



Quality beyond regulations in ECEC: country background report for Switzerland

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1. Summary

Pedagogical quality of early childhood education and care (ECEC) is currently at the heart of the discourses in practice, research, policy and politics in Switzerland. The new focus follows a phase of quantitative expansion in ECEC in the last two decades, where setting up childcare provision was the focus. Still however, demand of ECEC exceeds supply in most areas.

As a consequence of this focus on quality, several quality initiatives have been set up by cantons, municipalities and professional associations. ECEC for children before the age of four lies either in the responsibility of the canton, the municipality, or of canton and municipality together. There are differences between language regions; French-speaking Switzerland established better conditions for childcare in the early years than German and Italian-speaking Switzerland. In rural areas, centre-based childcare provision is often scarce.

A Swiss curriculum for ECEC from birth to four years was developed, marking a significant step. The curriculum called "orientation framework for ECEC" written by Wustmann Seiler and Simoni (2016), was the result of a systematic consultation process with practitioners and experts. The curriculum was commissioned by the Swiss UNESCO committee and the Swiss childcare network. The orientation framework is now widely recognized as a reference in all areas of ECEC. However, the orientation framework is not binding, although it formulates quality and curricular goals. The orientation framework seeks to guide pedagogical practice and emphasizes the importance of reflection on one's own actions and on providing stimulating learning opportunities for children. In order to ensure and improve pedagogical quality in ECEC and to achieve quality standards for process quality, training and further education is required. Self-evaluation and external evaluation should be established as a quality indicator assessed by the monitoring authorities. The requirement for regular team-based as well as subject-oriented further education should be included. Furthermore, monitoring authorities require tools to assess the implementation of the orientation framework.

In July 2020, the Swiss childcare association issued its position on the quality of education in centre-based childcare (kibesuisse 2020c) and the finance provided for ensuring quality (kibesuisse 2020d). In these two position papers, the Swiss childcare association clearly defines goals for ECEC, which need to be achieved in all quality dimensions: structure, orientation and process. In order to achieve these goals, sufficient funding through increased state funding is required and it is suggested to link an increase of funding in ECEC with more monitoring of pedagogical quality (Hoch, 2019).

Currently, as is shown in detail in this report, the only binding legislation on the national level is the 'ordinance on the admission of foster children' (PAVO), which mainly includes aspects of structural quality for family-based and centre-based childcare, but not process quality. Within the federal structure of Switzerland, the responsibility for monitoring, licensing and regulating child-care is assigned to the 26 cantons. An assessment on behalf of the Swiss Conference of the Cantonal Directors of Social Affairs (SODK) showed that all cantons set requirements for the quality of centre-based childcare, i.e. the requirement to present a pedagogical concept when requesting licensing, requirements regarding the qualifications of the workforce and the educator to children ratio; the topics covered in the pedagogical concepts are not regulated and requirements remain vague (Ecoplan, 2020).

Overviewing the current regulations in relation to process quality in ECEC for provision for children from birth to four years old, it becomes apparent, that there exists – due to the federal system – a variety of regulations and still a lack of commitment to binding and effective quality assurance, especially regarding pedagogical quality, and to continuous development of process quality in ECEC. Throughout Switzerland, the provision varies. Generally, there is still higher demand in relation to supply, and the financing of centre-based childcare varies across municipalities. In comparison to the neighbouring countries, parents pay high fees for centre-based childcare. Although fees are means-tested, the costs for families with low to medium income is still very high, leading to unequal access to ECEC, and bearing the risk of inequality.

The cantons coordinate policy development regarding ECEC through the Swiss Conference of the Cantonal Directors of Social Affairs (SODK). The SODK is therefore strongly involved in quality development in childcare centres, coordinating efforts throughout Switzerland in all cantons. In 2014 and 2020, the SODK commissioned a review of the implementation of the quality recommendations to the cantons, which included areas of process quality, such as an assessment of the pedagogical concepts as a cornerstone for high quality care (Ecoplan, 2015, 2020).

There is only limited scientifically based knowledge about pedagogical quality in Swiss institutions of ECEC. This knowledge is needed in order to promote professionalization and to make professional and vocational educational training more evidence-based. A recent, non-representative study on process quality in Swiss centre-based childcare using the CLASS observation tool concludes that quality is in the middle range and that improvements are needed (Perren, Frei, & Herrmann, 2016). Findings from research and development need to be applied in practice and questions deriving from practice must be taken up in research. Educational formats that strengthen the connection between research, development and practice are particularly beneficial. Learning settings in practice guided by experts may have a major impact and have a distinct positive influence on process quality. In Switzerland, central topics of ECEC such as cooperation with parents and guardians, equal opportunities for all children and valuing diversity, are currently being explored in greater depth through initiatives of further education as well as in research.

Educators of ECEC for children from birth to four years old are qualified through vocational educational training (VET). The duality of training at the work place, for example a childcare centre, and at the professional school, is an asset of the Swiss education system. As apprentices in vocational educational training continuously spend part of their training period in the work place contributing to the education and care of children, and part at the professional school, maximum transfer of theory and practice is ensured. Vocational educational training can lead to educational pathways from secondary level two (vocational educational training), to professional tertiary level and to degrees in higher education. Within ECEC, for example amongst staff of centre-based childcare, educators with basic vocational qualifications, as well as educators with higher professional qualifications work together. In principle, the larger the responsibility, the higher the required competence profile and the expectation of an educational qualification. The dual system thus offers the opportunity to pursue a career in a social and caring profession according to the level of education and to obtain qualifications from secondary two to tertiary level. Still to be desired in all childcare institutions throughout Switzerland is a personnel mix, consisting of educators with basic educational training, specialists with tertiary professional qualifications, apprentices, students and assistants (kibesuisse, 2020c). More ECEC educators with higher professional qualifications are working in French-speaking Switzerland, whereas in German-speaking Switzerland an increase in professional qualification is needed. A competence profile at the tertiary level is needed in ECEC professions in order to significantly develop quality, which is in line with the initial demand for an improvement of

pedagogical quality. In addition to an investment in higher professional qualification, professional development of educators also needs to be a focus for the development of quality. The association of social profession seeks to clarify the competencies required as well as the competencies obtained in professional development within ECEC (SPAS & SAVOIRSOCIAL, 2014).

In addition to centre-based childcare there is family-based childcare, which is provided by childminders or so-called day-families. Family-based childcare allows more flexibility to meet a family's needs (i.e. regarding work hours). Local associations of family-based childcare match families seeking childcare and childminders providing family-based childcare, mostly in the home of the childminder. These family childcare associations monitor quality through yearly visits by the coordinator and provide access to some training. Training requirements for registering as a childminder with a family childcare association vary between 20 to 100 hours.

The vast majority of children enter kindergarten in August after their fourth birthday. Kindergarten is part of the Swiss education system and linked to primary schools. Children attend kindergarten for two years, from approximately four to six years old, before transitioning to first grade of primary school. The focus in kindergarten is on education. Pedagogical approaches are mainly based on guided play and activities as well as free play. As kindergarten is part of compulsory education, it is free of charge, and attended by nearly all children. The anchoring of the kindergarten in the education system, the legal foundation that kindergarten has to be offered throughout Switzerland, as well as the strong educational perspective and the curriculum centered on play are clear strengths of ECEC in Switzerland. Whereas childcare and educational opportunities for children aged zero to four years are not available nationwide in all regions of Switzerland and therefore not attended by all children, kindergarten being part of the school system ensures that all children from the age of four (or, in very few cantons from five) have guaranteed and free access. A nationally harmonized curriculum for kindergarten supports pedagogical quality across Switzerland. The curriculum emphasizes the requirement of meeting the needs of the individual child, to support their learning through play and to focus on competencies. Kindergarten teachers in Switzerland have a Bachelor's degree, which they obtain from a university of teacher education. The monitoring of process quality lies in the responsibility of the school principal.

Kindergarten however does not provide before- and after-school care nor supervised lunch breaks. Therefore, childcare supplementing kindergarten is needed. The HarmoS concordate states that municipalities need to offer childcare provision if there is demand for it (HarmoS, Art.11). The implementation at municipality level shows great differences in interpreting demand and in quality requirements pursued as well as in accessibility. In terms of standards in childcare supplementing kindergarten, only the defined minimal structural quality features of the ordinance on the admission of foster children (PAVO) are met. Qualifications of educators in childcare provision supplementing kindergarten vary greatly. Very little research is available on process quality in childcare supplementing kindergarten and school (Chiapparini, Schuler & Kappler, 2016). There is an acute need of more research and professional development as well as development of concepts on the cooperation between kindergarten teachers and educators in childcare supplementing kindergarten, in order to ensure process quality for children throughout the day, transitioning from kindergarten to the lunch program, back to kindergarten and later to after-school care.

In sum, improvement in educational quality in Switzerland could be achieved through more far-reaching national standards for childcare in all forms of provision (centre-based childcare, family-based childcare, childcare supplementing kindergarten and school). The only federal legal foundation, the ordinance on the admission of foster children (PAVO) stipulates aspects of structural quality, but not process quality, so that requirements allow ensuring only a minimal standard of pedagogical quality. Stronger regulation and more quality monitoring and quality enforcement by the cantons or municipalities, in particular not only aimed at structural but also process quality, are necessary throughout Switzerland. For centre-based childcare, a focus on the development and implementation of pedagogical concepts would be useful. Continuing efforts to increase the level of qualifications in ECEC and to support professionalization of the workforce are also important. In order to increase process quality in ECEC, further education focusing on educator-child interaction is particularly relevant. A joint focus on process quality of all professionals, including early educators and teachers, and a strong cooperation between them and parents and guardians would lead to better quality as well as equality of educational opportunities for all children.

2. Introduction

The International Organization for Economic Cooperation and Development (OECD) regularly initiates country reports and international comparisons on themes on early childhood policies in OECD countries and partner countries. The reviews offer an international perspective based on the developments in policy and research in the different countries. Furthermore, the reviews seek to guide policy development to ensure high quality early childhood education and care and to ascertain equal opportunities for all children. So far, five studies have been carried out, called Starting Strong I to V (OECD, 2020).

The new study "Quality beyond Regulations" focuses not only on aspects of structural quality, but more so on process quality. The interactions between educators and children are the centre of attention. In order to increase the quality of early childhood education and care, high quality of educational provision delivered by the ECEC workforce is crucial. It has been proven that especially children from disadvantaged backgrounds benefit from high quality services. The focus of the current country study „Quality beyond Regulations“ lies on process quality in ECEC in all participating countries and the identification of areas for further action.

There is a defined grid for the comparative literature review in order to capture the conditions in the different countries. The study design includes two parts: country surveys and country background reports on process quality. These are incorporated in a multi-dimensional matrix of quality in ECEC. Results of "Quality beyond Regulations" feed into the final report "Starting Strong VI" (OECD, 2021).

Participation in international comparative studies is voluntary. Up until now, Switzerland has not taken part in any of the comparative studies within "Starting Strong". However, the Conference of the Cantonal Directors of Social Affairs (SODK) considers the development of structural quality as well as process quality in ECEC as highly relevant for young children's future opportunities. This country background report contributes the Swiss data to the OECD's international comparative study "Quality beyond Regulations".

The international comparative study focusses on provisions for children from 0 to 6 years, in particular provisions regulated by the state. Therefore, the country background report for Switzerland focuses on centre-based childcare and kindergarten, as well as – to a lesser extent – on family-based childcare. Educational playgroups are not discussed in this report, although the national playgroup association also works on quality standards (SSLV 2017). However, educational playgroups are less regulated; children are usually only attending educational playgroup during three hours per week at the age of three to four years, before entering kindergarten. In addition, other provisions such as health visitors and parenting advice centres are not covered in this report.

3. The policy context of ECEC in Switzerland

The chapter gives an overview of the recent developments in ECEC strategies, discussing the situations in the cantons as well as at national level. With the focus on quality and process quality, current quality initiatives are presented. As a background to quality development, the chapter also provides information on the regulations, licencing, financing and monitoring of ECEC provision and the data available for policy development at national level.

3.1 Policies at national and cantonal level

With a population of approximately 8.5 million inhabitants, Switzerland is a small country in comparison to other European countries. Switzerland consists of four regions with four national languages (German, French, Italian and Romansh) and contains 26 cantons. The protection, education, and participation of children and youth are preserved in the Federal Constitution. The UN Convention on the Rights of the Child, ratified in 1997, regulates activities at all levels of government. Some cantons formulated legislation on child and youth welfare. Where cantonal law does not define child and youth welfare services, legal foundations for the regulation of provisions can be found in civil law, cantonal social welfare laws, and legislation on education and health. In addition to the federal government, the cantons and municipalities, non-governmental and private initiatives shape child, youth and family policies and provisions.

The division of responsibilities between the federal government, cantons and municipalities characterizes child and youth policy as well as family policy. The 26 cantons and 2,255 municipalities are primarily responsible for policies and provisions for children, youth and families. The Confederation assumes a supporting and complementary role, for example in financing the development of the cantonal ECEC policies. Since 2003, the Confederation has provided start-up financing to foster the expansion of centre-based childcare, thus increasing the quantity of childcare opportunities for families. Since it came into force, the federal government has thus supported the creation of a total of 62,939 new childcare places for pre-school and schoolchildren (EDI, 2020). The federal government's support will continue until 2023. Until now, the focus for the development of ECEC was set primarily on the quantitative increase of childcare provision in order to meet the high demand. More recently, the focus shifted from quantity to quality of ECEC, ensuring pedagogical quality is at the heart of programs and policies

The Swiss labour organisation for work in the social domain 'SAVOIRSOCIAL', is an umbrella organisation for several professional associations in social domains. It is represented in cantonal organisations of the social work sector, in the employers' associations as well as in federal

bodies such as the Swiss Conference of Cantonal Ministers of Social Affairs (SODK). SAVOIRSOCIAL steers Vocational Educational Training VET, providing knowledge and coordination at national level, based on cantonal and national laws. SAVOIRSOCIAL is the driving force for further development and quality assurance of the social professions, including the professions of ECEC (SAVOIRSOCIAL, 2020a).

In Switzerland, the term "early childhood" is often understood as the age range of children from birth to four years. Children from four to six years attend kindergarten, which is part to the education system. In August after their fourth birthday, children are required to enter kindergarten. Kindergarten is part of primary school, though implementing a play-based approach. Children enter kindergarten for two years before transitioning to first grade of primary school (usually in the summer after their sixth birthday). In most cases, kindergarten and the early grades of primary school comprise four lessons in the morning and two lessons in the afternoon (usually on two afternoons a week). Before and after school, during lunch break, and on afternoons without school, children are looked after at home or in a childcare provision. The childcare supplementing kindergarten is offered by the municipality or privately run. As Vogt (2015) points out, the development of ECEC in Switzerland could benefit from bringing education and care together and increasing the quality of childcare with an orientation not only on aspects of care, but also on education. In Switzerland, the cantons are responsible for education. They determine the curriculum and define the competency standards. The inter-cantonal agreement on the harmonization of schooling (HarmoS) came into force in 2009. In order to streamline education policies across cantons, standardized curricula were created for the language regions, specifying the competencies to be attained for 8-, 12- and 16-year-old children (EDK, 2007).

As for the education of children from birth to four years old, a national orientation framework for ECEC was developed in 2012 and published in a revised version in 2016 (Wustmann Seiler & Simoni, 2016). The UNESCO Commission and the Swiss Childcare Network commissioned the framework to be written by Wustmann Seiler and Simoni from the Marie Meierhofer Institute for the Child (MMI). The authors developed the framework in a Delphi process with educators and experts. The orientation framework is the foundation for all those working in early childhood education and care, describing the values and understanding of ECEC and formulating guiding principles for pedagogical practice. The orientation framework is the national reference document for the quality of support for children from zero to four years of age, but it is not binding in any way.

The current legal basis for the approval and supervision of care institutions for children of all ages at national level is the 'ordinance on the admission of foster children' (PAVO, 2017). Related to quality, it contains specifications regarding the staff to children ratio and defines the professional qualifications required for staff. The 'ordinance on the admission of foster children' (PAVO, 2017) provides scope for the cantons to promote educational quality in childcare. Cantons have the right to decree guidelines in the context of their power to monitor and license. However, the practice of the cantons to ensure process quality continues to differ largely. So far, neither common quality guidelines nor common practices of supervision are shared by cantons.

In recent years, several cantons have developed ECEC strategies in order to initiate developments that benefit young children and their families. Figure 1 provides an overview on the cantons having developed or developing an ECEC strategy (Stern, Schwab Cammarano & De Rocchi, 2017). Several cantons have already deployed an ECEC strategy; several cantons are in the process of defining such a strategy. Some cantons include ECEC in broader strategies, i. e. as part of the integration strategy or within the policies concerning children and youth.

