How digital activities become (im)possible in Swedish school-age educare centres

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Abstract: This study explores how digital tools play a part in the practices of Swedish school-age educare centres (SAEC). The aim is to contribute knowledge about opportunities and/or obstacles in and with digital activities in SAEC practices. Data is produced using observations and conversations at five SAEC centres. The SAEC practice is found to be characterized by three different approaches to digital tools and their use: 1) A permeating practice, where digital tools are an integrated part of the whole day, 2) A happening practice, where digital tools are present on special occasions, and 3) A neglecting practice, where digital tools are absent. These differences can be connected to how teachers interpret their assignment but also to differences in competence, access, and interest in relation to digital tools. This entails that SAEC pupils are given unequal opportunities to develop digital skills.

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Introduction

Digital competence is both a requirement and a right for all children*, as for all citizens, if they are to be safe and functional in today's digital society (De Felice, 2017; Ferrari, 2013; Lupton & Williamson, 2017). Therefore, recent educational policy highlights that children, growing up in this digital culture, are entitled to understand and profit from digital activities (United Nations [UN], 2018; 2021; United Nations Educational, Scientific and Cultural Organization [UNESCO, 2019]; United Nations International Children's Emergency Fund [UNICEF], 2020). This is now a core objective of many national curriculum frameworks, in order to empower pupils to manage (digital) challenges (European Commission, 2014; 2017; Ilomäki et al., 2016). The integration of digital activities to promote these competences into educational practices has often become a complex process (cf. European Schoolnet, 2012; Hallett & Meanwell, 2016). On the one hand, educational policy has led to an increasingly visible consensus on what children should be taught and how, when digital technology and competence are highlighted. On the other hand, with growing pressure to digitalize this practice, teachers struggle to introduce digital activities and their notions of the purposes of care and schooling.

This tentsion raises the question of how much technology is appropriate to incorporate in education (Shirley, 2017). For various reasons, this complexity has become particularly relevant for many teachers in different afterschool programmes, which are often viewed as important arenas for developing pupils' digital skills (Micheli, 2013).

The focus of this study is on school-age educare centres (SAECs) in Sweden. This context is especially interesting, as the Swedish policy documents emphasize digital competence while leaving significant scope for interpretation and offering little guidance for SAEC teachers regarding digital activities (Martinez, 2019; Swedish Association of Local Authorities and Regions [SALAR], 2019; Swedish Parliament, 2020). The paper asserts that when Swedish SAEC centres are given the right conditions to achieve digital competence,

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^{*} In the text, we use the terms 'child' and 'pupil' based on 'child' relating to a broader context, for example children's conditions, and 'pupil' relating to pupilship.

this creates a multiplicity of responses in terms of opportunities and obstacles for teachers' actions as they try to enact, uphold or resist the stipulated reforms or their assignment in the curriculum (Swedish National Agency for Education [SNAE], 2022; Wilcox, & Lawson, 2018).

Consequently, with a focus on SAEC teachers' work, this study explores how digital tools play a part in the practices of SAECs. The aim is to contribute knowledge about SAEC practices concerning opportunities and/or obstacles in and with digital activities. The study is based on the following two research questions:

- 1) What characterizes SAEC practices' different approaches to and use of digital tools?
- 2) What emerges as central for the possibility to engage with digital tools in activities at SAEC centres?

With this aim, the study stresses the importance of focusing on more consequential internal organizational dynamics, rather than relying on interpretations of "externally prescribed changes in curriculum, accountability measures, and instructional methods described in policy" (Hemmings, 2012, p. 199). This study will thus contribute significant knowledge about the dynamic processes where policies are interpreted and incorporated into the SAECs' digital practices. The concept practice is used to describe different conditions and doings in different SAEC centers. The findings can lay the groundwork for understanding factors that contribute to SAEC teachers' various approaches to digital tools and activities, which is essential for an informed discussion on how to develop both practice and policy.

In Sweden, most children aged six to nine attend SAECs before and after school and during school holidays (SNAE, 2019). The institution has a long tradition as part of the national education system. However, the objectives of SAECs were clarified in 2016 in a section of the national curriculum directed at SAECs (SNAE, 2016). The curriculum stipulates that the Swedish SAEC is a place for group-based learning, and that activities should be designed around each pupil's interests and adapted to children's culture and everyday life. SAEC teachers thus have a dual assignment: to create opportunities for meaningful leisure-time based on pupils' interests, curiosity and knowledge, and to contribute to pupils' development and learning (SNAE, 2022). For the latter assignment, specific objectives are designated in the curriculum concerning aspects such as science, social environment, play and communication. The curriculum also states that teaching should focus on digital competences. However, research shows that there is uncertainty among staff about how this multifaceted teaching task should be implemented and evaluated in SAEC (Ackesjö, 2022).

