

‘It is unbelievable how many come to us’: A study on municipal librarians’ perspectives on digital inclusion practices in Sweden

Mariana S. Gustafsson

Assistant Professor, Department of
Management and Engineering, Political
Science, Linköping University, Sweden
mariana.s.gustafsson@liu.se

Elin Wihlborg

Professor, Department of Management and
Engineering, Political Science, Linköping
University, Sweden
elin.wihlborg@liu.se

*In advanced, digitalized democratic communities the demands for digital literacy are a prerequisite for engagement and inclusion, yet at the same time, different forms of divides are omnipresent. By providing access and qualified support to community inhabitants, **public libraries** play a central function in the building of democratic and inclusive societies and are being increasingly relied upon by governments to deliver access and support for digital services. Based on a case study of municipal library services in Sweden, this paper aims to study digital inclusion as reflected in daily practices through the perspective of librarians. In this paper **we argue** that while advancing digitalization involves opening new access and engagement opportunities through empowering digital tools and the Internet, it also involves different challenges of exclusion for those who cannot use, choose not to use, or have other needs.*

Introduction

Informed and knowledgeable community members make up a critical base for advanced digitalized democracies and markets. High information volumes - stored and managed through increasingly advanced digital technical infrastructures, require advanced skills for information and technology management to enable problem solving, critical thinking, creativity, but also collaboration and communication. These skills that have been addressed by literature as ‘21st century skills’ (van Laar, van Deursen, van Dijk, & de Haan, 2017). Never before has the demand for digital literacy been so stringent.

Library as institution is fundamental for a lively, engaged, inclusive, and rooted democracy (Bertot, 2010; Palfrey, 2013). Public libraries play a central function in the building of democratic and inclusive local communities, being increasingly relied upon by governments to deliver access and support for e-services (Jaeger, Bertot, Thompson, Katz, & DeCoster, 2012). In particular, local public libraries have played a crucial role for deliberation, literacy, and democratic inclusion during the building of the Scandinavian welfare states (Hedemark, 2005).

The annual web survey “The Swedes and the Internet” reports that in 2019 approximately 5% of the Swedish population, most of which were over the age 66, were not at all on-line and 10% were non-daily users (Internetstiftelsen, 2019)¹. The non- or seldom users tended to be older, pensioners, or have lower education, lived alone or in households with low income, or had a functional impairment (Internetstiftelsen, 2020a). The inclusion challenge therefore focused on the considerable differences between daily users of digital services and Internet and those who were more seldom users. The survey was followed by complementary on-site interviews with the goal of reaching drop-outs from the annual survey (Skill, Wihlborg, & Kaharevic, 2020). The interviews particularly focused on non-Swedish speaking respondents and people with low socio-economic status. The results of the interviews showed that the numbers of non-users were higher among these groups, amounting to 13% non-users (Skill, Wihlborg, & Kaharevic, 2020).

In digitalized democratic societies, the demands for literacy are a prerequisite for engagement and inclusion, and at the same time different forms of divides are omnipresent. In this paper we argue that advancing digitalization involves opening new access and engagement opportunities through empowering digital tools and the Internet. But this also involves different challenges of exclusion for those that for different reasons cannot use technologies or the Internet, consciously choose not to use them, or have special needs pre-conditioning their information literacy through the use of technology.

The increasing volumes of information, the complexity of information technologies, and advanced digitalization of public services, raise challenges of accessibility to information and services, transparency of decisions and quality of services for different user groups when interacting with governmental authorities (Bertot, 2016; Bertot, Gorham, Jaeger, Sarin, & Choi, 2014; Molnar, Janssen, & Weerakkody, 2015). This development in Sweden happens in the context of a decades-long series of reforms of institutional efficiency and rationalization that involved a gradual decrease of physical service centers of national authorities such as The Swedish Tax Agency, Försäkringskassan (the National Social Insurance Agency) and Swedish Public Employment Service (Elowsson, 2009; Norberg, 2017) in rural and sparsely populated municipalities. As the possibility to meet a case worker on site decreased and the communication and application for respective services was channeled online, increasingly people turned to public libraries asking for help.