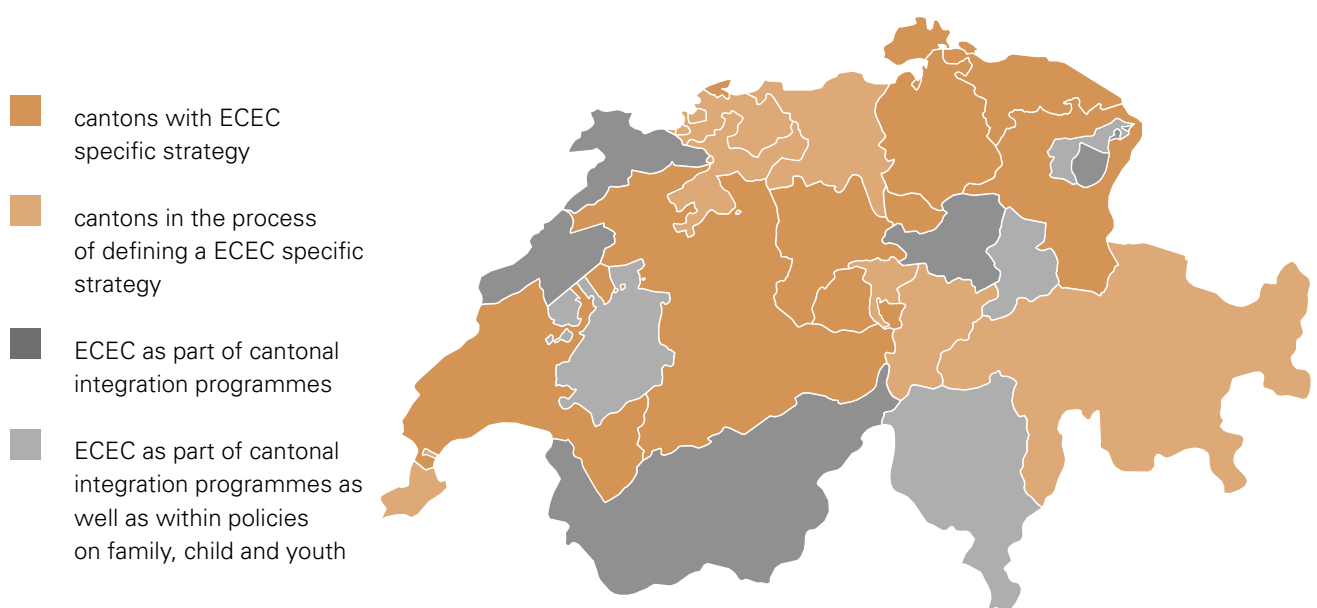


Figure 1: Strategies of ECEC in the Cantons (Stern et al. 2017, p. 14)

The focus of the cantonal strategies lies on professionalization of ECEC staff. The frequency of themes included in strategies is as follows: (1) initial and further education of ECEC staff, (2) parenting advice centres on infant care, (3) working with parents, (4)

educational playgroups, (5) childcare provision, (6) language fostering, (7) programs for families at risk, and further followed by five additional themes, which were mentioned less frequently (Stern et al., 2017, p. 18).

3.2 ECEC provision

The ECEC provision for children from 0–4 years in Switzerland steadily expanded in recent years, albeit late by international standards (Burger, Neumann, & Brandenberg, 2017). However, there is still considerable demand in many regions, which is not yet met. Figure 2 shows the

regional distribution of the number of available places per child in childcare centres as researched by Schwab et al. (2014, cited in Burger et al., 2017, p. 5). Municipalities in French-speaking Switzerland have greater coverage than German-speaking Switzerland, and urban centers have more coverage relative to population than rural areas.



Figure 2: Regional disparities in supply of childcare per child and municipality for children between 0 and three years (Schwab et al, 2014, cited in Burger et al., 2017, p. 5)

On average 40 % of all children up to three years attend centre-based childcare (BFS, 2019), with most children attending two or three days per week. While 30 % of all mothers with a child below the age of six are not in paid employment at all (ibid.), 82 % of all mothers in employment only work part-time (Giudici & Schumacher, 2017). Because of the high cost of childcare for young children, it is financially more attractive for mothers with lower salaries to suspend paid employment (ibid.).

An analysis based on centre-based childcare receiving start-up funding (n=1890) revealed that 21 % of the children attend one day per week, 35 % attend 2 days, 22 % attend 3 days, 10 % attend 4 days, and 12 % attend full-time (5 days per week) (EDI, 2020, p. 7). These numbers show that for Switzerland education and care in early childhood occurs to a large extent within the family. Participation in ECEC is non-compulsory; not only is there no legal requirement to send a child to ECEC before

kindergarten, there is also no clearly specified requirement issued by the federal government for cantons to provide childcare opportunities for early childhood and beyond. This is one of the reasons why ECEC provision is mainly run by private bodies such as associations and foundations and not the public, especially in German-speaking Switzerland.

Figure 2 does not represent the childcare provided by family-based day care, where childminders care for children other than their own in their own home. 7.3 % of all children up to three years are cared for on an hourly base or for full days in family-based care. Childminders offer very flexible childcare provision. Hours are agreed individually between parents and childminders. Family-based childcare can be arranged through private organisations; these organisations usually also define cost and quality guidelines. Beside family-based childcare organisations, childcare with childminders is also arranged

informally, following individual, non-institutional agreements on costs between the families involved as providers and customers.

Institutions (i.e. childcare centres) and organisations (i.e. family-based childcare associations) providing all different forms of childcare form the national childcare association *kibesuisse*, representing members mainly from German-speaking Switzerland. For French-speaking Switzerland, *pro enfance* is the relevant provider organisation. Quality of childcare is a core interest of these associations. In a recent policy statement, *kibesuisse* (2020c) highlights the importance of all three dimensions of quality (structure, orientation, process) and demands more public funding for childcare in order to increase quality (*kibesuisse*, 2020d).

In the public debate, there are different views on the responsibility for ensuring the provision of and on the financing of ECEC: should the public or the private sector assume responsibility and financing of ECEC? To what extent should the responsibility lie at the level of the municipality, the canton or the federal government?

3.3 Aims

Strategic aims and policy aims for ECEC are formulated at different levels and in different areas. In the following, the overarching foundations are outlined as well as the bodies concerned. Then, policy initiatives and programs in different areas are outlined. The Federal Office of Public Health (BAG), the Federal Office of Social Insurance (BSV) as well as the Federal Commission for Migration Issues (EKM) and the Federal Commission for Family Issues (EKFF) formulated strategies which include ECEC in parts.

3.3.1 Ensuring the rights of the child

The federal government does not formulate binding goals for ECEC, neither based on the constitution and laws nor based on ordinances. At the national level, developments are guided by the Federal Council's commitments within the Agenda for Sustainable Development (United Nations, 2015), and the Convention on the Rights of the Child (ratified by Switzerland in 1997). The United Nations educational goal "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" specifies: „By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education“ (United Nations, 2015, 4.2). The basic principles in accordance with Articles 2, 3, 6 and 12 of the Convention on the Rights of the Child, which entail the principle of non-discrimination, acting in the best interest of the child, protection and development and the expression of the child's own views, are particularly relevant

to early childhood. They guide the national efforts for policy development in ECEC (MMI, 2014).

Even though no goals with binding character are formulated in the constitution or in laws, the federal government sets goals for ECEC. Advisory bodies providing recommendations and statements at national level on ECEC include the Swiss national commission for child and youth issues (EKKJ) and the extra-parliamentary UNESCO commission for Switzerland. With the recently published publication 'For a policy of early childhood – an investment for the future' the Swiss UNESCO Commission seeks to stimulate the political discussion on early childhood in Switzerland and to empower and encourage political action (Stern, Schwab Cammarano, Gschwend & Sigrist, 2019). As the overarching aim it is emphasized that ECEC should ensure the best possible development for children at the start of their education. This includes the living conditions from pregnancy onwards. Good living conditions for families, measures supporting and complementing families, as well as a high-quality education system are necessary. Within four fields of action, the publication presents requirements for implementing an early childhood policy: „Demand-oriented provision should be offered for all. Providers and stakeholders should coordinate and network with one another. The quality of the ECEC services should be secured and improved. Financing of ECEC provisions should be increased as an investment in the future“ (Stern et al, 2019, p. 6, authors' translation). In 2019, the Swiss Federal Commission for Family Affairs (EKFF) published a policy brief on the need for high quality childcare for families (Hoch, 2019). The policy brief proposes coupling the necessary increase in public investment with stronger monitoring of quality.

3.3.2 Public health

As an example of strategies relevant for early childhood concerning public health, the National Strategy on Prevention 2017 to 2024 (NCD) and the National Strategy on Addiction 2017 to 2024 of the Swiss Federal Office of Public Health (BAG, 2018) set out the following goals:

- „Existing procedures to improve network, coordination and cooperation are mainly focused on ECEC. Greater involvement of health care professionals and institutions would be beneficial for socio-economically disadvantaged and multiple burdened families. The Swiss Federal Office of Public Health supports selected activities aimed at networking and integrating players in the field of early childhood health care“ (ibid., p. 39, authors' translation).

- “The networking, coordination and cooperation of experts and institutions from the health and social sectors, as well as decision-makers relevant for early childhood, is a major challenge in Switzerland’s highly federalized system. The Swiss Federal Office of Public Health supports existing networks and initiates additional efforts with the aim to improve coordination of activities in early childhood at federal level” (ibid., p. 41, authors’ translation).
- „There are large data gaps regarding early childhood, especially on the health situation of 0–4 year-olds. The Swiss Federal Office of Public Health’s new strategy for monitoring the prevention of non-communicable disease (NCD-strategy) and on addiction also include indicators on children and adolescents. In addition, targeted research mandates can be awarded to a limited extent” (ibid., p. 43, authors’ translation).
- „For a sustainable improvement of provision in early childhood, it is important that the public and especially decision-makers better understand why health promotion and prevention in early childhood is so important. The Swiss Federal Office of Public Health prepares the information delivered in this concept, as well as from international and national research, for specific target groups and disseminates it through the channels at the Office’s disposal” (ibid., p. 44, authors’ translation).

3.3.3 Social affairs

As for the area of social affairs, the National Program against Poverty 2014 to 2018 of the Swiss Federal Office of Social Insurance examined educational opportunities with a focus on the needs of families at risk of and affected by poverty. Projects analysing the quality of provision, reducing access barriers and improving cooperation with parents were supported (BSV, Frühe Förderung, 2020). Reference documents were created, such as a guideline on criteria for effective practice in ECEC (Meier Magistretti, & Walter-Laager, 2016) and a focus publication on successful cooperation with parents in the context of poverty prevention in early childhood (Bieri, Sengupta, Simoni & Schürch, 2016).

Furthermore, the federal government plays an active role in promoting the compatibility of family and working life. In 2003, the Federal Act on Financial Aid for Childcare Provision came into force, enabling an impulse program promoting the increase of childcare provision through start-up funding. Providers receive financial assistance during the first three years for increasing the number of childcare places. The impulse program was extended for

the third time until 2023. Since it came into force, the federal government has supported the creation of a total of 62’939 new childcare places for pre-school and school children (EDI, 2020). Not only new childcare places will be funded, but also initiatives to better tailor childcare provision to the needs of families as well as increased subsidy from cantons and municipalities (BSV, Familien-ergänzende Kinderbetreuung, 2020).

3.3.4 Migration

The Swiss Federal Commission on migration (EKM) was the first national governmental body to address ECEC in-depth. Based on an analysis of research, practice and policy in ECEC, the commission formulated foundations to raise awareness and to foster dialogue, as well as recommendations to develop ECEC (EKM, 2009). The needs of families having experienced migration and the role of fostering language acquisition are the focus of the commission. The following aims were set for integration in view of ECEC:

- „Early intervention supports parents in creating an environment for their children that is conducive to all aspects of early childhood development” (EKM, 2009., p. 4, authors’ translation).
- “Early intervention supports the motor, linguistic, social, emotional and cognitive abilities of the child” (ibid.)
- „Early intervention improves the chances for a successful educational career” (ibid.)
- “Early intervention supports the development and strengthening of the child’s physical and psychological resilience” (ibid.)

In addition, the Swiss Federal Commission on Migration (EKM) – in cooperation with the State Secretariat for Migration (SEM) – launched a pilot framework to promote integration at an early age. The aim was to increase the accessibility of services for parents and children with a migrant background, to improve the intercultural qualifications of educators, and to advance the conceptual work, particularly at community level. Innovative projects at local level were financially supported (SEM, 2020).

Today, ECEC is an established component of the cantonal integration programs, which are aligned with a common national strategy. Since 2014, each canton has established a cantonal integration program. The federal government advises cantons and develops instruments for quality assurance in order to establish integration as a shared responsibility. The promotion of integration within the framework of the cantonal integration programs for the period of 2018 to 2021 is based on three pillars. Early childhood is reflected in the second pillar. The strategic goal of the program is: „Families with migration background are informed about the medical, family-supporting, health- and integration-promoting services in the early years and have equal access to these“ (SEM, 2017, authors' translation). Supported by funds from the cantonal integration program, the city of Zurich initiated, for example, the program 'Kita-integrierte Deutschförderung', promoting German language acquisition integrated in childcare institutions (Vogt, 2020a). The canton of the city of Basel created the program 'mit ausreichenden Deutschkenntnissen in den Kindergarten', 'to kindergarten with sufficient German language skills' (Grob, Keller & Troesch, 2014).

3.3.5 Special educational needs

For children with special educational needs the UN Convention on the Rights of Persons with Disabilities, which Switzerland signed in 2014, also comes into play. The Federal Constitution stipulates that cantons are responsible for the education of children with special educational needs (Schweizerische Eidgenossenschaft, 2014, Art 62). Access to early intervention for children with special educational needs is guaranteed throughout Switzerland. A diagnostic assessment based on the standards of the World Health Organisation identifies the need and ensures public funding of individual support. For children aged 0–4 years, it is up to parents to decide whether they want regular support from a specialist visiting the child and family. Inclusion in ECEC provision such as centre-based childcare and educational playgroups is formulated as a desirable development, but is not very widespread (Koch & Vogt, forthcoming).

3.3.6 Inter-departmental cooperation

The Swiss Conference of Cantonal Ministers of Social Affairs (SODK) is the association of the councillors of the executive government of the 26 cantons who head the social affairs departments. The Conference of Cantonal Directors of Social Affairs (SODK) promotes cooperation between cantons in social affairs and thus contributes to the harmonization of social policy. In 2017, the Conference of Cantonal Directors of Social Affairs (SODK) defined parameters for inter-cantonal cooperation with the Swiss Conference of Directors of Education (EDK) and the Swiss Conference of Directors of Health (GDK). The following objectives were formulated for early intervention in the sense of an inter-departmental policy integrating policy on children and youth, family policy, education policy, social policy, integration policy and health policy (SODK, 2017):

- „Early intervention is a component of a continuous child and youth policy“ (ibid., p. 2, authors' translation)
- “Early intervention is an important contribution to equal opportunities and poverty reduction, as well as to the social integration of children“ (ibid.)
- “Early intervention in the sense of early childhood education lays a positive foundation for the later educational career and promotes educational opportunities before school entry. It ensures the child's right to education“ (ibid.)
- „Early intervention strengthens children's health resources and potential. In terms of health promotion, it thus supports the psychological and physical well-being of children“ (ibid.)
- „Early intervention strengthens the health resources and potential of children“ (ibid.)
- “Early intervention supports the language integration of children speaking a different language and the social integration of immigrant children and their families“ (ibid.)

3.4 Quality

There are no national regulations for standards of process quality in ECEC provision in Switzerland. At national level, the binding legislation is the 'ordinance on the admission of foster children' (PAVO), which does not stipulate process quality as such. The 'orientation framework for ECED' as well as quality initiatives such as the QualiKita quality label, the „Interroger la qualité“ guide, and the Quality4Children standards provide guidelines. These existing quality tools are briefly described.

3.4.1 Ordinance on the admission of foster children (PAVO)

As mentioned above, the PAVO is the only binding legislation at the national level for extra-familial care of minors (PAVO, 2017). The PAVO contains general rules as well as regulations for foster care, day-childcare, children's homes and family care services. Centre-based childcare follows the regulations of care in children's homes. The operating license is granted if the care of minors appears to be assured (protection and fostering), the management and employees are suitable for their tasks (qualifications), the number of employees is sufficient (staff to children ratio) and the facilities meet the hygiene regulations and have secure finances (ibid.). The regulations of the PAVO focus on structural quality only and do not define any regulations ensuring process quality, i.e. interaction quality between educators and children. Regulations in PAVO are formulated in a very general way and do not stipulate of how the indicators, for example the staff to children ratio, are measured. These indicators are defined in cantonal ordinances and regulations. For an operating license to be granted, both, the regulations of the PAVO and those of the respective cantonal ordinance must be fulfilled.

3.4.2 Orientation framework for ECEC

In the orientation framework for ECEC, structural quality is defined based on three groups of characteristics: staff characteristics (level of education, work experience), social characteristics (group size, staff to children ratio, group composition) and spatial-material characteristics (rooms and equipment). Process quality focuses on pedagogical processes, such as interaction with the child, developmentally appropriate instruction and fostering and peer interactions as well as the cooperation of the educators with the families. As a third quality dimension, reference is made to the orientation quality (educators' beliefs, pedagogical values, understanding of education, awareness of the role of a professional, etc.) (Wustmann Seiler & Simoni, 2016).

Regarding pedagogical quality, the orientation framework includes concrete examples, how the interaction between educator and child can be established, how educational needs and children's development can be observed, reflected upon, documented and stimulated, and how successful education partnerships with parents can be established and maintained. It provides numerous, very concrete practice ideas and instructions on how high pedagogical quality can be implemented and thus how process quality is achieved. The orientation framework concludes with describing quality management for the institution as a whole. The elements of structural, process and orientation quality are linked together. They should feed into the pedagogical concept, which in turn is the basis for the continuous development of pedagogical quality (ibid.).

3.4.3 Interroger la qualité

„Interroger la qualité“ is a non-binding guideline developed in the canton of Vaud for educators in the field of childcare and support for young children. The guide by the Association Partenaire Enfance & Pédagogie (PEP, 2012) offers a collection of texts published by the Association between 2006 and 2012. The guideline provides educators and organizations with a tool for quality self-assessment. Twelve quality indicators for pedagogical practice are defined, which should support the (re-)activation of theoretical knowledge and link it to pedagogical practice. For each indicator a set of questions initiates reflection on values and practice, followed by expert contributions. Individual indicators, which describe topics such as the needs of young children, equal opportunities, relations with parents, safety, as well as health and professional resources, are grounded in both, theory and practice. Suggestions for practice in specific situations are provided and linked with theory (PEP, 2012).