Previous Research

Skolforskningsinstitutet [The Swedish Institute for Educational Research] (2021) show in a research overview about SAEC that digital tools can create good opportunities for interaction and learning in SAEC centres and is also recognised as a meaningful activity by the pupils themselves. However the selection of previous research is delimited to studies that explore digital activities in the practices of SAECs with a focus on teachers, and that do not centre on how pupils learn to use digital technology in activities and for various learning purposes in different extended education contexts (e.g. Barkhuus & Lecusay, 2012; Davis & Fullerton, 2016; Harvard, 2015; Klerfelt, 2007; Lagerlöf, 2016; Lecusay, 2014; Prieto et al., 2016; Wernholm, 2021). Due to the limited number of studies of significance for the study's aim, studies in other educare settings that are relevant to the study at hand are also included.

In a study of Swedish SAEC teachers' work, Elvstrand and Lago (2020) show how these teachers struggle with the requirement to combine activities based on pupils' interests and goal-oriented activities. The teachers strive to satisfy the increasing expectations to be adept with a variety of technology-based activities for content delivery, goal-oriented learner support and edutaining or play (Stenliden et al., 2022). Still, the activities that take place in SAEC settings are usually characterized by informal learning situations where children's own perspectives are important (Saar, 2014) and teachers try to provide activities that take into consideration pupils' right to choose what they want to do, even though the choices often are limited (Elvstrand & Lago, 2020).

However, recent studies indicate that teachers might have an ambivalent attitude towards digital activities, even if the pupils themselves show an interest and emphasize the importance of having access to digital tools at the SAEC (Lago & Elvstrand, 2022; Martinez, 2019). Possible reasons include the historic importance of children's development and wellbeing being related to their practical "doings" at SAECs. Handicrafts and outdoor activities are generally valued at SAECs, and are presented by teachers as "good" choices for children. This ambivalent attitude is also highlighted by Stenliden et al. (2022), who examined teachers' reflections on the adoption of digital technology at SAECs. They identify that a tension emerges among teachers related to two main concerns about digital activities: keeping away and/or embracing them. The tension, constructed in an interplay between the teachers' different actions (avoid, protect, support, integrate and add value), leads to an uneven distribution of activities with digital tools at SAECs. David and Fullerton (2016) also recognized challenges with respect to implementing and distributing digital (networked) technologies and new media in afterschool settings, despite showing that pupils enjoyed considerably more opportunities to experience such learning activities in afterschool settings compared to school. The analysis associated the challenges of implementation with conflicts due to the participants' values and goals. Nevertheless, Micheli (2013) showed in her study how teachers in afterschool settings who want to stop 'avoiding' new media and start thinking of effective ways to adopt them in their curricula, and who also wish to promote pupils' civic participation, ethical reasoning and critical thinking, can benefit from two important processes: (1) developing a "know-how" that is useful for incorporating new media literacies into teaching and (2) providing pupils with the knowledge and attitudes needed to participate actively in the media creation and production process. Furthermore, Martinez (2019, 2021) illustrates through interviews how SAEC teachers work to promote critical digital literacy and responsible online communication. SAEC teachers relate to these issues in a variety of ways, from not promoting critical digital literacy at all, to providing planned learning activities with this focus. In the SAEC context, spontaneous discussions promoting digital literacy are described as an important aspect by SAEC teachers. The role of teaching in spontaneous situations is further highlighted by Martinez (2021), showing how SAEC teachers describe their use of strategies such as active mediation, co-use and participatory learning to promote responsible online communication.

Another aspect highlighted by Martinez and Olsson (2021) that affects how SAEC teachers organize digital activities is their limited agency in relation to digital tools. Teachers are found to be dependent on others, such as principals, when it comes to accessing digital tools, and can rarely make decisions for themselves about which kinds of tools to use, when the tools are available, etcetera. They also often need to relate to the children's own digital tools such as mobile phones, which SAEC teachers tend to be view as a risk. Connected to these results is an early study by Klerfelt (2007), who showed how different roles are negotiated and how pupils emerged as brokers who connect popular culture with the SAEC's traditional and regular activities. Since the pupils were often more digitally skilled, this meant that the positions of power between pupils and teachers could be reversed.

Including digital tools can hence be troublesome and even uncomfortable for teachers, due to different beliefs and values. It can be difficult for teachers to keep up the institution's traditional norms when introducing digital activities, given the dynamics of such contexts (Bates, 2015). To gain a deeper understanding of these matters, the study introduces the theoretical framework of symbolic interactionism in the following section.

In summary, the previous research show a lack of research related to how digital tools are used in the SAEC practice. Most studies rather addresses how teachers talk about the use of digital tools and how the values this activities in relation to the SAEC assaignement.