3.4.4 QualiKita

QualiKita is a quality label for centre-based childcare initiated by the Swiss association for child-care (kibesuisse) and the Jacobs Foundation (kibesuisse & Jacobs Foundation, 2019). QualiKita defines a set of standards and suggests a quality development plan. QualiKita was developed based on scientific research by Stamm et al. (2012). Eight quality development areas – four internal process quality aspects and four external structural quality aspects – form the concept. In order to assess process quality, the aspects „development, support and learning activities“, „relationships and interaction“, „inclusion and participation“ and „parental involvement and family cooperation“ are focussed (kibesuisse & Jacobs Foundation, 2019, p. 8, authors' translation). The label explicitly describes areas of development and their requirements and characteristics. As an example, requirement 1.1.: „Educators enable children to engage in a variety of learning and developmental activities. These activities are adapted to the age and developmental level of the children“ (ibid., p. 14, authors' translation). As characteristics to the requirement 1.1. QualiKita exemplifies a daily routine, a variety of learning arrangements, and a variety of play and activities adapted to age and needs. Childcare providers can be certified through QualiKita. The quality assessment process includes a self-evaluation report, an on-site audit visit and a certification. Experts from an independent certification body regularly evaluate the certified providers. The costs of quality assurance through QualiKita are covered by providers themselves.

3.4.5 Quality4Children (Q4C)

The Q4C standards are a European quality tool for extra-familial care for young children up to young adults. The standards are based on the Convention on the Rights of the Child and were developed by the 'Federation Internationale des Communautés Educatives', the 'International Foster Care Organisation' and 'SOS Children's Village' with the aim of improving the living conditions of children and supporting their development by means of quality standards for extra-familial care (Quality4Children, n.a.). The eighteen Q4C standards are assigned to three core processes. The process of decision-making and admission, the care process and the exit process. Standards 2, 6, 7, 10, 11, 13 and 17 refer to aspects of process quality, as interactions between the educators and the children as well as participation and empowerment are in the foreground.

3.4.6 Further policy initiatives on quality

The Federal Commission on Family Issues recommends in its recently published policy brief entitled „Quality management of institutional child care. A patchwork quilt with consequences“ an enforcement of quality standards (Hoch, 2019). They highlight the importance of scientifically based educator to children ratios, which also account for children's age. Further, they propose that only trained educators with the required qualifications can be counted for ratios between staff and children. This means that untrained assistants do not count as staff in the legally binding educator to children ratio. Furthermore, the Commission demands increased quality control to be linked with an increase in public funding. Finally, they called for more research on ECEC (Hoch, 2019).

In July 2020, the national association for childcare kibesuisse published a white paper: „Position on the financing of pedagogical quality in centre-based childcare“ (kibesuisse, 2020c). Kibesuisse (2020c) formulates a new standard for pedagogical quality and quantifies the requirements of personnel and finance to meet this standard. The position paper identifies aspects of structural quality, which are needed for a good process quality: In defining staff requirements, they take opening hours and time for preparation and professional development into account. Furthermore, teams should include educators with tertiary education, so that a good of skills is achieved. Unqualified staff however, should not count towards the educator to children ratio, a ratio that needs to be adjusted depending on the age of the children present (kibesuisse, 2020c).

3.4.7 Cantonal ordinances and educational concepts

Almost all 26 cantons have cantonal ordinances and regulations governing the licensing and monitoring of centre-based childcare, whilst in a small number of cantons, the regulations are located at the level of municipality. With regard to process quality, guidelines on educational concepts are particularly relevant.

Figure 3 shows the extent to which cantons formulate guidelines for pedagogical concepts. Pedagogical concepts describe how principles – such as pedagogy, curricular goals, and design of the daily routines, familiarisation and transition, inclusion, participation,

observation and documentation, room design, co-operation with parents – are lived in practice. Many of the principles defined in pedagogical concepts form the basis for process quality.

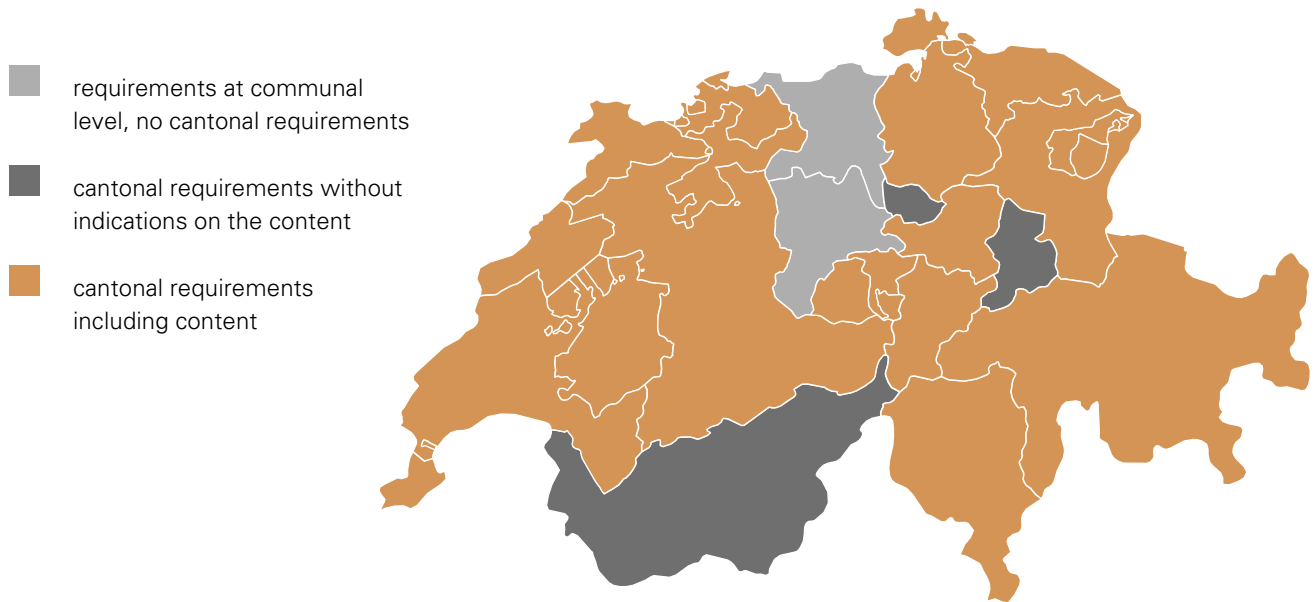


Figure 3: Overview of the cantonal guidelines for the „pedagogical concept“ (Ecoplan, 2020, p. 21)

Two examples illustrate how process quality is linked to the requirement of pedagogical concepts in centre-based childcare: Geneva and St.Gallen. Since 1993, the Canton of Geneva specifies quality standards for ECEC, which reflect characteristics of structural quality. Since 2002, the city of Geneva provides a ‘guide qualité’ (quality guide) as an orientation for centre-based childcare (Ville de Genève, 2003). However, as in most Swiss cantons, Geneva does not provide detailed guidelines for the pedagogical concept and this is not monitored (Ecoplan, 2020). In the Canton of St.Gallen, there is minimal regulation concerning pedagogical concepts, meaning that a pedagogical concept needs to be in place. It should give interested parents an insight into the work of the childcare centre and provide orientation for educators. The pedagogical concept needs to state the pedagogical approach (in particular the pedagogical approaches adapted to the different age groups), the approach to diversity of children, cooperation with parents, daily routines, observation and documentation, interactions and relationships, transitions, nutrition and meal routines, sleeping and resting, and personal hygiene (Kanton

St.Gallen, 2020). Like six other cantons, St.Gallen requires the implementation and continuous revision of a pedagogical concept (Ecoplan, 2020).

The Swiss Conference of Cantonal Ministers of Social Affairs (SODK) attaches great importance to the issue of quality, as it is acutely aware, that ECEC services can only be of benefit if their quality is in line with the well-being of the children they care for. With the aim of supporting the promotion of the quality of the institutional extra-familial childcare services and the conditions in the cantons, the Swiss Conference of Cantonal Ministers of Social Affairs (SODK) made recommendations in 2011 on childcare provision in the early years. The guidelines on process quality cover the two topics of „pedagogical quality and quality management (in the sense of ensuring the implementation of the pedagogical concept)“ (SODK, 2011, p. 21, authors’ translation).

The report by Ecoplan in 2015 on the quality requirements for centre-based childcare in the cantons, which has been compiled on behalf of the Swiss Conference of Cantonal Ministers of Social Affairs (SODK), shows that most recommendations regarding minimum standards for structural and process quality are met and implemented by the cantons. All cantons require a pedagogical concept as a prerequisite for the operating license (Ecoplan, 2015). There are differences regarding the legal and, in particular, content-related requirements. In their 2020 report, Ecoplan (2020, p. 2, authors' translation) states: „In comparison to 2014, cantons are now increasingly setting requirements for reviewing or revising the concept, even though only a few cantons have a legal requirement to review implementation“.

3.4.8 State of research on quality

The increasing awareness of the importance of ECEC for children's future development and for equality, driven by agendas as discussed above, also led to more research being conducted in the field of ECEC. However, a comprehensive empirical study on quality in Swiss centre-based childcare for pre-school children is missing, as Burger, Neumann and Brandenberger (2017) pointed out in an overview study on ECEC in Switzerland commissioned by the Jacobs Foundation. Several smaller studies had used different quality measures, included only small samples and/or concentrated on specific quality aspects (ibid.). Swiss studies on effects of ECEC are discussed first, then studies including process quality.

In a Jacobs Foundation white paper, Balthasar and Kaplan (2019) summarized findings on the effects of ECEC and mentioned the results of three Swiss research projects. They found a positive connection between attending ECEC and later educational achievement, in some cases many years later. One of the studies showed a tendency to more externalised negative social behaviour linked with the amount of centre-based childcare, but these effects did not persist long-term. The connections between factors such as family background, age of entry into ECEC and duration are also not clear. Balthasar and Kaplan (2019) concluded, that the results of the studies cannot be interpreted unambiguously, possibly because quality in childcare centres was not included as a factor. Accordingly, a focus on process quality is recommended and the need for evidence-based quality tools to assess process quality is emphasized.

A study of cognitive and motor skills of children aged between one-and-a-half and two years, who either attended centre-based childcare and those, who did not receive extra-familial care, showed no differences between these children. The duration of care, in terms of age and years, as well as in terms of weekly attendance also had no effect (Bleiker, Gampe, & Daum, 2019). Researchers suspect that this is due to the generally high quality of childcare in the centres. They also note that the socio-economic background of the children studied was rather privileged. For this study, too, authors highlight that they did not include process quality, though this would be important to do.

An earlier study examined the effects of centre-based childcare attendance on school performance and found no significant difference (Burger, 2012). In comparison to other countries, it should also be emphasised, that children from birth to four years old, who attend centre-based childcare, do so only on 2–3 days per week on average. However, it is emphasized that the influence of socio-economic background starts very early. Again, the author emphasises the need to include process quality measures in further research, as it can be assumed that good quality in centre-based childcare has the potential to improve equality of opportunity.

Process quality was focused in a study by Perren, Frei and Herrmann (2016) using the widely applied scale CLASS Toddler (Pianta, La Paro & Hamre, 2008) in thirty-five Swiss ECEC institutions (centre-based childcare, family-based childcare and educational playgroups). As the scale focuses on educator-child interactions, it is a measurement of process quality. Findings indicate good quality regarding emotional aspects such as a positive climate and child-centeredness and mediate to good quality for behavioural support; whereas the quality of learning support, language fostering and feedback are below moderate (Perren, Frei & Herrmann, 2016). However, the sample is small and not representative of Swiss ECEC in any way. It provides an indication, that more efforts are required to increase educational quality within process quality, particularly regarding the active support of a child's learning.

Wustmann Seiler, Müller and Simoni (2017) showed effects of good process quality on socio-emotional development of children from families at risk. In their study, 162 children in 24 childcare centres in German-speaking Switzerland were examined. Authors state that high process quality in centre-based childcare can reduce stress and foster resilience: „High process quality can provide the chance of considerable attention, encouragement, and new learning opportunities for children at risk; these highquality centres thereby contribute to protective processes“ (Wustmann Seiler, Müller & Simoni, 2017, p. 1).

3.5 Monitoring (process) quality in ECEC

There is no clear allocation of responsibilities, neither vertically nor horizontally, within ECEC. Care and education for children from 0–4 years is regulated by national and cantonal sectoral regulations and, depending on the canton, is anchored in the main responsibility of the departments of either social affairs, education or health, in the majority of cantons within social affairs.

Across cantons and their cantonal policy, the Swiss Conference of the Cantonal Directors of Social Affairs (SODK) has a central coordinating role. With regard to ECEC policies, it cooperates closely with the Swiss Conference of Cantonal Directors of Education (EDK) and the Swiss Conference of Health Directors (GDK). They published a policy document „Together for early intervention. Benchmarks for the inter-cantonal cooperation between SODK, EDK and GDK“ defining the guiding principles, definitions and objectives of inter-cantonal cooperation in ECEC (SODK, 2017).

Recognizing the great importance of early childhood for children, policy developments and initiatives are promoted across areas of responsibility and across disciplines through coalitions and collaborations between government and other agencies. Accordingly, the Swiss UNESCO Commission, through the publication of its latest report „For an early childhood policy“, wishes to provide inspiration and arguments „to create a legal basis for the promotion of early childhood education and care that has been lacking so far“ (Stern, Schwab Cammarano, Gschwend & Sigrist, 2019, p. 5, authors' translation).

Because of different policies and regulating bodies concerned with different ECEC provisions, monitoring is discussed for specific ECEC provisions separately. First, centre-based childcare providing ECEC for children from birth to four years will be discussed. Then, family-based childcare provided by childminders in their family home will be explained. Third, the focus lies on the kindergarten, providing education for children from four to six years old. Finally, childcare provision complementary to kindergarten will be presented. The same recurring order will also be applied in the next chapters of the report.

3.5.1 Monitoring of centre-based childcare

In Switzerland, cantons and municipalities are responsible for the supervision, licensing and monitoring of centre-based childcare. At national level, the 'ordinance on the admission of foster children' (PAVO) defines that the supervising authority should supervise through monitoring visits as often as necessary, but at least every two years, in order to assess the well-being and quality of care for the minors in care. Providers, whether a private firm, a non-profit organisation or the public service, have no influence on how the supervisory authority carries out its monitoring. In addition, the supervisory authority has to ensure that the requirements for granting a license are met and that providers comply with the statutory terms and conditions (PAVO, 2017).

Table 1 shows at what level the competencies for regulating, licensing, and monitoring are located in the cantons, distinguishing between the cantonal level and municipalities. In the majority of the cantons, these

competencies are located at cantonal level, in some cantons, the competencies are at local level of the municipality. In few cantons, canton and municipality have a joint responsibility.

COMPETENCIES	CANTON	CANTON AND MUNICIPALITY JOINTLY	MUNICIPALITY
Regulation	AI, AR, BE, BL, BS, FR, GE, GL, GR, JU, NE, NW, OW, SG, SH, SO, SZ, TG, TI, UR, VD, VS, ZH	ZG	AG, LU
Licensing of centre-based childcare	AI, AR, BE, BL, BS, FR, GE, GL, GR, JU, NE, NW, SG, SH, SO, SZ, TG, TI, UR, VD, VS		AG, LU, OW, ZG, ZH
Monitoring	AI, AR, BE, BL, BS, FR, GE, GL, GR, JU, NE, NW, SG, SH, SO, SZ, TG, TI, UR, VD, VS	VS, ZG	AG, LU, OW, ZH

Table 1: Competencies for regulating, licensing and monitoring (Ecoplan 2020, p. 15f.)

Regulation, licensing and monitoring often focus on structural quality. Regarding process quality, institutions themselves are responsible for ensuring and developing process quality in centre-based childcare. Regulatory and licensing authorities at the level of municipality and canton check the existence of educational concepts. An analysis by Ecoplan (2020, p. 14) shows that: „in most cantons, no checks are foreseen as to whether the concepts are actually implemented in practice“. A regular review or revision of the concept is required in seven out of the 26 cantons. Since the curriculum for ECEC from birth to four years, the so-called orientation framework (Wustmann Seiler & Simoni, 2016) is not binding, there is no monitoring verifying the implementation and achievement of educational goals.

In cases where the monitoring authority detects violations of the 'ordinance on the admission of foster children' (PAVO), the childcare provider is subject to specific requirements with the goal of improvement. The authority may revoke the license, in which case the childcare centre will be closed. However, this monitoring focuses mainly on structural quality as set out in the PAVO.

3.5.2 Monitoring of family-based childcare

The monitoring and licensing authorities for family-based childcare (childminders) are mostly the municipalities, sometimes the cantons and municipalities (kibesuisse/ Netzwerk Kinderbetreuung, 2015). Family-based childcare is – like centre-based childcare – regulated through the federal 'ordinance on the admission of foster children' (PAVO). Municipalities may delegate the monitoring and licensing of family-based childcare to experts. Many municipalities delegate the tasks to family childcare associations. The 'ordinance on the admission of foster children' (PAVO) stipulates that the monitoring authority must make sure that the childminder is monitored through an on-site visit at least once a year. A record of the visit is kept, the person in charge of monitoring verifies whether the conditions for the continuation of family-based childcare are fulfilled (PAVO, 2017).

3.5.3 Monitoring of kindergarten

In course of the harmonization of compulsory schooling (HarmoS), kindergarten is now part of the compulsory education system in Switzerland and lies in the responsibility of the cantonal education departments. The first two years of compulsory education for children from four to six years can be organized in different ways. The majority of the cantons introduced the two-year compulsory attendance of kindergarten, in only a few cantons kindergarten may only be compulsory for one year or not at all. However, most cantons require that kindergarten be provided. In all cantons, almost all children attend kindergarten. The aim of the HarmoS Concordat was to harmonize the most important structures, transitions and goals in the education system across cantons in order to smoothen transitions and to make the education system more permeable for all (EDK, 2015).

Cantons are responsible for the curriculum and conditions such number of lessons, size of class etc. The curriculum is binding for all kindergartens, including the small proportion of non-state kindergartens. The curriculum states the competencies to be achieved in kindergarten, but there are no comprehensive tests or similar monitoring instruments that would measure achievement after kindergarten. Kindergarten belongs to cycle 1 together with the 1st and 2nd grades of elementary school. At the end of cycle 1, around the age of 8 years, national testing for monitoring purposes is planned throughout Switzerland, but is still in the development phase (ÜGK, 2020).

In Switzerland, 93 % of kindergartens are public and state-funded (BFS, 2020a, Trägerschaft der Bildungsinstitutionen table je-d-15.05.00.01). The school principal is responsible for monitoring pedagogical quality in kindergarten. A school principal will announce a quality management visit and observe teaching in kindergarten at least once a year as part of personnel management. Insufficient process quality can be addressed within the personnel management and may have consequences under personnel law. In contrast to other countries, teachers in Switzerland are not registered as civil servants, i.e. the local school authority has the right as the employer to dismiss a teacher based on a negative assessment in quality of teaching.

3.5.4 Monitoring of childcare supplementing kindergarten

Kindergarten offers education during up to four lessons in the morning and two lessons usually for two afternoons a week. During lunchtime, before, and after kindergarten, children might need supplementing childcare. In many cantons, the provision of childcare supplementing kindergarten and primary school is part of education laws, but provision is only ensured if there is sufficient demand for such childcare. Cantons that have joined the HarmoS Concordat are in principle obliged to offer childcare provision appropriate to the needs and the local situation (Art. 11 Para. 2) (EDK 2007). Municipalities or the local schools are responsible for assessing the situation, and for monitoring supplementary childcare services. Private schools combining school and childcare (day-schools) are monitored by the canton. Childcare supplementing kindergarten might also include childcare centres, which are monitored as outlined above. Again, the legal basis for monitoring childcare supplementing kindergarten is the federal 'ordinance on the admission of foster children' (PAVO), with little specification on process quality.

3.6 Financing of ECEC

3.6.1 Financing of centre-based childcare

A comparative study on the cost of childcare comparing Switzerland with the neighbouring countries Austria, France and Germany found that the full costs for care provided in centre-based childcare in Switzerland are similar to the other countries (Stern, Schultheiss, Fliedner, Iten, & Felfe 2015, p. V). However, the costs are allocated differently. In Switzerland, the main financial burden is carried by the parents in contrast to neighbouring countries. For Swiss parents, costs for childcare are high in comparison, as the state contributes less to the costs. In addition, the contribution through public funding differs greatly within Switzerland, between cantons and municipalities (Stern et al., 2015).

Costs for centre-based childcare are often means-tested; families with a high family income pay the full costs. The financing of institutional care in Switzerland can be described with reference to four models (Figure 4). Depending on the model, the composition of financing varies, with a distinction between models; parents as full payers (type 1), parents and public authorities (type 2), parents and companies (type 3) and parents, public authorities and companies (type 4) (Stern & Schwab Cammarano, 2017).

	TYPE 1	TYPE 2	TYPE 3	TYPE 4
CONTRIBUTORS TO THE FINANCE OF CHILDCARE	Parents (+ sometimes charitable giving)	Parents + municipality/ confederation	Parents + private companies	Parents + municipality/ confederation + private companies
SUBSIDIES FOR CHILDCARE PLACES	No subsidized places	All places or part of the places are subsidized through public funding	All places or part of the places are subsidized through funding of private companies	All places or part of the places are subsidized through public and private funding
FEES	Parents pay full costs or almost full costs	Parents pay reduced fees		
	Mainly fixed fee	Mainly means-tested fees		

Figure 4: Types of financing models in the canton of St.Gallen (Stern & Schwab Cammarano, 2017, p. 27)

Since financing is the responsibility of cantons or municipalities, there are large differences in the proportion of public funding and the financial burden on parents. A comparison of municipalities in the cantons of Zurich and Vaud (Stern et al., 2015) shows that in the canton of Zurich the parental contribution accounts for about two

thirds of the full costs, whereas in the canton of Vaud parents contribute about 40 percent of the full costs. In the canton of Zurich, the public sector therefore contributes one third of the costs, while in the canton of Vaud the public sector covers more than half of the costs (Figure 5).

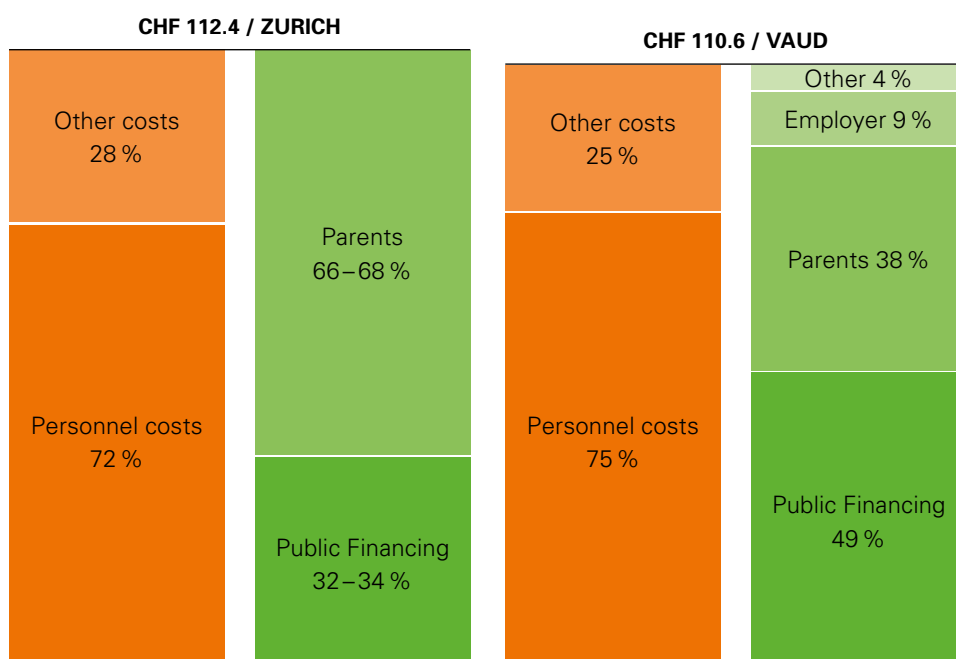


Figure 5: Full costs, financing and financial burden on parents in the cantons of Zurich and Vaud (Stern et al., 2015, p. 33)

Good models of financing policies for ECEC can be found in the cantons of Geneva, Fribourg, Vaud and Neuchâtel. Following a type 4 financing model, the public sector and companies co-finance the costs of childcare through a joint fund. In the canton of Vaud, for example, employers contribute at least 0.08 % of the wage bill to childcare costs. They thus finance 55 % of the fund. The municipalities contribute 5 CHF (~USD) per inhabitant and year (Netzwerk Kinderbetreuung Schweiz, 2013)

In eleven cantons, the responsibility for financing lies only with the municipality, in two cantons only with the canton. In nine cantons, responsibility is shared between canton and municipality, and in four cantons, the joint responsibility of the canton and municipalities is supplemented by the involvement of companies (Figure 6).

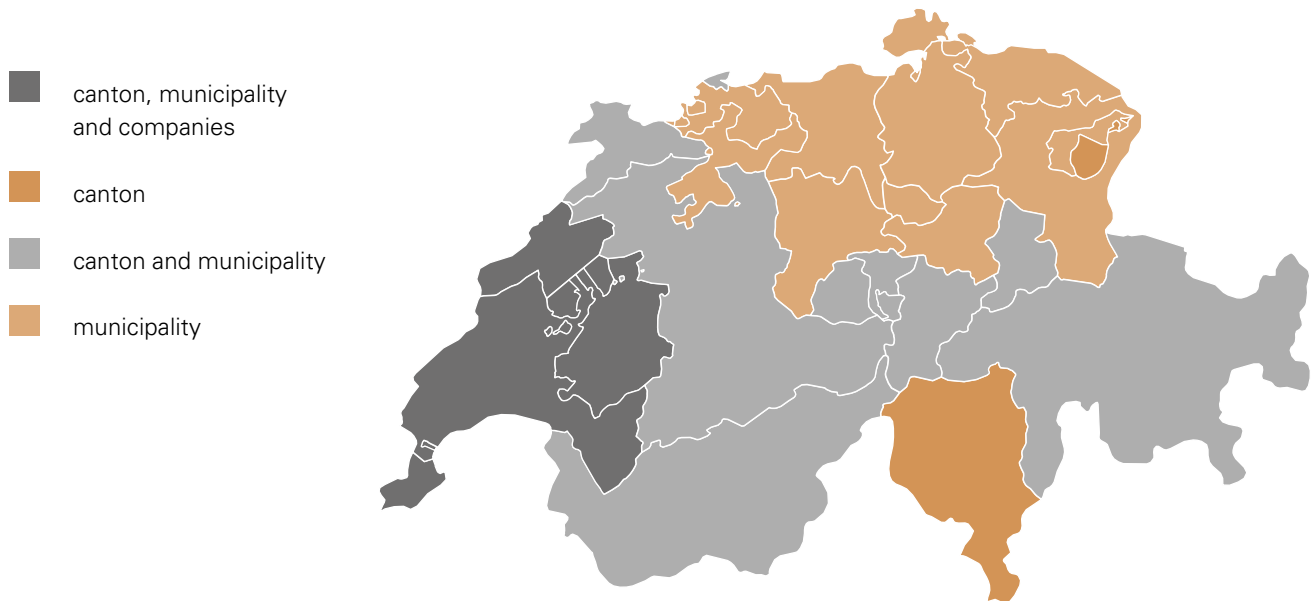


Figure 6: Responsibilities for financing centre-based childcare (Ecoplan, 2020, p. 41)

As mentioned before, the federal government has approved around 3,500 applications and provided around 393 million Swiss Francs within 17 years in start-up funding for additional childcare places. These funds have contributed to the creation of 63,000 new childcare places (EDI, 2020). The funding is for start-up, thus not contributing to sustainable financing in the long run.

Several studies conducting choice experiments with varying centre-based childcare costs showed that the high costs of childcare have a large effect on parents' choices. In addition, immigrant parents and parents with low-income, who use less centre-based childcare at present, would prefer centre-based childcare if it would be subsidized more (Zangger & Widmer, 2020, p. 119). Availability of childcare places would support the re-entry of mothers in employment and lead to an augmentation of work hours whereas affordability would lead to an increase in maternal work hours (Jeanrenaud, Kis, Gnaegi & Soulet, 2019).

3.6.2 Financing of family-based childcare

Costs for family-based childcare are carried to a large part by parents, while non-profit organisations might be funded through the municipality and/or donations for the non-profit organisations monitoring family-based childcare.

3.6.3 Financing of kindergarten

As kindergarten is part of compulsory education and part of the education system, kindergarten is free for all children. Salaries of kindergarten teachers are structured according to cantonal pay scales.

3.6.4 Financing of childcare supplementing kindergarten

For childcare over lunchtime or before and after kindergarten, parents and municipalities contribute to costs, similar to the types of funding for centre-based childcare. Parents' fees for childcare supplementing kindergarten is mostly means-tested, costing approx. 40 CHF (~USD) per day, with some subsidies for low-income families, and depending on the policy of the local municipality (Felfe, Lechner & Thiemann 2016, p. 65).

3.7 Evaluation data informing strategy

In previous chapters, responsibilities, monitoring and accountability for each setting of ECEC was described. To round this chapter off, the various sources of data and the regular evaluations are identified, as well as initiatives to increase and standardize data compilation and evaluation in order to inform policy.

Data on the development of ECEC in Switzerland is rather incomplete. There is a lack of evaluation tools and data on quality of ECEC and especially of process quality. Since the federal law on funding support for childcare provision came into force in 2002, some data collected through that program can be used to describe the progress in provision. For example, it is possible to determine how many new places were created in which cantons or to what extent the newly created or expanded childcare places are filled. It is however still not possible to make any statements about process quality at national level.

In 2011, the Swiss Conference of Cantonal Ministers of Social Affairs (SODK) made recommendations regarding the planning of ECEC provision addressing cantonal administrations. According to these recommendation, the regular survey of supply and demand should be used to plan and steer provision (SODK, 2011, p. 20). Ecoplan's recent analysis of the implementation of the recommendations in the cantons shows that although data compilation on childcare provision has been improved, there is still a need for standardization (Ecoplan, 2020, p. 57). In the following, instruments which are currently used to collect data on provision and the development of provision are briefly explained.

3.7.1 National statistics on childcare provision and families

There are no comprehensive national statistics on childcare facilities for pre-school and school age children in Switzerland (BFS, 2020b, Familienergänzende Kinderbetreuung). A feasibility study to assess the supply side of childcare revealed that many cantons collected some data, but that the data collected is not always sufficiently complete nor precise, and that definitions vary. In order to build up a national statistic on childcare, additional resources as well as legal foundations would be required (Stern, Fliedner, Walther & Iten, 2012). The Federal Statistical Office piloted a survey on childcare provision in the format of a quick survey. However, it became apparent that the data obtained this way did not meet the quality requirements. Further consideration and discussion are necessary (BFS, 2016).

Various federal survey instruments can be used to identify different characteristics of households and of children in childcare to provide information on the situation of demand (Stern et al, 2012). For example, the Statistics on Income and Living Conditions (SILC) surveys a representative sample of households once a year. The SILC survey provides information about whether families are satisfied with the childcare for their children (BFS, 2020c, Erhebung über die Einkommen und Lebensbedingungen SILC). The family and generations survey provides a statistical record of the family settings in Switzerland, as well as the relationships between generations. Carried out every five years, the family and generations survey describes how women and men combine family responsibilities and employment and how adult children and their parents support each other (BFS, 2020d, Erhebung zu Familie und Generationen EFG). The Household Budget Survey provides a continuous and detailed record of the household budgets and also compiles data on the expenditure for childcare (BFS, 2020e, Haushaltsbudgeterhebung HABE). The Swiss Labour Force Survey annually records indicators on the compatibility of work and family life and on unpaid work.

It thus provides important findings on the use of formal and informal childcare (BFS, 2020f, Schweizerische Arbeitskräfteerhebung). The Structure of Earnings Survey (LSE) can be used to determine wages as well as the level of qualification of employees in childcare provision (BFS, 2020g, Schweizerische Lohnstrukturerhebung).

3.7.2 Data on the education system including kindergarten

The Federal Statistical Office provides statistics on the number of children in kindergarten, on the number of kindergartens and type of providers (BFS, 2020h, Bildungsinstitutionen).

Kindergarten is also included in the educational monitoring reports as part of compulsory school. Educational monitoring is structured as a cyclical process and serves the systematic and long-term compilation of information on the Swiss education system. At national level, there are two instruments of education monitoring with a focus on quality at system level: education reports and assessment of basic skills (ÜGK).

The education report is published every four years. It contains data from research, statistics and administration on all levels of the education system, including early childhood education and kindergarten. Priorities are set for each of the education reports. For example, the 2018 education report also included ECEC. It reported the level of provision of childcare across Switzerland (Wolter, Denzler and Cattaneo 2018, pp. 52–54). With regard to kindergarten, the „structural harmonization“ in relation to the school entry date, the content of the regional curricula and the lessons per week in kindergarten were described (ibid., pp. 58–60).

In 2011, the federal government and cantons defined basic competencies for four areas of compulsory education, which will be regularly assessed (language of schooling, mathematics, science, languages). Four test phases are planned up to 2025 to assess to what extent students achieve the basic competencies in the four subjects. First tests were conducted in 2016 and 2017. Two subjects were tested at the end of primary school, main language of schooling and additional (national or foreign) language. Mathematics was tested at the end of compulsory education (EDK, 2019). Tests with 8-year-old children are planned for 2022. These test results are used exclusively for monitoring and evaluating the education system at the level of the system. No feedback on test results are provided on the performance of individual students or classes. School rankings are also explicitly excluded (ÜGK, 2020).

3.8 Summary: large differences in provision, financing, and quality monitoring

The chapter described the Swiss policy context of ECEC. The responsibility for ECEC, particularly from birth to four years old, lies mainly with cantons and municipalities. At a national level, the ‘ordinance on the admission of foster children’ (PAVO) defines only structural quality. It provides the legal framework for licensing and monitoring through the cantons and municipalities. Authorities in different areas, foremost social affairs, but also education, public health and migration have developed programs and policies highlighting the relevance of ECEC.

Many initiatives over the last two decades focused on pedagogical quality and process quality in ECEC. The ‘orientation framework’ providing a Swiss curriculum for ECEC, is influencing practice and contributes to improving process quality even though it is not binding. The certification process for centre-based childcare, regional initiatives as well as international frameworks such as Quality4Children also enhance quality.

In Switzerland, educators who work with children and their direct superiors are responsible for ensuring and further developing process quality. Monitoring and licensing authorities at the level of municipality and canton are responsible for overseeing the implementation of quality assurance processes, but do not assess pedagogical quality of interaction with children. Monitoring visits ensure the legal requirements according to the ‘ordinance on the admission of foster children’ (PAVO) are met and therefore assess structural quality only.