Theoretical Framework (Inhabited Institutions)

Symbolic interactionism (SI) (Blumer, 1969) – more specifically, the concept of inhabited institutions – is used as a theoretical framework for the study to understand how practices are created when actors interpret their everyday lives in actions and negotiations. One point of departure in SI is that humans are social and reflective actors who create meaning through their interactions, and by interpreting these actions

they define different situations (Blumer, 1969).

As peoples' actions are connected to how they define situations, both the participants' actions and the context in which these actions take place are important (Blumer, 1969). This is an ongoing and everchanging process, as pointed out by Everitt (2012). Accordingly, SI gives the study tools to understand how practices emerge in relation to the actors' interpretations, negotiations and actions concerning the use of digital tools at SAECs. These processes are closely connected to the SAECs' organizational dynamics, where visions, policies, school structure, school culture and moral orders are important (Hemmings, 2012). Hemmings, who has conducted school improvement research, stresses the importance of the interpretative process where the actors do the practice, i.e. SAECs. The framework is used to show and understand how the task of working with digital tools is interpreted and translated into SAEC practice in different ways, and what characterizes different SAEC practice approaches.

Method

This study builds on two sets of data: data from four SAEC centres participating in action research projects and data from one SAEC centre (outside the action research) as a complement to further examine the preliminary results that emerged in the action research projects. The participating SAEC centres are located in two different municipalities, and have different sizes and locations (e.g. rural/urban). Two of the SAEC centres, the Lake and the Mountain are located in multicultural areas while the other three are located outside two larger cities and is more ethnically homogeneous, The sampling was chosen to give a variety of SAEC centres with different teaching conditions, although we do not make a systematic comparison of the contextual conditions of the different SAEC centres.

The action research data consists of observations and reflexive group talks with teachers. The overall purpose of the action research was to work with the development of SAECs' teaching. A central aim in action research is that the research participants should be able to address issues that are important of them (Stringer, 2007), and the study was conducted at a time when new policy documents for SAECs were introduced at national level. In all five SAEC centres that took part, digital media was a topic that the teachers touched on. At some SAEC centres this has been a main focus, while at others it has been part of broader discussions. As a basis for this development work, the researchers conducted observations at the SAEC centres to gain knowledge about the activities. It is the data from these observations, together with the reflexive group talks, that forms the basis for this study. The total body of material consists of twenty reflection meetings and observations carried out on three afternoons at each SAEC. The observations were conducted in everyday situations in the SAEC and gave us insights into how digital tools were used in everyday practice at the different SAEC centres. The reflection talks dwelt on many different issues, but contain several examples of how the SAEC teachers talked about and related to digital tools and their use at SAEC centres in different ways.

For the school that did not participate in the action research, the data consists of observations carried out on three different occasion, and one interview with a teacher with a specific focus on how the SAEC centre uses digital media.

In total, the study builds on data from six different SAEC centres. All observations were documented with fieldnotes during the reflexive group talks, and the interview was recorded and transcribed. The combination of data methods provides an overall and varied insight into the SAECs' work with digital media, for example.

Analysis

Ethnographic observations (fieldnotes) and data from the reflexive group talks and the interview (transcripts) were analysed using a method inspired by reflexive thematic analysis (Braun & Clarke, 2006, 2019). This means that the content (fieldnotes and transcripts) was first processed by reading through the data. In this step, aspects of relevance to the study's focus on digital activities were noted. Thereafter, data was coded more systematically based on the focus of the study, and different approaches to and use of

digital tools were noted. These were then themed, and the overall way in which the six SAEC centres related to digital activities was made visible. In this step, central content and codes were connected and named. The analysis of data from the six SAEC centres resulted in three different approaches that characterized the SAECs' practices with digital tools. In relation to this, the three different types of practices were described, and different emerging characteristics were constructed:

- 1) A permeating practice
- 2) A happening practice
- 3) A neglecting practice

It is important to point out that such thematization entails an analytical simplification. The characteristics should not be seen as exclusive, but as generalized. Even though the different SAEC centres are characterized by specific approaches, these have been refined in the analytical process. In real life, actions and statements of various kinds occur at each SAEC centre, even though they can mostly be understood on the basis of a theme.

The results are based on an analysis of both observational data and transcribed conversations and an interview. In the text, observational data is used to illustrate the different practices. In line with an ethnographically inspired tradition (Hammersley & Atkinson, 2007), a holistic understanding of SAECs is used in the interpretation, and the transcribed conversations constitute an important contextual framework for understanding the observations. In line with Braun and Clarke (2019, p. 330), we wish to point out that the process of analysis involves a "reflexive engagement with theory, data and interpretation". This means that we have consistently reflected on and discussed the meanings and understandings of the data, and how this relates to theoretical perspectives. The process of reflexive thematic analysis needs to be understood as being closely related to both data and theoretical assumptions.