ECEC provision for children from 0 to 4 years old and childcare supplementing kindergarten varies largely between regions and urban and rural areas. Demand exceeds supply, although the costs are high in comparison to other countries. Parents pay a large part of the costs for centre-based childcare through fees, authorities and/or companies might contribute and subsidise childcare.

For kindergarten, the harmonisation across the cantonal systems of education has led to the vast majority of children attending kindergarten from around four years. In all cantons, kindergarten is now compulsory. Kindergarten is free of charge. Process quality is monitored by the school principal through visits. Kindergarten is part of the education system with a binding curriculum.

After the focus in Switzerland in recent years in ECEC has been placed strongly on the expansion of provision and the harmonization curricula for kindergarten as part of compulsory schooling, the question of quality in general and demands for more pedagogical quality are moving to the center of attention. Although there is no evaluation instrument to determine the developments of the last years in the area of process quality, indications relevant for ECEC can be obtained on the basis on statistical data and research data. Research, continuing education and practice are seeking to develop new approaches.

4. Curriculum and Pedagogy

For the education of children from 0 to 4 years, the orientation framework (Wustmann Seiler & Simoni, 2016) is the reference document whereas for education in kindergarten from 4 to 6 years of age, cantonal curricula apply. These curricula are presented, each of them regarding the basic principles and guiding ideas, the statements on pedagogical practice and references to process quality.

4.1 Curricula

In Switzerland, the 'orientation framework for early childhood education and care' (Wustmann Seiler & Simoni, 2016) commissioned by the UNESCO Commission and the Childcare Network is considered the national reference document for quality in early childhood. The guiding principles of the orientation framework are not statutory like the national educational goals for compulsory schooling, but there is very high acceptance of the framework. It serves as a foundation in practice, education, research and policy.

At kindergarten level, the three language-regional curricula „Curriculum 21“ for German-speaking Switzerland, „Plan d'études romand“ for French-speaking Switzerland and „Piano di studio“ for Ticino apply. The HarmoS Concordat sought to harmonize the cantonal curricula for the three language regions and to coordinate teaching materials. The national educational goals (Art. 7 HarmoS Concordat), subject areas for compulsory education (Art. 3) and regulations for teaching (national or foreign) languages (Art. 4) were incorporated into the regional curricula in the three languages (EDK, 2020a).

4.1.1 Orientation framework for ECEC

The orientation framework is not structured according to subject or competence areas, but focuses on the developmental and psychological needs of the child. It is divided into three parts. In the first part, the underlying understanding of the learning and developing child and the role of the adults in relation to the child's learning and development are described. The first part forms the foundation of the framework. The second part defines six guiding principles for educationally oriented work with children between the ages of zero and four years, oriented towards the well-being of the child. The third part focuses on pedagogy, the competencies required of the educators for observation and reflection, and on cooperation between educators and families (Wustmann Seiler & Simoni, 2016).

The orientation framework is aimed at adults who care for children from birth to four years of age, thus ranging from volunteers to childminders, ECEC staff, management and to policy makers. The main addressees are educators in centre-based childcare, childminders in family-based childcare, as well as at leaders of educational playgroups.

Contents of the orientation framework were based on research publications and trends in ECEC curricula in other countries. The authors, Wustmann Seiler and Simoni, conducted a multilingual Delphi survey with experts from all over Switzerland. The third, updated edition of the orientation framework is currently available. The editors, the Childcare Network Switzerland, are publishing further materials, up-to-date information and background information on the implementation of the orientation framework on their website (Network Childcare Switzerland n/a). Certain topics of the 'orientation framework' were deepened with reference to important aspects, experiences and ideas for action for practical work in so-called focus publications.

The Convention on the Rights of the Child forms the foundation of the orientation framework. The needs and rights of every child are guiding principles. The following six guiding principles are stated (Wustmann Seiler & Simoni, 2016, p. 37ff. authors' translation):

- 1) „Physical and mental well-being: A child who is well can be curious and active“ (ibid., p. 37)
- 2) „Communication: Children acquire a rich understanding of themselves and the world through exchange with others“ (ibid., p. 39)
- 3) „Belonging and participation: Every child wants to feel welcome and participate from birth“ (ibid., p. 42)
- 4) „Strengthening and empowerment: Reactions children experience in relation to them as a person or to their behaviour influence their self-perception“ (ibid., p. 44)
- 5) „Inclusion and acceptance of diversity: Every child needs a place in society“ (ibid., p. 46)
- 6) „Holistic and appropriate: Small children learn with all their senses, guided by their interests and previous experiences“ (ibid., p. 48)

Diversity is valued and recognised in the orientation framework. Equal opportunities for all children, respect for each other, valuing diversity, the focus on a child's individual potential as well as inclusive education form fundamental values (ibid. p. 33).

The third part of the orientation framework is devoted to pedagogical practice. High quality requires the competence of educators to observe and reflect, and the willingness to engage in dialogue with adults and institutions outside the childcare institution. Pedagogical practice is described regarding five key areas (Wustmann Seiler & Simoni, 2016, p. 52ff. authors' translation):

- „Observing, reflecting and documenting“ (ibid., p. 52)
- „Stimulating educational processes and designing learning environments“ (ibid., p. 56)
- „Cultivating educational and care partnerships“ (ibid., p. 57)
- „Accompanying and shaping transitions“ (ibid., p. 60)
- „Planning and evaluation“ (ibid., p. 63)

The orientation framework describes process quality as follows: „It refers to pedagogical processes, to interactions with the child, and to developmentally appropriate and educationally beneficial activities and interactions. Children's interactions with adults, with other children and with their spatial-material environment are also taken into account. Further, the skilled response of educators in a specific situation as well as cooperation with the families belong to central aspects of the process quality“ (Wustmann Seiler & Simoni, 2016, pp. 63–64, authors' translation). Process quality together with structural quality and orientation quality form pedagogical quality. The orientation framework emphasizes that pedagogical concepts should include statements on the support of educational and developmental processes of children as well as on the assurance of pedagogical quality in the institution. Self-evaluation and external evaluation serve to assess quality. The leadership of childcare provisions is responsible for quality management (ibid.).

4.1.2 Kindergarten curriculum

A curriculum describes society's legitimized mandate to compulsory education and defines the aims. Over several decades curricula for kindergarten developed from a non-binding framework of the Swiss kindergarten teachers association, to some cantons introducing curricula (Wannack, 2003) to the present, with all cantons having harmonized curricula for kindergarten.

There are three regional curricula, related to the three linguistic regions. The three regional curricula do not differ fundamentally, but for certain details, different pedagogical traditions are noticeable. In French-speaking Switzerland, all children are taught according to the „Plan d'Etudes romand (PER)“ (CIIP, 2010). „Lehrplan 21“

(Curriculum 21), was developed jointly by the 21 German- and multilingual cantons and released in 2014 (Lehrplan 21, 2016). Cantons made certain adjustments to Curriculum 21. The introduction of Curriculum 21 was the responsibility of the cantons, it has now been implemented in all 21 cantons. In the Canton of Ticino, the „Piano di studio“ has been released in 2015 (Repubblica e Cantone Ticino. 2015). Kindergarten is included in cycle 1 in all three regional curricula.

These curricula provide information about the educational goals and the understanding of teaching and learning. The main part of the curricula are organised according to subject areas. Competencies to be acquired are described with goals as well as exemplary learning content. In addition, trans-curricular competencies and interdisciplinary themes are defined, in relation to the guiding principle of sustainable development (Lehrplan 21, 2016). Teaching and learning in cycle 1 (children from four to eight years) are oriented towards the development of children. Particularly at the beginning of cycle 1, in kindergarten, an interdisciplinary perspective is promoted. Figure 7 shows the interplay of development-oriented approaches with subject areas as presented in curriculum 21. In later years of cycle 1, in grade 1 and 2 of primary school, development-oriented perspectives evolve to a more subject-oriented teaching and learning.

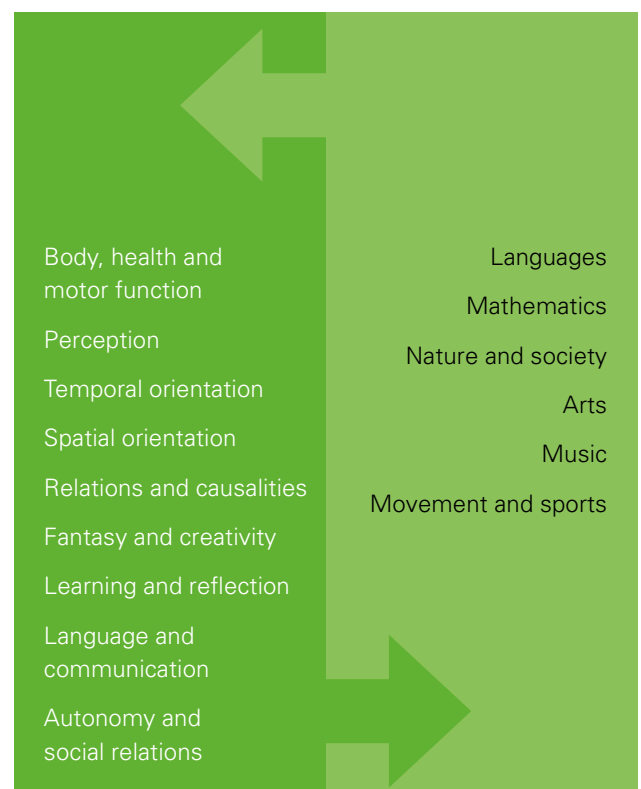


Figure 7: Interplay between the development-oriented perspectives on the left with the subject areas of cycle 1 on the right (Lehrplan 21, 2016)

Competences are differentiated according to subject area and operationalized for each cycle. Basic requirements and benchmarks are given. As an example, main goals included in the curriculum on the theme of body and movement in the French-speaking curriculum (plan d'étude, PER) are cited (CIIP, 2010, authors' translation):

Main goals:

- „Knowing your body, taking care of it and recognising its physiological and nutritional needs“ (ibid.)
- „Developing physical and motor resources, as well as modes of bodily activity and expression“ (ibid.)
- „Preserve your health through responsible choice of sports and leisure activities“ (ibid)

Example of learning goals for body and movement:

- «Experimenting with different body functions and reactions by
- perceiving the different physiological reactions of their body in movement and effort
- perceiving the various functions of their body
- exercising various postures
- distinguishing and naming the different parts of their body
- integrating movement into daily practice
- adapting their behaviour to basic safety rules“ (ibid.)

The guiding principle of the curricula is the orientation at competencies. Unlike previous curricula, the current curriculum does not list the content teachers should teach. Instead, they describe what students should know and be able to do at the end of the cycle. The focus is thus on students' acquisition of knowledge and skills.

It is the role of the teacher, to determine based on curricula, which competences can be acquired through which learning content and topics. The teacher designs the learning environment and teaching units in order to enable students to acquire the competences. Competence-orientated teaching and learning requires the teacher to make use of teaching materials, learning media, well-designed learning tasks and pedagogical approaches to purposefully selected contents, to design learning environments, plan teaching and learning and to support the learners.

In order to meet the diverse needs and levels of development of all students, teachers are required to adapt the lessons to the different prerequisites of the students. In this way, they can enable all students to achieve individual learning progress. Learning tasks corresponding to level of development and learning of individual students or groups of students as well as adaptive teaching are required to meet the diverse needs and heterogeneity of the class. Furthermore, the cooperation of teachers with parents and guardians is crucial to meet the diverse needs of students. These aspects on how to meet diverse students' needs, which should be applied across subject areas and cycles, are described in the introduction of the curriculum 21 (Lehrplan 21, 2016, Lern- und Unterrichtsverständnis).

The curriculum describes the following characteristics that contribute to pedagogical quality (Lehrplan 21, 2016):

- „Significance of learning content and learning tasks in relation to the subject and to the life of students;
- quality of teaching materials and media for learning;
- teacher's support;
- transparency of goals and performance expectations for learners during class;
- clarity, comprehensibility and structuring of content to be learned;
- cognitive activation of students;
- consolidation of the learned and intelligent exercises (revision tasks tailored to the goals and students' skills, authors' explanation);
- effective class management to create a low-disturbance learning environment in order to use learning time efficiently;
- positive school and classroom climate;
- respectful classroom atmosphere conducive for learning with an appropriate culture of communication, feedback and reaction to students' mistakes;
- dialogical conversation;
- teacher's diagnostic skills of and individual support for students;
- promotion of self-direction and learning strategies“ (Lehrplan 21, 2016, authors' translation)

Focusing on process quality in kindergarten, interactions between teachers and students, learning environments and cooperation between parents and teachers are emphasised in a similar way as in the orientation framework for younger children. The understanding of education, teaching and learning in the curriculum provides orientation for ensuring process quality in kindergarten.

4.2 Pedagogy

In ECEC institutions such as centre-based childcare providers define their own guiding principles for pedagogy in their pedagogical concepts. They may draw on the orientation framework in formulating their pedagogical concept. Educators and other members of staff within an institution are expected to act according to the pedagogical principles of their institution and to share its values and attitudes. First, the pedagogical approaches are discussed for centre-based childcare, then family-based childcare and finally kindergarten.

4.2.1 Pedagogy in childcare centres

Providers of centre-based childcare are free to choose and implement their pedagogical approach. There is no research on the occurrence of different pedagogies chosen by childcare centres. It can be assumed that most providers are eclectic in the development of their pedagogical approach. Among others, the following pedagogies are mentioned in pedagogical concepts of child-care centre:

- Friedrich Froebel
- Rudolf Steiner (Waldorf education)
- Maria Montessori
- Emmy Pikler
- Reggio Emilia
- Infans concept
- education and learning stories (BuLG)
- social context orientation
- anti-prejudice education
- inclusive education

Since 2012, the KITAplus program, an initiative for inclusion of all children, also children with special educational needs and disabilities, has been implemented in six cantons in Switzerland. KITAplus seeks to provide a framework to enable children with special needs to attend centre-based childcare. The focus lies on integration, such as for the daily routines of the centre, and not on separate programmes. In general, children with special needs and their parents receive support through early childhood special education experts, who might either support the children at home, or support the inclusion of children in centre-based childcare. KITAplus is promoted by the foundation Kifa Switzerland, kibesuisse, the respective early childhood special education services and the local public authorities (Kifa Switzerland, 2020).

4.2.2 Pedagogy in family-centred childcare

The associations for family-centered childcare in some cases also have guidelines and pedagogical concepts. As an example serves the pedagogical concept of the Winterthur day-families association, which has been developed in cooperation with kibesuisse. This concept takes children's needs as a starting point and contains concrete advice on the pedagogical approach. Examples from everyday life are used to illustrate how the topic is implemented in daily practice (Verein Tagesfamilien Winterthur/kibesuisse, 2017).

4.2.3 Pedagogy in kindergarten: competence-orientation

The three curricula for the three language regions covering compulsory school from kindergarten to secondary school emphasise the concept of competence according to Weinert (2001). The concept of competence encompasses abilities, skills, knowledge, volition and attitudes Curriculum (Lehrplan 21, 2016, Lern- und Unterrichtsverständnis). Teaching and teaching materials should support students' acquisition of competencies. Educational aims centre on understanding, application and skills (ibid.).

Teachers teach through designing learning environments and plan units of lessons. They structure the topic, define learning tasks, methods, forms such as seatwork, group work, whole class teaching, and they select learning aids according to the learning goals and competences to be acquired. Diverse learning opportunities allow all students to benefit from the learning environment according to their skills, so that the heterogeneous prior knowledge and diverse needs of the students can be met (ibid.).

4.3 Curriculum implementation

The implementation of curriculum and pedagogy guiding ECEC is described in the following chapter first for early educators typically working in centre-based childcare and second for kindergarten teachers. Curriculum implementation is discussed in relation to resources provided for curriculum implementation, initial and further education, the role of centre leaders and the cooperation with parents and guardians.

4.3.1 Resources for implementing curriculum in centre-based childcare

Research publications deepen aspects of the orientation framework and provide further theoretical foundations and recommendations for action. Neither the orientation framework nor these resources are binding. As an example, the focus publication „arts education & cultural participation – from the very beginning“ (Kraus, Ferretti & Meier, 2017) shows how the implementation of the orientation framework can be supported in the subject area of arts. The focus publication highlights the foundations, which are expressed in the orientation framework. The promotion of creativity and cultural activity is considered in the orientation framework to be important keys to holistic education and development. In the orientation framework, it is suggested that educators provide children with a wide range of opportunities to actively engage in artistic activities and express themselves freely, and have a broad repertoire of stimuli to stimulate the children’s creative processes (Wustmann Seiler & Simoni, 2016). In the focus publication, the theoretical understanding of art education is expanded, formulating the vision of „freedom of expression – from the very beginning“. The focus publication also draws conclusions how the promotion of creativity through arts education and cultural participation is to be anchored as a supporting element in the curriculum of initial and continuing education (Kraus, Ferretti & Meier, 2017).

4.3.2 Resources for the implementation of the kindergarten curriculum

The implementation of the curriculum and as well as the development and the setting of teaching and learning materials is the responsibility of cantons. Teachers are obliged to use certain teaching and learning material in a given canton. Cantons decide which teaching and learning materials are compulsory and to what extent. They distinguish different degrees of obligation: binding or compulsory, alternatively binding or compulsory, recommended, optional, voluntary, supplementary, approved, free choice.