Ethical Considerations

Throughout the research process, we have taken the ethical guidelines for social science research formulated by the Vetenskapsrådet [Swedish Research Council] (2017) into consideration. Specifically, this means that we have informed all the participants about the overall aim of the research and have asked for their consent. When conducting observations and structured conversations, it is important to reflect on ethical considerations such as power issues in the relationship between the researcher and the participants. When researching teaching, the tension between what should be done according to the curriculum, school administration, etc. and what is actually done – due to one's own and local values – can put teachers in a difficult situation. We have therefore anonymized participating pupils, teachers and schools.

Results

The results show that digital tools play a part in the practices of SAECs in various ways. The SAEC practice is found to be characterized by three different approaches to digital tools and their use:

- 1) A permeating practice where digital tools are an integrated part of the whole day
- 2) A happening practice where digital tools are present on special occasions
- 3) A neglecting practice where digital tools are more or less absent.

These practices will be illustrated in detail in the following three sections, one at a time. In parallel, the central aspects that have emerged according to possible engagement with digital tools in each one of the approaches are identified.

A Permeating Practice

The permeating practice characterizes an SAEC centre where digital tools are incorporated into activities, with teachers allowing or arranging activities that include digital tools in several ways. The teachers also use the tools themselves, for example when communicating with parents (e.g. blogging). The

Ocean is one SAEC centre that exemplifies this way of integrating digital activities:

The SAEC teachers have been working for a while with digital tools as a project, with the aim not only of including digital activities for pupils, but also of developing knowledge among the teachers about digital tools. In the long run, the teachers want to expand and work in a more systematic way at the SAEC. That means that they have created a plan, which follows the pupils during their years at the SAEC, with a focus on developing certain abilities and skills related to digital tools. The goal is that the pupils should be able to get an awareness of different digital tools, like how an iPad works, making digital collages, producing a film and practising simple programming. These kinds of activities take place with a smaller group of pupils, like courses.

In the example above, the SAEC's activities are coordinated based on an idea that all pupils should learn how to use various digital tools and gain experience of a variety of digital activities. The planning for these kinds of practices is organized by the SAEC teachers in a structured way. The pupils take part in different digital activities in the form of group activities on various themes. These practices also entail more spontaneous digital activities initiated by both pupils and teachers. The following example at the Lake SAEC shows how the digital tools are also used in an informal and child-centred way.

It is circle time. The theme of the month is the Nordic languages, and the SAEC teacher Martin explains to the pupils that they can practise language skills by singing songs in the different Nordic languages. "We can use the net," says Lisa, one of the girls. Martin continues and discusses with the pupils what kind of music they like. After a while they agree to watch the theme song from the Frozen movie, first in Swedish and then in Norwegian. Martin uses the interactive smartboard on the wall, and the pupils suggest what to search for and then what to choose.

This example shows how the teachers at the Lake SAEC centre have an overall plan for the SAEC's learning activities. Pupils will learn about the Nordic languages, which is a stipulated goal within the national curricula, and the teacher, Martin, indicates how they might approach this. He suggests that they will sing various songs in the different languages. By inviting the pupils to discuss what music they like, Martin continues to act according to the curricula as he engages in the pupils' interests and tries to adapt the activity. It is the pupils rather than the teacher who introduce popular culture and media to the activity, singing the theme song from the popular movie Frozen. The use of the interactive smartboard is a response to an initiative from the pupils. As Martin allows individual pupils to suggest which search terms they should use and then lets the pupils decide together which hyperlink they should choose, the activity can be seen as a common emerging digital activity. By including the interactive smartboard as a digital tool in the activity, Martin provides an opportunity for the pupils not only to visualize and discuss the lyrics of the theme song from Frozen, but also to use and develop their knowledge about searching the internet and various online sources. In this case, the digital tool is employed in the activities as an integral part of the SAEC's assignment and activities.

The teachers at the Ocean and the Lake say that they have knowledge of digital tools, and most of them explain that they are also able to use them in a flexible way. They frequently use digital tools as a specific topic, but also work with them interactively in relation to pupils' questions. This kind of practice is permeated by digital tools as something that they do not have any specific assertions or thoughts about.

The teachers describe themselves as guides with a task of interacting with pupils and giving them an understanding and knowledge about digital tools. The pupils have access to digital tools such as tablets to search for information or play games, and they are allowed to play computer games as an activity. The pupils also have some opportunities to influence the kinds of games they want to play. The teachers are involved when pupils use the digital tools, and discuss what happens in the games and talk about gaming culture with the pupils. Various digital tools thus play a part in the daily life at the SAEC via these kinds of practices. The digital tools are seen as important, and as a vital part of the education at the SAEC.