Throughout Switzerland, there are fewer teaching and learning materials set compulsory or recommended for kindergarten than for primary and secondary school (ilz, 2016). For kindergarten as part of cycle 1, many cantons do not set any teaching material as compulsory (e.g. Lucerne). Cantons setting compulsory teaching materials for kindergarten usually identify teaching materials for teachers in few of the subject areas, but not materials for the children, nor materials for all academic subjects. In Zurich, for example, a so-called teaching folder (‘Unterrichtsordner’) is defined for kindergarten.

In order to harmonize the curriculum and the development of teaching materials, cantons work regionally in four regional conferences: the inter-cantonal conference of public education in French and Italian-speaking Switzerland (CIIP)), the conference of the ministers of education in central Switzerland (BKZ), the Conference of ministers of education in Eastern Switzerland and in Liechtenstein (EDK-East) and the Northwestern Conference of ministers of education (NW EDK). Also the producers of teaching resources work together regionally.

4.3.3 Embedding the curriculum in initial and further education for educators

During initial education and through further education the foundation for pedagogy in ECEC is laid. The curriculum for the vocational educational training (VET) is defined at national level.

The curriculum for the vocational educational training (VET) for educators working in childcare centres defines as a main aim, amongst others, the following: „contributing to the designing of the childcare environment“ (SAVOIRSOCIAL, 2010, p. 1, authors’ translation). The corresponding performance aim VET level specifies „The educator designs rooms as places to live, learn and play that promote development“ (ibid. p. 47, authors’ translation). The corresponding performance objective at the VET level reads: „the educator describes room concepts and facilities for living, learning and play that promote development“ (ibid.). „Process-oriented and systemic thinking and acting“ and „learning strategies and systemic thinking“ (ibid. p. 69) are examples of methods competencies. „Promotion of selfregulation“, „discretion“, the „ability to empathize“ and „communication and teamwork“ and „resilience“ (ibid.) are examples in the area of social and personal competences.

Institutions providing vocational educational training (VET) prepare educators for implementing the curriculum. The extent to which the orientation framework (the curriculum for ECEC from birth to four years) is covered in initial education cannot be conclusively assessed. It can be assumed that the orientation framework is drawn upon in VET as a standard reference, as training institutions were important partners in the development of the orientation framework and its subsequent dissemination (Wustmann Seiler & Simoni, 2016).

In addition to embedding the orientation framework in initial training, it is also dealt with in further training courses. Curaviva Switzerland, for example, offers a certificate course for working with the orientation framework. Educators working in centre-based childcare as well as leaders of educational playgroups are the target groups of the 14-day course. The certified course promotes the understanding of the orientation framework and expands on it in the areas of language fostering, caring for babies, diversity and cooperation with parents and guardians (Curaviva.ch, 2020).

Numerous courses of further education for ECEC staff offer the possibility to expand competences in specific subject areas. These training courses are offered by various institutions and are aimed at different target groups. The variety of courses on offer responds to the vast heterogeneity in terms of training backgrounds of staff in centre-based childcare. A recently published study on qualification requirements in early childhood education and training (Dubach et al. 2018) shows that in German-speaking Switzerland in particular, approx. 50 % of employees in centre-based childcare are in training or on an internship. In addition, but to a smaller extent, also unskilled employees work in childcare centres as assistants alongside trained educators (Dubach et al, 2018).

In terms of process quality, training courses that focus on the quality of interaction between educators and children as well as on creating an environment that promotes learning are of particular interest. In cooperation with cantons and cities, for example, the St.Gallen University of Teacher Education offers the two continuing education formats „On-site practice coaching in childcare centres and play groups“ (Waibel, 2020) and coaching as part of the early intervention programme „Integrated fostering of German language acquisition in childcare centres“ (Vogt, 2020a). These two formats build on coaching, whereby experts reflect practice together with educators and develop learning opportunities for second language learners as well as providing tailored further education for educators. In cooperation with the canton of Zurich, the Thurgau University of Teacher Education and the professional school Winterthur offer further education based on videos, which the educators take of their own practice and analyse their video together with peers and experts (Isler & Neugebauer, 2019). This format allows for in-depth reflection of the professional practice. Interaction quality is at the heart of video-based further education.

4.3.4 Embedding the curriculum in initial and further education for kindergarten teachers

Since 2005, kindergarten teachers study at an university of teacher education and achieve a Bachelor's degree in primary and pre-primary education in all regions of Switzerland (Edelmann, 2014). Studies focus on education, didactics, and developmental and educational psychology and include teaching practice in kindergarten and primary school. Pre-service teachers study teaching and learning in the different subject areas of the curriculum, such as language, mathematics, natural science, sport etc. In addition, the pedagogy of play, i.e. initiating play, supporting play, learning through play, guided play and free play is taught (Vogt, 2020b).

For teachers in the first two years of work in kindergarten and school mentoring and specific courses are provided by cantons. As Keller-Schneider and Hericks (2017) point out, the specific training and mentoring at work entry ensures professionalization, thus also pedagogical quality in this very crucial moment in a teacher's career.

For further education, kindergarten teachers attend compulsory and non-compulsory further training courses. Compulsory courses are used to implement a new curriculum, lately for example curriculum 21. The introduction of a new subject, such as informatics, could also be realised through compulsory courses for all teachers from kindergarten to secondary school (Schiff-erle, Rösch & Suter, 2019). These inservice training courses take different format: in-house courses, courses offered by the canton or free courses. Training courses focus on a certain theme, subject area, or pedagogical area or methods of instruction. Many of the further education courses contribute to process quality, for example, on the subject of cooperation with parents or individualization and differentiation according to students' educational needs.

4.3.5 Role of centre leaders in curriculum implementation

Leaders of ECEC institutions are responsible for the creation of framework conditions that enable high-quality pedagogical work. In order to promote process quality, centre leaders are responsible for promoting further training for their staff, giving feedback to individual educators and teams on their pedagogical work, initiating processes of reflection in teams and across the institution, encouraging educators to try out new things and offering time for professional development for the team to jointly reflect on experiences and findings (Wustmann Seiler & Simoni, 2016). The orientation framework offers concrete approaches for pedagogical action, in particular with the explanations in the following sub-chapters: „observing, reflecting and documenting“, „stimulating educational processes and designing learning environments“ and „planning and evaluating“.

4.3.6 Role of school principals for curriculum implementation in kindergarten

In the course of the HarmoS Concordat, the curricula of the three language regions were harmonized. Since 2014, the new curricula were introduced in the cantons. The introduction of the curricula is shaped at the level of the Canton, i.e. regarding timing, introduction model, further education, teaching materials, assessment, etc.. In the canton of Zurich, for example, curriculum 21 at kindergarten level came into force in the 2018/2019 academic year. At the level of school principals and teachers, the introduction of the curriculum began with preparatory work and further training in 2017.

The school principal is responsible for the operational management of the school as well as for pedagogical quality. The national association of school principals defined six guiding principles for their profession. The first two focus explicitly on quality: (1) “school principals are responsible for quality management at the level of the whole school” and (2) “school principals are experts for leading, shaping and developing their school” (VSLCH, 2015, p.4). School principals are responsible for ensuring and developing quality through process and self-evaluation. They take the needs of teachers, parents and students into account and ensure the cooperation with school authorities. Human resources management and assessment is within their competence (Berufsberatung.ch, 2020b).

4.3.7 Cooperation with parents in implementing curriculum in centre-based childcare

In ECEC, great importance is attached to the cooperation with parents. The quality handbook of Qualikita (Kibesuisse, 2020a) defines cooperation with and participation of parents as central areas. However, there is still a great need for improvement regarding the cooperation with parents. A study analysing topics chosen for parent-educator cooperation during daily transitions from home to centre and home again shows, that childcare centres use these moments of transition not for enhanced parental cooperation regarding the development of the child or the educational focus of the day but only for brief information exchange (Vogt, Zumwald, & Itel, 2018). There is a need for professionalisation of educators in ECEC, to enable them to increase parents’ participation and to build a lasting educational partnership. Various ECEC initiatives and programs place great value on the involvement of parents. Furthermore, practical guidelines have been developed to increase the involvement of parents in language promotion (Graber, Muret, Salzmann & Selimi, 2011; Zumwald, Itel & Vogt, 2015).

Cooperation between parents and ECEC is further strengthened by ensuring access to various services, in particular the parenting advice centres for infant care. Securing and expanding these services is a focus of many of the cantons’ ECEC strategies (Stern et al., 2017, p. 18). In the first few years, this support is supplemented in some cities by home visit programs such as a:primo. This adapts the Dutch program Opstapje (Averroes Foundation, 1996 quoted in Dreifuss & Lannen, 2018, p. 8) and its German implementation (Sann & Thrum, 2005) to the context in Switzerland. Various alternative implementation models are being tested, all with the aim of strengthening interaction between parents and children and networking families with local services such as centre-based childcare or playgroups and with other families (Dreifuss & Lannen, 2018). In the city of Bern, this home-visiting program was included as an essential element in the overall concept of primano, the early intervention program of the city of Bern (Tschumper, Gantenbein, Alsaker, Baumann, Scholer & Jakob, 2012).

4.3.8 Cooperation with parents in implementing curriculum in kindergarten

The cooperation between kindergarten and parents and guardians is seen as a necessity. The responsibility for educating a child is understood as a shared responsibility. Teachers inform parents about learning goals and about their pedagogy at yearly parents evenings. At least once a year, a meeting is convened to discuss a child's development and learning progress, involving the kindergarten teacher and the parents, sometimes also the child (Volkschulamt Kanton Zürich, n.a.).

Whilst it is widely recognised that cooperation with parents is very important, it also becomes apparent that the cooperation between teachers and parents deserves even more attention (Neuenschwander, Lanfranchi & Ermert, 2008). An analysis of the discourse in Swiss media reveals a new media problematization of the relationship between school and parents: parents are presented as deficient, whose educational participation needs to be activated, or whose refusal to cooperate should be sanctioned with fines (Knoll, 2017). At the same time, there are reservations that parents could exert too much and undue influence on the school. A guideline of the Swiss Teachers' Association states: „Parents have no say whatsoever in the content and methods of lessons. What is taught in public schools is primarily determined by the curriculum and education laws in force at the time“ (Brühlmann & Staehelin, 2017, p. 23).

4.4 Summary curricula, pedagogy and curricula implementation

Only since 2012, there is a curriculum for ECEC covering the years zero to four. The curriculum is called 'orientation framework' (Wustmann Seiler & Simoni, 2016). It has been developed across regions at national level and is widely known. It seeks to provide orientation for practice in all forms of ECEC, mainly in centre-based childcare, but also family-based childcare, home-visiting programmes and educational playgroup. However, the orientation framework is not binding. There is no legally binding curriculum in Switzerland for ECEC before the age of four.

Kindergarten is part of the school system and since several decades, pedagogy was guided by curricula in most cantons. Since 2012, curriculum 21 is implemented in all cantons of German-speaking Switzerland, as well as „Plan d'Etudes romand (PER)“ in French-speaking cantons and in canton of Ticino, the „Piano di studio“. These curricula are competency oriented and formulate competencies to achieve in all subject areas for three cycles within compulsory schooling. Kindergarten and the first two years of primary school form cycle 1.

Regarding materials for curriculum implementation in centre-based childcare, focus publications based on the orientation framework were developed with practical suggestions, which support educators in carrying out high-quality pedagogical work. Childcare centres are not obliged to base their work on the orientation framework. Childcare centres formulate their pedagogical concepts, often based on certain pedagogies such as Montessori, Infans, etc. For kindergarten, teachers are obliged to ensure that children acquire the competencies specified in the curriculum. Cantons can define certain teaching materials as mandatory, however, for kindergarten there are only few compulsory teaching materials, but a wide range of resources teachers can use to guide their practice.

Initial and further education are guided by curricula for early educators as well as kindergarten teachers. Initial education for centre-based childcare is organised as vocational educational training (VET); no studies have researched the implementation of the curriculum, but as all institutions engaged in VET were part of the development of the orientation framework, it can be assumed, that it is taught in initial education. For kindergarten teachers studying at a university of teacher education, the curriculum and its competency-orientation is taught in order to be implemented regarding pedagogy as well as teaching and learning in all subject areas.

Cooperation between parents and guardians and ECEC staff is highlighted in both, the orientation framework as well as the curricula. Research shows that further professionalization of educators is required to improve and deepen the cooperation.

5. Workforce development

As process quality needs to be embedded in every day practices, notably in the educator/teacher – child interaction, professionalization is seen as crucial for process quality. The following chapter discusses vocational and professional education as well as governance and workforce development. First, the Swiss dual professional education system is introduced. Then the context of professionalization for centre-based and family-based childcare as well as kindergarten is outlined. The chapter closes with explorations on the relation between training and process quality and on monitoring of workforce development.

5.1 Governance and context of workforce development

The workforce in ECEC in Switzerland includes early educators with Vocational Education Training (VET), as well as with higher professional education. In the case of kindergarten, a bachelor degree is required. The so-called ‘dual professional education system’ emphasises the close link between practice and theoretical knowledge. It also ensures, that professional development is flexible, enabling the access to higher degrees also for educators with vocational background (Figure 8).

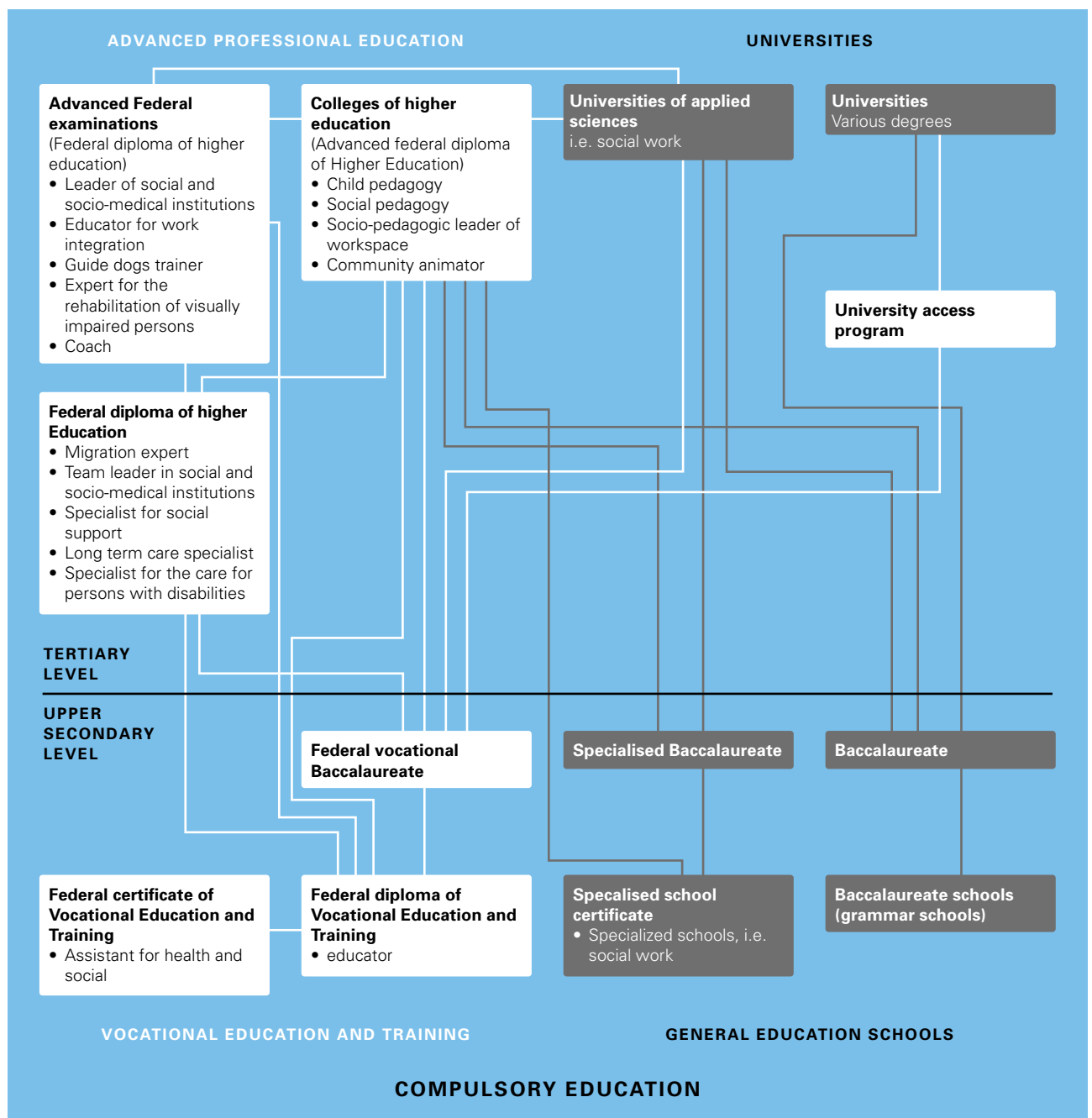


Figure 8: Variety of professional and academic paths in the areas of social and caring professions. (SAVOIRSOCIAL 2020b, p. 1)

Students entering social professions can train either following the path of basic vocational training (vocational certificate, Federal VET Diploma, and Federal Vocational Baccalaureate) or the path of general education (upper secondary specialised school and Baccalaureate school). The dual education system in Switzerland, with its permeability from apprenticeship to university, is seen as a strength, as it enables professionals to pursue individual career paths and to qualify for different positions and functions in the labour market. At present, there is however a gap for the field of ECEC: there is no bachelor's degree program focusing early childhood education and care in Switzerland. There are however, two Master degrees offered, Master Early Childhood Studies and Master Early Childhood, each cooperations between a Swiss and a German institution. A bachelor's degree in early childhood would complete the early childhood education landscape and close the gap for graduates of vocational baccalaureate schools and higher professional schools. A further strength of the dual education system for ECEC is the team-oriented and individualized practice of continuing education, which enables educators to determine the thematic focus of their own development. The challenge remains that continuing education requirements are not binding for institutions and educators, and that in some fields and institutions, the financial resources for continuing education are very limited.