A Happening Practice

A happening practice differs from a permeating practice in that it characterizes an SAEC centre which only uses digital tools in its activities on special occasions. When digital tools are used in activities, they are not seen as an integrated part of the daily activities or routines. This practice can therefore be described as 'a happening' – something out of the ordinary – and the digital activities become activities of their own, distinct from other activities. One example of this is computer time at the Mountain SAEC:

A popular activity is having computer time. If they want, every pupil in the third grade has access to a computer for 45 minutes per week. The pupils specify in a special notebook how many minutes they have used. Melker, Linus and Holger are sitting around one computer and playing an arcade game together. During their play, they frequently discuss how many minutes they will play the game for and how much of their allotted time they should use this afternoon. Mats – one of the teachers – passes them, and the boys stop him and ask: "When we are playing three together, can we share the time and put some minutes in the book." Mats shakes his head and says: "You know that we don't like too much computer gaming here, go out and play instead."

At the Mountain, the pupils have opportunities to use computers as shown in the example above. However, this use is strictly regulated, and the teachers say that they want to limit the pupils' access to digital tools. In the example, the boys try to negotiate with Mats by arguing that their time should be extended since it is a shared activity, and that they are cooperating with each other. In this case, the amount of time each pupil spends using the computer seems to be more important. Mats's response signals this when he says that they "don't like too much computer gaming", and he asks the pupils to go outside instead.

Even if computers are allowed, as in the example, the time spent using them should be limited. In the organization of digital activities, the use of digital tools by both pupils and teachers seems to be oriented more towards how and when these tools are used, and less towards what the pupils do with the tools. The teachers often act as an obligatory passage point, as the digital activities are always decided on, allowed or guided by teachers. The pupils cannot decide for themselves, but must ask the teachers' permission to play a computer game or use a tablet to interact with an app. Nor do they have much influence over what kinds of games they play. The teachers often associate including digital tools in everyday activities with difficulties, and digital tools are often seen as something pupils need to be protected from. In the example above, for example, pupils need to be protected from spending too long on sedentary indoor activities.

At SAECs characterized as happening practices, the teachers frequently describe a lack of knowledge about how to handle digital tools. The use of digital tools is often dependent on one or two teachers who are seen as experts. This is shown in the following example:

During the former observations at the Forest SAEC, all kinds of digital activities have been absent. However, on this particular day, during the planning meeting, Malin – one of the SAEC teachers – explains that she has started a blog to show the SAEC's activities, "so the parents can see all the important things we do". Another teacher, Maria, says that she thinks it is a good thing, but she is not able to do it because she does not know how to blog. She is also worried that it will take too much time. Malin says that she will manage the blog and that she will use her private telephone. During the day, Malin takes photos frequently and she also talks with some pupils about what kind of things they can put on the blog. When we are back at the SAEC centre after some weeks, Malin explains that that they have paused the blog because it took some time to do, as she did it all by herself. She was also disappointed that there were so few visitors to the blog. There had also been some discussion at central level in the municipality about creating a central platform, so the SAEC centre was waiting for a decision on that.

This is an example of how digital activities such as blogging occur as a happening, i.e. the activity is temporary, and a long-term or common idea is missing. Malin represents the enthusiastic SAEC teacher who takes photos and engages pupils in the blog activity for a short period before the initiative fades away. The activity of documenting the SAEC's practice and blogging about it never became an integrated part of the daily activities at the Forest. The activity is dependent on Malin's enthusiasm for digital activities. As mentioned previously, she is a teacher who is rather skilful and can be seen as an expert, while the other teachers express a lack of competence. At the Forest, this becomes both an argument for not supporting the activity, as it takes too much time, and an obstacle for these teachers to contribute to the blogging activity. The fact that the activity depends entirely on Malin's interest and competence affects the possibility to make the blogging an integrated part of daily activities or routines. This might also be a reason why few readers engaged with the blog. The pupils and parents probably did not have enough time to adjust to and keep up with the opportunity to take part in the digital activity or engage in reading the blog posts during the short time it existed.

Another example of how digital activities are given a peripheral space – i.e. they are permitted and are given space, but are not integrated into the core activities – is also taken from the Forest SAEC. This time, teachers' and pupils' various standpoints are illustrated:

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The pupils have expressed a strong desire to be able to use their mobile phones. They have addressed this issue on several occasions during circle time. The teachers are positive, and say that they will give it a try. Some weeks later, the pupils say that they can now use their phones, "but it has not worked well because the adults decided that the mobile time should be on Tuesdays after four o'clock, and at that time almost all the pupils have gone home".

This reveals a difference in perspective towards the use of digital tools between the pupils and the teachers. In this case, the pupils want to use their mobile phones to spend time together, but the teachers scheduled the activity at a time when most pupils have left the SAEC for the day. In reality, the teachers placed strict regulations on using this kind of digital tool. Using mobile phones is central to pupils, but is not seen by teachers as a central part of SAEC activities.

At these SAEC centres, the pupils have no daily access to digital tools. The digital tools are brought out on special occasions, and are not used by either teachers or pupils in everyday activities. Even if the pupils at the SAEC centres are able to make choices about what they want to do during the afternoons, digital tools are often not an option because access is limited. Other reasons are that the teachers are unfamiliar with the technology and view other activities as more central. At same time, the happening practices are characterized by ambivalence among the staff in relation to digital tools. On the one hand, there is an awareness that digital activities are important to many pupils (e.g. mobile phones). On the other hand, there is a view that digital tools are risky or harmful. When SAEC teachers try to balance these approaches, digital activities are not completely lacking; they occur, but they are not integrated into the SAEC centers everyday activities.

A Neglecting Practice

At the SAECs that are categorized as neglecting practices, digital activities are more or less absent. The teachers view these kinds of activities as not feasible in an SAEC environment. They often express strong beliefs that digital tools should not be a part of the education at the SAEC, along with arguments about digital tools, and especially computer gaming, as something today's children do enough of at home, and that SAECs should work with other kinds of activities to broaden pupils' perspectives and experiences. The teachers often refer to traditional SAEC activities like outdoor activities and play. They also highlight the risks involved with the use of digital tools, such as children becoming too sedentary or unsocial. In the teachers' descriptions of digital activities, they often described them in terms of something children do individually, and for this reason they are not an appropriate activity for SAECs. Overall, digital tools are seen as something risky and something that children need to be protected from. Another argument for not engaging with digital activities in these kinds of SAEC practice is that the teachers see themselves as lacking competence or knowledge of how to handle the technology. At these SAEC centres, digital tools are rarely used by the teachers themselves and they describe a stress in relation to the pressure to use digital tool more, i.e. for documentation. These SAEC centres are characterized by an absence of digital tools, and can thus be described as practices where digital activities are neglected.

Even if digital activities are not on the official agenda at these SAEC centres, digital activities are not totally absent from the pupil's social lives at the SAEC centres. The example below shows how pupils themselves use digital tools at the Volcano SAEC:

It is early morning. It is summer break, so few pupils are present. Laura, Tage and Ina are sitting on a sofa. Laura has her mobile telephone in her hand. They are watching different YouTube clips together. "Turn it down," says Ina, "so no one notices it." They are laughing and negotiating which movie clips they will choose.

In this example, the pupils have brought a mobile telephone to the SAEC centre even if this is prohibited. Their opportunity to use it is probably related to the fact that it is summertime and boundaries are less strict, and that they hid their activity and kept it quiet.

At all six SAEC centres in the study – even those that do not offer any or very few digital activities – the observations show that digital activities, in form of games and popular culture, are important for many pupils. They discuss popular games and what their favourite YouTuber or gamer has done, and incorporate these elements into their play. This raises questions about SAEC teachers' role in relation to handling digital tools and the surrounding social world.

Conclusions and Discussion

Overall, the results show that digital tools are allowed to play a part in different SAEC practices in quite various ways. This entails SAEC pupils being given unequal opportunities to develop digital skills. The study is an important contribution, as there is generally a lack of studies examining obstacles and barriers in SAECs' practice in relation to digital tools. The studies that do exist, which often highlight teachers' descriptions of their work rather than the practice as such, indicate that there is an ambivalence about handling digital activities (Lago & Elvstrand, 2022; Martinez, 2019). By analysing the actual doing, the results contribute to deepening the knowledge on this. In line with previous studies (e.g. Martinez, 2019, 2020; Stenliden et al., 2022), the results of this study show that SAECs' digital assignments are received and interpreted in different ways, which results in pupils being able to take part in digital activities in very different ways. The results also show that there is a tension between the different assignments of the SAEC centres and how SAEC teachers interpret the prioritization of these in practice. In this study, this tension is between the extent to which teachers should control the content and pupils' opportunities for participation (Elvstrand & Lago, 2020; Saar, 2014). In relation to the informal education that takes place at SAEC centres does not always offer opportunities for all pupils to take part in digital activities, and the digital competence and rights are thus unequally distributed. If SAEC teaching is to give pupils the opportunity to discuss the risks and consequences of communication via digital tools, SAECs' digital mission needs to be challenged and developed in practice for all pupils to be given equal knowledge and rights.