Regulations concerning qualifications of the workforce, as well as statistics on the ECEC workforce and the working

conditions are presented first, again discussing early educators in centre-based childcare, childminders providing family-based childcare and then kindergarten.

5.1.1 Governance and workforce development in centre-based childcare

In Switzerland, educators and leaders in ECEC have different qualifications depending on the field of work and on their function. In the area of childcare centres, qualifications are defined and anchored in the system of Vocational Educational Training. The Federal Certificate of Proficiency for Specialist Care (EFZ) and the Diploma for Child Educators at Higher Professional Schools (HF) are the two most common qualifications. In French-speaking Switzerland, the latter – a higher professional education diploma – is the standard, but not in German-speaking Switzerland. In German-speaking Switzerland, about half of the workforce working with children in centre-based childcare obtained the Federal Certificate of Proficiency, having completed vocational educational training during three years. A small percentage of those working in childcare centres still have no basic social or pedagogical training.

Cantons formulate regulation on educator-child ratios and on the minimum of trained personnel in centre-based childcare (Table 2)

Table 2: Proportion of trained staff and childcare ratio by canton (adapted by the authors) (Ecoplan, 2020, p. 30–31)

CANTON	MINIMUM REQUIREMENTS FOR THE PROPORTION OF TRAINED PERSONNEL	TRAINED STAFF TO CHILDREN RATIO 0 TO 4 YEARS CENTRE-BASED CHILDCARE	TRAINED STAFF TO CHILDREN RATIO 4 TO 6 YEARS CHILDCARE SUPPLEMENTING KINDERGARTEN
Aargau (City of Aarau)	50 %	0–1.5 years: 1:4 from 1.5 years: 1:6	
Appenzell Inner-Rhodes	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:8
Appenzell Outer-Rhodes		0–1,5 years: 1:3 1.5–4 years: 1:6	1:8
Bern	50 %	0–1 years: 1:4 1–4 years: 1:6	1:8
Basel District	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:8
Basel City	50 %	0–1.5 years: 1:3.3 1.5–4 years: 1:5	1:6
Fribourg	66 %	0–2 years: 1:4 2–4 years: 1:7	1:12

CANTON	MINIMUM REQUIREMENTS FOR THE PROPORTION OF TRAINED PERSONNEL	TRAINED STAFF TO CHILDREN RATIO 0 TO 4 YEARS CENTRE-BASED CHILDCARE	TRAINED STAFF TO CHILDREN RATIO 4 TO 6 YEARS CHILDCARE SUPPLEMENTING KINDERGARTEN
Aargau (City of Aarau)	50 %	0–1.5 years: 1:4 from 1.5 years: 1:6	
Appenzell Inner-Rhodes	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:8
Appenzell Outer-Rhodes		0–1,5 years: 1:3 1.5–4 years: 1:6	1:8
Bern	50 %	0–1 years: 1:4 1–4 years: 1:6	1:8
Basel District	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:8
Basel City	50 %	0–1.5 years: 1:3.3 1.5–4 years: 1:5	1:6
Fribourg	66 %	0–2 years: 1:4 2–4 years: 1:7	1:12
Geneva	60 %	0–1 year: 1:4 1–2 years: 1:5 2–3 years: 1:8 3–4 years: 1:10	
Glarus	50 %	0–1.5 years: 1:3 1.5–3 years: 1:5 3–4.5 years: 1:8	1:10
Grisons	50 %	0–1 years: 1:4 from 1 years: 1:6	
Jura	100 %	0–2 years: 1:5 2–4 years: 1:10	1:15
Lucerne (city of Lucerne)	50 %	0–1.5 years: 1:3.3 1.5–3 years: 1:5 3–4 years: 1:6.25	1:10
Neuchâtel	66 %	0–2 years: 1:5 2–4 years: 1:8	1:12
Nidwalden	50 %	0–1.5 years: 1:3 1.5–3 years: 1:5 3–4.5 years: 1:8	1:10
Obwalden	50 %	0–1.5 years: 1:4 From 1.5 years: 1:6	
St Gallen	60 %	0–1.5 years: 1:3 From 1.5 years: 1:8	
Schaffhausen	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:8
Solothurn	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:8
Schwyz	50 %	0–1.5 years: 1:4 1.5–4 years: 1:6	1:12

CANTON	MINIMUM REQUIREMENTS FOR THE PROPORTION OF TRAINED PERSONNEL	TRAINED STAFF TO CHILDREN RATIO 0 TO 4 YEARS CENTRE-BASED CHILDCARE	TRAINED STAFF TO CHILDREN RATIO 4 TO 6 YEARS CHILDCARE SUPPLEMENTING KINDERGARTEN
Thurgau	50 %	0–1.5 years: 1:3 1.5–3 years: 1:5 3–4.5 years: 1:8	1:10
Ticino	33 %	0–1 years: 1:4 1–2 years: 1:5 2–3 years: 1:8 3–4 years: 1:12	1:12
Uri	50 %	0–1.5 years: 1:3 1.5–3 years: 1:5 From 3 years: 1:6.25	
Vaud	80 %	0–2 years: 1:5 2–3 years: 1:7 3–4 years: 1:10	1:12
Valais	66 %	0–1.5 years: 1:5 1.5–3 years: 1:6 3–6 years: 1:8 (mixed age groups: 1:8)	1:8
Zug	50 %	0–3 years: 1:3 3–6 years: 1:7 (mixed age group with children under 1.5 years: 1:4; Mixed age group: 1:6)	1:7
Zurich	50 %	0–1.5 years: 1:4 From 1.5 years: 1:6	

At management level, specific diplomas and certifications are expected in most centre-based childcares. Certificates are achieved through specific training courses in leadership for childcare leaders. In centre-based childcare, the team leader responsible for a group of children may obtain a certificate as team leader, whereas the leader of the centre may obtain a higher professional qualification for managers of institutions. These types of leadership certificates, team leader and institution managers are federally

recognized. However, there are still many employees without leadership qualifications in management positions (Dubach et al, 2018, p.26–30). In eight cantons, management qualification is only expected for institutions of a certain larger size, in three cantons years of work experience are considered equivalent for obtaining a management position, whereas in twelve cantons training at the management level is required (Figure 9).

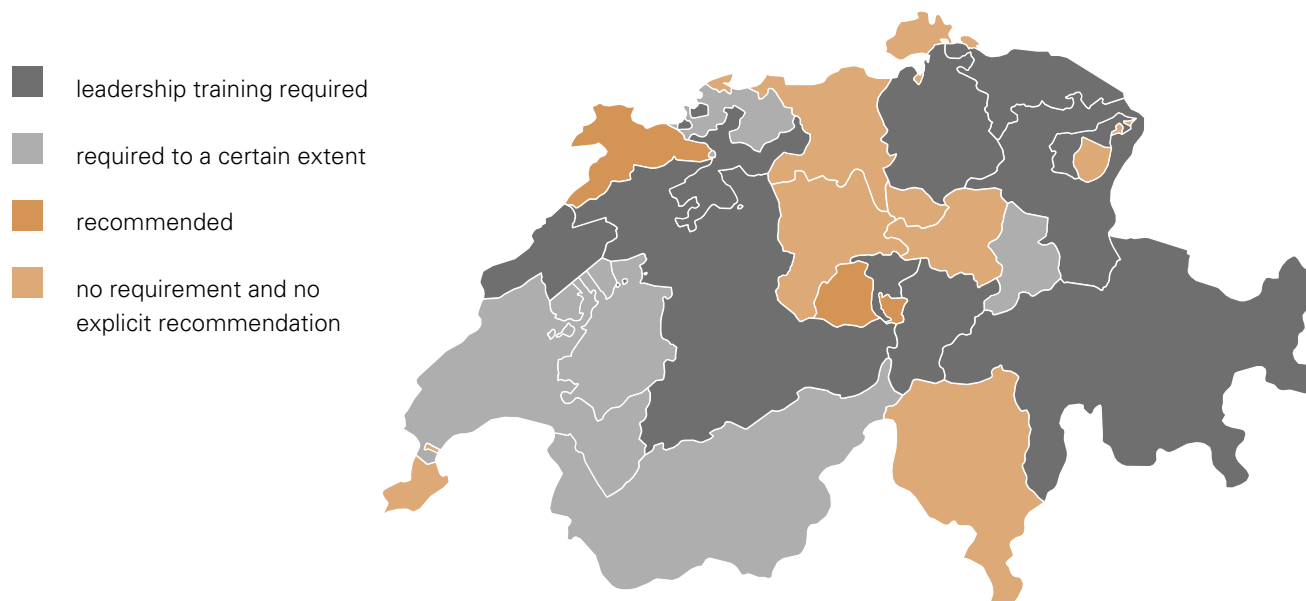


Figure 9: Overview of the requirements for managers of centre-based childcare in the cantons (Ecoplan, 2020, p. 26)

Working conditions for staff at centre-based childcare are governed by labour law according to the Labour Code and the Code of Obligations for employment relationships under private law and the requirements of the supervisory and licensing authorities (kibesuisse, 2019, p. 1). Childcare centres define working conditions autonomously, in compliance with the legal requirements and regulations of cantons and municipalities. In the canton of Vaud there is a collective labour agreement in the area of childcare since January 2019 (Convention collective cantonale de travail dans le secteur de l'accueil de jour de l'enfance).

Kibesuisse, the Swiss childcare association, and the public service union (VPOD) are committed to ensuring good working conditions in centre-based childcare. Kibesuisse formulates guidelines, wage and employment recommendations for providers, specifying planning for staff, requirements for staff qualifications, the staff to children ratio, as well as other topics.

In Switzerland, working hours are set at 42 working hours per week with four weeks' vacation, for older employees with five weeks' vacation. Kibesuisse distinguishes between hours for direct pedagogical work and indirect pedagogical work. Direct work stands for the direct pedagogical work with the child, indirect work for meetings, parental work, training, etc. According to the recommendation of kibesuisse, 10% of the work hours per position should be planned for indirect work (kibesuisse, 2016, p. 9).

Wages of pedagogically trained staff in centre-based childcare vary depending on the provider and canton. Only three cantons set minimum standards for wages of childcare educators (Ecoplan, 2020, p. 38). Wages of childcare workers are below the Swiss median wage of 6,538 CHF (~USD) (year 2018) (BSV, 2020b).

Kibesuisse wage recommendations for trained personnel distinguish 20 wage levels and take into account the level of education, years of work experience and additional responsibilities. According to kibesuisse recommendation, total compensation based on 13 monthly salaries with 42 hours per week and four weeks of vacation including meals (180 CHF per month) is as follows (kibesuisse 2019, pp. 19–22) (Table 3).

Table 3: Salary recommendation according to level of qualification by the Swiss childcare association (kibesuisse, 2019, p. 19–22)

LEVEL OF QUALIFICATION	CHF (~USD) / ANNUALLY
Educators (vocational educational training)	52'000–76'099
Educators (higher professional education at tertiary level)	61'100–98'670
Management without tertiary education	71'500–108'251
Management with tertiary education	78'000–115'401

Apprentices in vocational educational training usually work 3.5 days a week in the childcare centre (Berufsberatung.ch, 2020a), students of higher professional education are recommended to work three days a week (Agogis, 2020). The remaining time of the week is spent at vocational school and for students at the institutions of professional higher education. Kibesuisse (2019) gives recommendations for the classification of employees in training and sets a wage recommendation (Table 4).

Table 4: Distinction of trainees and salary recommendations by the Swiss childcare association (kibesuisse, 2019, p. 17–18)

EDUCATION LEVEL	CHF (~USD) / MONTHLY
Apprentice Childcare (FaBeK) vocational educational training, EFZ	1 st year of apprenticeship 750
	2 nd year of apprenticeship 950
	3 rd year of apprenticeship 1'270
Apprentice Childcare (FaBeK) EFZ, shortened vocational educational training,	1 st year of apprenticeship 1'100
	2 nd year of apprenticeship 1'500
Students for higher professional education (HF) without childcare qualification EFZ	1 st academic year 2'000
	2 nd academic year 2'400
	3 rd academic year 3'000
	4 th academic year 3'800
Students for higher professional education (HF) with childcare qualification EFZ	According to the scale for qualified educators EFZ

5.1.2 Governance and workforce development in family-based childcare

Childminders providing family-based childcare usually obtain a training course run by the Swiss childcare association for German-speaking Switzerland and by various other organisations in the two other regions. In German-speaking Switzerland, the training course consists of 24 to 30 lessons and is not at all comparable with the qualifications required for educators working in centre-based childcare. In the French-speaking part of Switzerland, the extent of the training courses for family-based childminders varies and can reach up to 100 lessons.

Childminders providing family-based childcare are employed by a private or public law institution, or they might be self-employed. Their employment conditions are regulated in an employment contract and their tasks defined in a job description, which may be based on the guidelines for institutional care of children in family-based childcare by the Swiss childcare association kibesuisse (kibesuisse, 2017a, p. 5–9).

Recommendation by the Swiss childcare association for the wages of childminders is 6.50 to 7.50 CHF (~USD) per child per hour (Hoch, 2017, p. 6f.). Work experience is additionally rewarded with an experience bonus of 0.3 to 0.9 CHF for every additional three years of experience. Wages for childminders might also depend on subsidies from the municipality and other sources of finance (kibesuisse, 2017b, p. 5). For parents, one hour of childcare costs between 1 to 13 CHF (ibid.).

The Swiss childcare association formulates minimum standards for organisations supporting family-based childcare. These include the compliance with the legal framework, the existence of an organisation of family-based childcare, the signing of a contract between family-based child-care organisation and parents and the invoicing of the care costs to parents through the organisation, the use of expert advisors or mediators to support family-based childcare and parents and the provision of basic and further training for the childminders. Mediators, who are supervising childminders, should complete a specific twelve-day course and have access to further training on a regular basis. The mediators are crucial to ensure quality. Childminders attend a basic training course of 36 hours during the first twelve months of their employment and continue their training on a regular basis thereafter (kibesuisse, 2017a, p. 5–9).

5.1.3 Governance and workforce development in kindergarten

The training of kindergarten teachers is the same as the training for primary school teachers. In Switzerland, kindergarten teachers have a bachelor degree (EDK, 2020b). The bachelor degree required for teaching in kindergarten is reached through studying at a university of teacher education during three years. In order to enrol, students need to obtain the Baccalaureate, or they complete a VET diploma with the additional Federal Vocational Baccalaureate followed by an access module (see also Figure 8).

Kindergarten teachers are employed by local school authorities. Schools are organized under public law (only a very small proportion of schools are private, fee-paying schools). Cantonal ordinances and laws govern conditions of employment for state personnel. Wages vary between cantons. The average wage range in Switzerland for kindergarten teachers entering the profession is 73,963 CHF (~USD) the maximal salary is 112,311 CHF (Fehr, 2020). As the Swiss association of teachers commented critically, in some cantons kindergarten teachers' salaries are lower than those for primary teachers (LCH, 2018).

Kindergarten teachers have access to various education programmes, in-house or through training providers. Cantons are responsible for providing further education for teachers. All cantons have appointed responsible bodies to develop and coordinate their offerings. The cantonal continuing education program is supplemented by national offerings by various organisations and private companies.

Kindergarten teachers are responsible for their quality of teaching and are monitored by the school principal as well as – to a less direct way – by the local school authorities. The school principal assesses the process quality through annual monitoring visits; they can recommend further training in the context of the annual evaluation interview as well as in the course of periodic performance reviews. The choice of individual further education is up to the kindergarten teacher, but there are obligations to attend further training courses: In the canton of Lucerne, for example, teachers are obliged to take part in further training for four to five days per year outside school hours (Kanton Luzern, 2001, p. 2).

5.2 Training to support process quality

Based on two recent studies, the current areas of further training for ECEC educators as well as the competence gaps and conclusions drawn for future training are outlined. Second, further training for leaders in childcare centres is discussed and third, the role of further training to support process quality in kindergarten is sketched out.

5.2.1 Current and future priorities in further education of educators in ECEC

A research study analysed further education for educators, typically employed in centre-based childcare and for childcare supplementing kindergarten and school as well as for childminders providing family-based childcare (Geiss & Wallimann, 2020). The study was conducted by the research centre „education and working life“ of the University of Zurich, with the support of the Swiss childcare association (kibesuisse) and funding from the Jacobs Foundation. Geiss and Wallimann (2020)

analysed data from 542 course advertisements of 40 institutions and organisation providing further education across German-speaking and French-speaking Switzerland in 2018 and conducted telephone interviews with 30 leaders of childcare centres, child-care supplementing kindergarten and family-based childcare organisations. The analysis did not include continuing education programs that were part of the Federal Vocational Training Act or continuing education programs in cantonal teacher training.

Geiss and Wallimann (2020, p. 6) claim that skills acquired during initial training are no longer sufficient to meet all the requirements of ECEC and highlight the importance of continuing vocational training. This study provides an overview on further education available and the relation between supply and demand. The researchers found three thematic areas of further education: „growing up“, „social relations“ and „management, team and organizational development“. Within the thematic area of „growing up“, the following topics are of interest with regard to process quality: attachment and relationships, health and nutrition, senses and motor skills and (language) development (Figure 10). Within the thematic area of 'social relations' the topics pedagogy, everyday life, problem behaviour and social problems, communication, parental work and heterogeneity were distinguished (Figure 11).