Even though the study is limited, the findings contribute to the groundwork for understanding aspects that signify SAECs teachers' various approaches to digital tools and activities. The results indicate that in addition to the different SAECs' and teachers' scope for interpretation, aspects such as competence, access and interest are also central for the practice that arises. In addition, the processes that arise within the organization – i.e. the local culture – are important in terms of what is done in different practices. Conditions are part of how the local culture is negotiated and done, but which values are seen as central and how the SAEC assignment is interpreted also matters – is integrating digital activities a choice or not? The study shows that there will be a great variation in how the practices are done, and that pupils will encounter significantly different types of digital (or non-digital) activities. This has implications for teacher education as it pinpoints the importance of knowledge about digital tools and how they can be used in practice. In the long run, this also has implications for how the SAEC centres can be arenas that contributes to providing pupils with digital literacy, something that can be seen as a right to develop for all pupils.

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References

Ackesjö, H. (2022). Evaluating the practice in Swedish school-age educare: Issues and contradictions. *Journal of Childhood, Education & Society*, 3(1), 60-73. https://doi.org/10.37291/2717638X.202231153

Barkhuus, L., & Lecusay, R. (2012). Social infrastructures as barriers and foundation for informal learning: Technology integration in

Helene ELVSTRAND et al.

- an urban after-school center. Computer Supported Cooperative Work, 21(1), 81-103. https://doi.org/10.1007/s10606-012-9157-3
- Bates, T. (2015). Teaching in a digital age: Guidelines for designing teaching and learning for a digital age. BC Open Textbooks.
- Blumer, H. (1969). Symbolic interactionism: Perspective and method. University of California Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis phsychology. Qualitative Research in Pshychology, 3(2), 77-102. https://doi.org/10.1191/1478088706qp063oa
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589-597. https://doi.org/10.1080/2159676X.2019.1628806
- Davis, K., & Fullerton, S. (2016). Connected learning in and after school: Exploring technology's role in the learning experiences of diverse high school students. *The Information Society,* 32(2), 98-116. https://doi.org/10.1080/01972243.2016.1130498
- De Felice, D. (2017). The right to security of online childhood. *The International Journal of Children's Rights*, 25(3-4), 573-598. https://doi.org/10.1163/15718182-02503001
- Elvstrand, H., & Lago, L. (2020). Do they have a choice?: Pupils' choices at LTCs in the intersection between tradition, values and new demands. *Education Inquiry*, 11(1), 54-68. https://doi.org/10.1080/20004508.2019.1656505
- European Commission. (2014). The Digital Competence Framework. European Commission.
- European Commission. (2017). Literature review of the reforms related to the 2006 European Framework of Key Competences for Lifelong Learning. European Commission.
- European Schoolnet. (2012). Challenges and opportunities for schools and teachers in a digital world: Lessons learned from the 2012 SMILE action research project. European Schoolnet.
- Everitt, J. G. (2012). Teacher careers and inhabited institutions: Sense-making and arsenals of teaching practice in educational institutions. *Symbolic Interaction*, 35(2), 203-220. https://doi.org/10.1002/symb.16
- Ferrari, A. (2013). DIGCOMP: A framework for developing and understanding digital competence in European Comission.
- Hallett, T., & Meanwell, E. (2016). Accountability as an inhabited institution: Contested meanings and the symbolic. *Symbolic Interaction*, 39(3), 374-396. https://doi.org/10.1002/symb.241
- Hammersley, M., & Atkinson, P. (2007). Ethnography: Principles in practice (3rd ed.) Routledge.
- Harvard, Å. (2015). Designing for peer learning: Mathematics, games, and peer groups in leisure-time centers [Published doctorate thesis]. Lund University.
- Hemmings, A. (2012). Four Rs for urban high school reform: Re-envisioning, reculturation, restructuring, and remoralization. Improving Schools, 15(3), 198-210. https://doi.org/10.1177/1365480212458861
- Ilomäki, L., Paavola, S., Lakkala, M., & Kantosalo, A. (2016). Digital competence: An emergent boundary concept for policy and educational research. *Education and Information Technologies*, 21(3), 655-679. https://doi.org/10.1007/s10639-014-9346-4
- Klerfelt, A. (2007). Barns multimediala berättande: En länk mellan mediakultur och pedagogisk praktik [Children's digital story telling and cultural meaning: A link between educational practice and mass media] [Published doctorate thesis]. University of Gothenburg.
- Lagerlöf, P. (2016). Musical play: Children interacting with and around music technology [Published doctorate thesis]. University of Gothenburg.
- Lago, L., & Elvstrand, H. (2022). Children on the borders between institution, home and leisure: Space to fend for yourself when leaving the school-age educare centre. Early Child Development and Care, 193(11), 1715-1727. https://doi.org/10.1080/03004430.2021.1929200
- Lecusay, R. (2014). Building zones of proximal development with computer games in a UC links after-school program. *International Journal for Research on Extended Education*, 2(2),13-26. https://doi.org/10.3224/ijree.v2i2.19544
- Lupton, D., & Williamson, B. (2017). The datafied child: The dataveillance of children and implications for their rights. *New Media & Society*, 19(5), 780-794. https://doi.org/10.1177/1461444816686328
- Martinez, C. (2019). Promoting critical digital literacy in the leisure-time centre: Views and practices among Swedish leisure-time teachers. *Nordic Journal of Digital Literacy*, 14(3), 134-146. https://doi.org/10.18261/issn.1891-943x-2019-03-04-04
- Martinez, C. (2021). Imagine the person in front of you: How teachers promote responsible online communication in Swedish Leisure-Time Centers. *Scandinavian Journal of Educational Research*, 65(6), 899-913. https://doi.org/10.1080/00313831.2020.1788140
- Martínez, C., & Olsson T. (2021). Domestication outside of the domestic: Shaping technology and child in an educational moral economy. *Media, Culture & Society*, 43(3), 480-496. https://doi.org/10.1177/0163443720948011
- Micheli, M. (2013). New media literacies in after-school settings: Three curricula from the program "explore Locally, Excel Digitally"