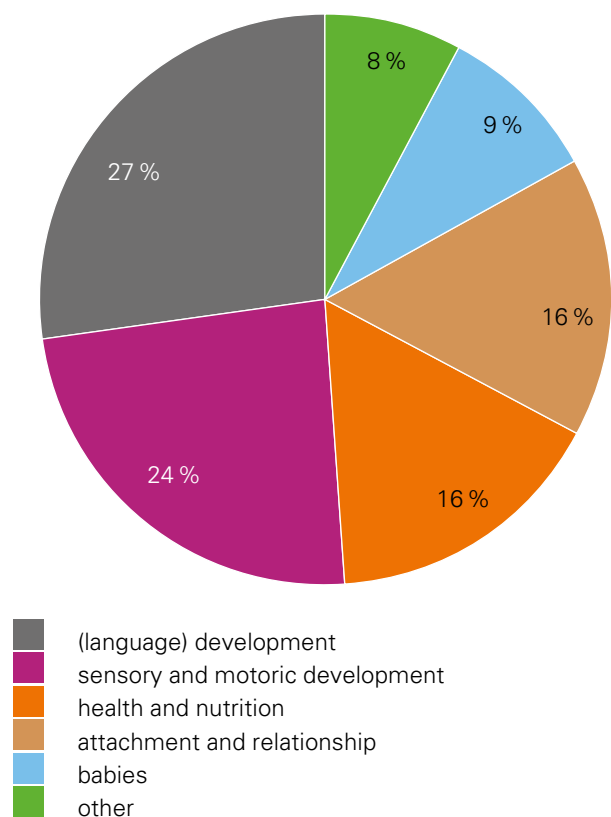


Figure 10: Further education in the thematic area "growing up" (Geiss & Wallimann, 2020, p.18)

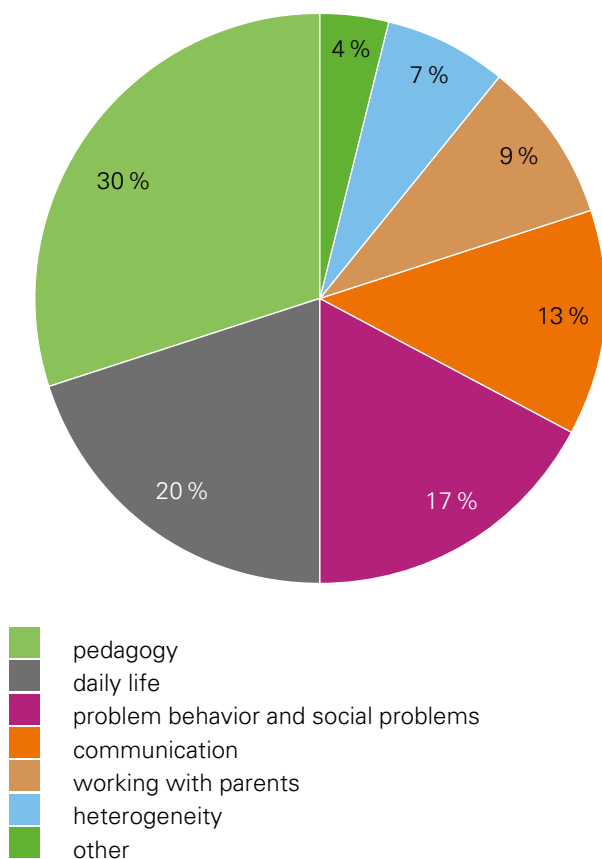


Figure 11: Further education in the thematic area “social relations” (Geiss & Wallimann, 2020, p.19)

From 30 qualitative interviews with leaders, it becomes apparent, that further training goals are set based on the organisational strategic goals and on the need identified in the workforce, in cooperation with an external person or institution. The leaders see it as their responsibility to arrange further training. The researchers identified several aspects, which promote further education in ECEC: (i) staff having the right to receive further training, (ii) institutions offering in-house compulsory further training (iii) actions taken in relation to evaluation interviews, and (iv) financial resources for further education included in the budget. Reasons impeding further education are as follows: (i) the cost of further education, (ii) incompatibility with work hours, (iii) lack of interest, and (iv) lack of incentives such as salary increase with further professional qualification. The leaders interviewed emphasised that further education is important for increased competencies amongst the workforce, for higher pedagogical quality and for higher societal recognition of the childcare professions (ibid. p. 22–24).

Another recent study identified further education needs. The study „Qualification needs in early childhood education and language development“ by Dubach et al. (2018), which was commissioned by SAVOIRSOCIAL, provides further information on process quality. The study used expert interviews to clarify the qualification needs of personnel working in ECEC childcare or working in advisory roles with parents of pre-school children. The study concludes with recommendations to meet the qualification needs that were identified based on competence profiles for the ECEC workforce, in particular differentiating between educators and leaders in ECEC. First, the findings on the educators without leadership roles are outlined.

Dubach et al. (2018) identified competence gaps within and across specific areas of ECEC which are highly relevant for ensuring process quality. Competency gaps were identified amongst staff without leadership functions in the areas of educational orientation (support for children’s learning and development processes), inclusion and dealing with diversity (specialist knowledge, sensitivity and positive approach to diversity), cooperation with parents (strengthening educational competence and a resource-oriented perspective) and personal and professional skills (reflection of one’s own actions) (Dubach et al., 2018, p. 37).

Dubach et al. (2018) formulate six courses of action to strengthen the competencies of ECEC personnel. One of these approaches is of great importance with regard to process quality: „strengthening learning in practice“ (ibid. p. 43). Further training should ideally take place in daily practice of educators, which enables them to reflect their actions within their work context, in order to increase professional competency and pedagogical quality. Such further training embedded in daily practice at the workplace already exist today. The city of Zurich, for example, has launched the project „well prepared for kindergarten“. Within the framework of this project, the city works together with the St.Gallen University of Teacher Education (PHSG) providing centre-based German language support and coaching (Vogt, 2020a). The coaching and further training by the expert and the early years educators takes place directly after jointly working with the children in the childcare centre.

5.2.2 Priorities for further education for ECEC leaders for process quality

Regarding the leadership qualification, the Swiss system of vocational and professional educational training defines two qualifications for leadership in ECEC: (i) the federal professional certificate “team leader in social and social-medical institutions”, which is thought for educators in ECEC who are responsible for the leading a group within centre-based childcare and (ii) the federal professional diploma “team leader in social and social-medical institutions” for leaders of childcare centres.

The experts interviewed in the study by Dubach et al. (2018) introduced above also were asked to evaluate the qualification needs of ECEC leaders. The experts maintained that the educators in leadership functions who have achieved the appropriate qualifications also have the necessary competencies (ibid. p. 39). However, there remain areas of work within ECEC accessible with less training where also the provision for leadership training is not sufficient. Amongst centre-based childcare leaders, 40 % did not have a specific qualification in addition to being a VET trained educator (Kibesuisse 2016 cited in Dubach 2018, p. 40). Overall, experts identify competence gaps amongst leaders of childcare centres in particular relating to conceptual and pedagogical competencies (ibid. p. 39). Further training for team leaders and childcare centre leaders focusing on pedagogical quality is already on offer. As an example, the training course for leadership of centre-based childcare offered by the Marie Meierhofer Institute for the Child (MMI) focuses in two of nine modules on the educational quality of everyday life in the childcare centre and within the centre as an organization. In the supervision module, students reflect their own practice as leaders of childcare centres (MMI, 2020).

5.2.3 Priorities in further education for kindergarten teachers

For kindergarten teachers, as for all elementary school teachers, further education oscillates between practice and science, as well as between personally selected topic of further education and the selection of further education in order to take on additional functions in school. On the one hand, it should be possible for teachers to choose in-service education programs that seem important to them from the perspective of their current practice without taking on a specific function at the school (Arpagaus, Kraus & Zimmerli, 2018). On the other hand, findings also

suggest that it is important to align professional development with the development of a teacher’s professional career, as this would also enhance the attractiveness of the teaching profession. „Conditions must be created that structurally link the qualification of teachers in higher education and further education to corresponding functions and positions in the school field and that are coupled with incentives and qualifications“ (ibid., p. 3). It is essential for the process quality of continuing education that further education includes experience-based and knowledge-based learning.

5.3 Monitoring and evaluation of training needs and programs

Various institutions are jointly responsible for the quality of vocational educational training for educators working in childcare. Vocational educational training is regulated by the ‘ordinance on vocational educational training for professional supervision’ of the State Secretariat for Education, Research and Innovation (SBFI). The ordinance regulates, for example, the title, thematic orientation and duration of training, the objectives and requirements, the ratio between professional school and workplace as places of learning and the language of instruction, the educational plan, and the plan for general education, the requirements for training providers, learning and performance documentation and the qualification procedure. The curriculum was developed by professional organizations and approved by the State Secretariat for Education, Research and Innovation (SBFI). The curriculum is continuously adapted by the Swiss Commission for Professional Development and Quality for Professionals Supervision, which is composed of representatives of the organizations of the world of work (OdA), the Swiss Platform of Training in the Social Sector (SPAS) and representatives of the federal government and the cantons, at regular intervals, every five years. If necessary, the Commission also initiates changes in the ordinance (Schweizerische Eidgenossenschaft, 2018).

Childcare centres take on the role of learning places to provide practice within the vocational training program for the EFZ childcare educator. In order to be allowed to train apprentices, the persons responsible for the apprentices must have a federally recognized qualification as childcare educator. In addition, the provider needs to be approved as a teaching centre by the cantonal vocational educational training office. To be admitted to the five-day course for vocational educational trainers, the respective qualification is required, i.e. educator EFZ, as well as a minimum of two years of working in the field. The extent to which the practice institution (i.e. the childcare centre) instructs the apprentices in the area of process quality cannot be answered due to missing data. It is possible to verify the guidance of the apprentice by the practice

institutions in relation to the contents of the curriculum at the final examination, where students demonstrate their practical skills. These exams at the end of the apprenticeship also include a practical part whereby specifically qualified experts mandated by the canton observe the future educator working with children on-site in the institutions and assess quality of interaction as part of process quality.

SAVOIRSOCIAL, the Swiss umbrella organization for social work, argues for further development and quality of vocational training in the social sector. Members of SAVOIRSOCIAL are employers' associations, professional associations, cantons and cantonal organizations of the social work environment. The organization provides differentiated information about social professions in Switzerland and the educational system. It is committed to the further development of existing vocational educational training programs, clarifies the need for further qualification and profiles, works to ensure that sufficient skilled workers are trained and that the reputation of social professions in society is promoted. Together with the Swiss Platform for Training in the Social Sector (SPAS), SAVOIRSOCIAL issued a recommendation concerning the designation of different types of training courses in the social sector. Such designations help educational and training institutions to categorize the training they offer based on definitions provided and thus contribute to a better overview (SPAS & SAVOIRSOCIAL, 2014). With its interdisciplinary work, SAVOIRSOCIAL contributes to the quality development in the field of ECEC and childcare.

The Swiss Conference of Cantonal Ministers of Social Affairs (SODK) is also strongly involved in quality development in centre-based childcare. In 2014 and 2020, the Swiss Conference of Cantonal Ministers of Social Affairs (SODK) commissioned a review of the implementation of the quality recommendations to cantons. In the area of process quality, the assessment of the pedagogical concepts is of interest. The ECEC institution's pedagogical concept would be seen as "an important cornerstone for high-quality childcare", but the cantonal "guidelines about the contents of pedagogical concepts are only very vague" (ECOPLAN, 2015, p. 28).

For further education, the employing institutions are responsible for regulating further training of staff in centre-based childcare. There is no law that stipulates that employees in childcare centres be obliged to undergo regular further training. Kibesuisse issued recommendations as to who should pay for the costs of further training; a distinction is made between training that is required by the institution and training that is not. Training for the benefit of the institution should be paid for by the employer and training time accounted for as working time. In the case of further training not requested by the workplace, the Swiss childcare association (kibesuisse) recommends that employers allow their employees three working days per year for further training and to partially cover costs. The content of further training should be agreed upon and approved by the employer (kibesuisse, 2019, p. 14). Contents of further education are selected by the staff and institutions in ECEC themselves. There is no legal obligation for educators working in ECEC to attend further training on certain content areas. ECEC institutions as well as individual educators are self-assessing and evaluating what further training would be beneficial to improve the quality of ECEC provided.

Some cantons and cities set priorities in further education for ECEC and subsidize further education on certain subjects, often working together with educational institutions to develop further education. In addition, associations and organisations offer further education programs or cooperate with educational institutions. The need for further education programs is usually determined through exchange with educators and experts or derives from research and evaluation studies. As the canton or municipality is required to carry out monitoring visits, the experts visiting may identify further training needs in ECEC and feed this information back to the steering of further education initiatives of the canton or municipality. The city of Zurich, for example, has a specially compiled further education program for educators in centre-based childcare. The program includes courses for both pedagogically trained personnel and assistants without pedagogical training. Based on the curriculum „Learning experiences and observation for ECEC“ (Walter-Laager, n.d., "Dossier Erfahrungsfelder und Beobachtungspunkte für den Frühbereich") developed for the city of Zurich, courses are assigned to subject areas (i.e. language, music, nature and technology, etc.) as well as pedagogy (i.e. cooperation with parents) (Stadt Zürich, 2019, p. 3).

The cantonal organizations of the social work sector (OdA) play a major role in the implementation of training and the further development of professions and qualification profiles in accordance with the Vocational Training Acts of the cantons and federal government. Together with training companies, professional schools, public administrations, employers and employees, the organizations of the work sector monitor development in social professions and are committed to quality assurance in vocational training. The organization of the social sector in the canton of Berne, for example, offers further education courses with the following titles: „Teaching learning subjects to reflect“, „Dialogue with parents“ or „courses for employees in day-schools“ (OdA Soziales Bern, 2020).

At national level, the Swiss childcare association *kibesuisse* facilitates exchanges between experts and educators working in childcare centres and in childcare supplementing kindergarten and school, as well as childminders providing family-based childcare. These exchanges contribute to an assessment of the need for further training in the field; the association then launches corresponding further education courses. The further education programme of the Swiss childcare association can be categorized into three aspects of childcare work: „Education (basic training for qualification), the child at the centre (educational topics), the employees at the centre (strategy, leadership, communication) (*kibesuisse*, 2020b). Topics with relevance to process quality are noticeable in the following course descriptions, for example: discovering and experiencing diversity in the childcare centre, „how I work – my personal care profile“, „education is based on relationships“, „transitional situations in daily practice“ (*ibid.*).

In contrast to institutions providing further training for educators working in centre-based child-care, elementary school teachers and thus also kindergarten teachers have an obligation to take part in further training. In many cantons, the universities of teacher education are the most important providers of further education for kindergarten teachers mandated by the cantons. Cantons can declare further training compulsory, for example for the introduction of the new Curriculum 21. In addition to the introduction of the new curriculum, there is currently also a great need for further training in the area of digital transformation (Wolter, Denzler & Cattaneo, 2018).

In addition to further education organised on behalf of cantons, compulsory or with individual choice for the teachers, school principals plan inservice teacher training for their school unit. School principals set certain training days for all teachers in a school team, for example from kindergarten to grade six of elementary school. They may also offer a series of internal courses, from which the

teachers choose. As part of their personnel management, they can recommend further training in a specific area to individual teachers. Teachers themselves also have the opportunity to choose their own further education courses. Further education, which is related to a teacher's work, is usually financed fully by the school authorities.

The evaluation of the quality of continuing education is usually carried out in the form of a survey of participants; in general, there is no further evaluation of the process quality through monitoring visits. The effectiveness of further education as interventions within a specific research project or programme is often assessed. For kindergarten, examples include research to enhance professional competencies for mathematics (Brunner, 2019; Lindmaier et al., 2020), an international study on the effects of further education on language fostering in day-to-day practices in kindergarten, centre-based childcare and educational playgroup (Vogt et al., 2015), or a study on the effects of a program fostering movement in kindergarten (Diezi-Duplain, Felkendorff, & Luder, 2010). There is however no evaluation of the effectiveness of further education at system level.

5.4 Summary: workforce development through further education

Regarding workforce development for centre-based childcare, a wide range of courses and programs in further education are available. However, there is no obligation for childcare providers to enable further education for their workforce and financial resources are not always provided by employers (work time for further education, fees). Some recent studies sought to provide an overview on further education for ECEC in centre-based childcare (Dubach et al., 2018; Geiss & Wallimann, 2020). Geiss & Wallimann (2020) found further education being centred on three areas: „growing up“, „social relations“ and „management, team and organizational development“. Dubach et al. (2018) identified competency gaps for educators in the areas of educational orientation, inclusion and dealing with diversity, cooperation with parents, personal and professional skills. Regarding the qualification needs of leaders of childcare centres, they highlight pedagogy as warranting attention, and point at the relatively high proportion of leaders not having obtained the qualification for childcare leaders.

Further education, which leads to qualification to develop the careers of early educators, is only standardized regarding the federal qualification for team leader or leader of institutions. Further education which focuses on process quality are more often courses and intervention programs which do not necessarily build up to a qualification for a new function or promotion.

For kindergarten teachers, further education is part of their professional obligations and is mostly paid for by the local or cantonal education authorities. Cantons might set compulsory further education for example when introducing a new curriculum or a new subject. School principals also set inservice training days for all teachers of a school unit. In addition, kindergarten teachers have the opportunity and the obligation to select further training for specific topics, which are relevant for their work. Further education for kindergarten teachers is mostly provided through universities of teacher education and led by teachers and/or experts; the feedback of the attending teachers is the basis for monitoring and evaluation.

The effectiveness of further education is assessed where a specific course of further education is part of an intervention study within a research project. An overall research-based assessment of the effectiveness of further education for the workforce in centre-based childcare as well as in kindergarten on process quality at system level is lacking.

6. References

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