How digital activities become (im)possible...

- at Robert F. Kennedy Community schools in Los Angeles. *Journal of Media Practice*, 14(4), 331-350. https://doi.org/10.1386/jmpr.14.4.331 7
- Prieto, L.L., Arreguín-Anderson, M., Yuen, T., Ek, L., Sánchez, P., Machado-Casas, M., & García, A. (2016). Four cases of a sociocultural approach to mobile learning in La clase mágica, an afterschool technology club. *Interactive Learning Environments*, 24(2), 345-56. https://doi.org/10.1080/10494820.2015.1113711
- Saar, T. (2014). Towards a new pedagogy in the after-school setting. European Early Childhood Education Research Journal, 22(2), 254-270. https://doi.org/10.1080/1350293X.2014.883722
- Shirley, D. (2017) The new imperatives of educational change: Achievement with integrity. Routledge. https://doi.org/10.4324/9781315682907
- Skolforskningsinstitutet [The Swedish institute for Educational Research]. (2021). Meningsfull fritid, utveckling och lärande i fritidshem. Skolforskningsinstitutet.
- Stenliden, L., Elvstrand, H., & Lago, L. (2022). Digital learning activities at school-age educare when policy reforms calls for educational change. *International Journal for Research on Extended Education*, 10(1), 4-18. https://doi.org/10.3224/ijree.v10i1.02
- Stringer, E.T. (2007). Action research. Sage Publications.
- Swedish Association of Local Authorities and Regions (SALAR) (2019). #skolDigiplan: Nationell handlingsplan för digitalisering av skolväsendet.

 https://skr.se/skr/tjanster/rapporterochskrifter/publikationer/nationellhandlingsplanfordigitaliseringavskolvasendet.28931.h
- Swedish National Agency for Education. (2016). Curriculum for the compulsory school, preschool class and the school-age educare center. Skolverket.
- Swedish National Agency for Education. (2019). Elever och personal i fritidshem läsåret 2018/19 [Pupils and staff in the LTC, year 2018/19]. Skolverket.
- Swedish National Agency for Education. (2022). Curriculum for compulsary school, pre-school class, and school-age educare center. Skolverket.
- Swedish Parliament. (2020). Digitaliseringens möjligheter för att främja kunskapsutveckling och likvärdighet i skolväsendet. Registration number: U2020/05525.
- United Nations Educational, Scientific and Cultural Organization. (2019). Artificial intelligence in education: challenges and opportunities for sustainable development. UNESCO.
- United Nations International Children's Emergency Fund. (2020). Policy guidance on AI for children. UNICEF.
- United Nations. (2018). The United Nations Convention on the rights of the child act (2018:1197). UNICEF
- United Nations. (2021). General comment No. 25 (2021) on children's rights in relation to the digital environment. UNICEF.
- Vetenskapsrådet [Swedish Research Council]. (2017). *God forskningssed* [Elektronisk resurs]. Vetenskapsrådet. https://www.vr.se/download/18.2412c5311624176023d25b05/1555332112063/God-forskningssed VR 2017.pdf
- Wernholm, M. (2021). Children's out-of-school learning in digital gaming communities. *Designs for Learning*, 13(1), 8-19. https://doi.org/10.16993/dfl.164
- Wilcox, K. C., & Lawson, H. A. (2018). Teachers' agency, efficacy, engagement, and emotional resilience during policy innovation implementation. *Journal of Educational Change*, 19(2), 181-204. https://doi.org/10.1007/s10833-017-9313-0