The Library Act in Sweden stipulates that every municipality shall have a public library open for everyone and adapted to the users’ needs (SFS 2013:801). Local libraries are financed and managed by the municipalities in Sweden. Based on their mission of working for inclusion based on visitor’s needs, the libraries developed their services to meet the new and increasing demands for digital information and e-services. Already in 2016, eight out of ten libraries in Sweden were offering services targeting users’ needs for digital information and services (Norberg, 2017). As many as 19,208 different courses targeting general information technology (IT) literacy for the public were run by the libraries in 2019, an increase of 25 percent from the previous year (Kungliga biblioteket, 2020). In parallel, a nationwide initiative for IT

¹ Response rate 29% and N= 5514

competence development for librarians was launched by the Government in 2018-2020 (Kungliga biblioteket, 2020).

Through the libraries, all community members are meant to have equal access to information, culture, and values – which are preconditions for informed, active, and engaged citizens in the civic realm. Moreover, libraries have been shown to act as an important equalizing institution in a democracy (Palfrey, 2013). By providing access and qualified support to all community members, the libraries promote equal access to information and knowledge resources for all individuals in society regardless of their economic and social resources. Libraries are seen as a public space and work to include and enable persons with disabilities and functional difficulties to get access and use public services in the local communities (Bertot, Jaeger, Gorham, Taylor, & Lincoln, 2013; Mersand, Gasco-Hernandez, Udoh, & Gil-Garcia, 2019).

While the social role of public libraries to promote digital inclusion is increasingly acknowledged by authorities, research has found that in most countries governments have failed to involve librarians' knowledge and experience of working with inclusion and literacy in identification of challenges, development of definitions, formulation of policies and decision-making that relate to inequalities and exclusions generated by digitalization (Jaeger, Bertot, Thompson, et al., 2012). To the contrary of increasing community reliance on libraries, there is a tendency to reduce their funding which leads to a dilemma of limited resources against purpose and higher expectations, a challenge that limits if not halts the librarians' action space and role (Stevenson & Domsy, 2016). In order to understand challenges of digital inclusion more insightfully, it is necessary to include the perspective of municipal libraries. This paper aims to study digital inclusion as reflected in daily practices through the perspective of librarians. The paper presents material collected from a municipal library and a regional library cooperation in Östergötland, Sweden.

Research Method

This paper introduces a case study of digital inclusion in Sweden, as it is addressed in the daily interaction between library visitors and library staff. In exploring new practices for digital inclusion, we have started out with an open field study inspired by an inductivist approach (Eisenhardt, 1989; Yin, 2009). Responding to a call from a municipality in Östergötland, Sweden, to evaluate their digital inclusion practices, the field study was designed as an action-research project on digital media buses to be able to bridge knowledge to practice (Wihlborg & Engstrom, 2017).

That opened an opportunity to initiate observations and interviews with one municipal library and a regional library cooperative including 13 municipal libraries. The municipal library had been one of the first in the country to receive national funding to establish a "DigidelCenter" to work with IT literacy. The DigidelCenter became a central node in our field studies. The regional library cooperative, called Götabiblioteken, acts for competence development for library staff.

The analysis of the empirical material focuses on themes and categories as they arise from observations in practice, keeping the representations close to their primary source, i.e. our informants, the library staff. The underlying idea is that their illustrations and the themes that emerge as salient, important and emphasized in practice will guide our subsequent selection of theoretical explanatory tools. At the same time, we are aware of the design implications of 'dataism' in the inductivist approach (Alvesson & Kärreman, 2011), by keeping theory and

empirical observation distinctly apart. We still consider this a necessary initial step prior to developing more complex designs in line with abductive processes. This analysis is both presenting a case study and used to elaborate on the need for further research in the field.

Selection of cases

The libraries in focus are located in the region of Östergötland, in south-eastern Sweden. This region reflects a diversity of outcomes in digitalization in local public administration. Among its 13 municipalities, one finds both those ranking highest and those ranking lowest in the country, in terms of e-services and mobile applications (Gustafsson, 2017). The municipalities in the region differ widely in terms of social-demographic parameters, with Norrköping and Linköping being urban centers with up to 150,000 inhabitants each, and smaller municipalities such as Ydre and Kinda with approximately 5000 inhabitants. Motala municipality, the focus of this study, has about 54,000 inhabitants, and is categorized as a commuting municipality (SALAR, 2017).

The field study consisted of several visits to the libraries including on-site observations of daily practices, as well semi-structured interviews. In addition, we analyzed municipal and library documents on library management and activity reports. Five semi-structured interviews were carried out on two occasions with library staff in Motala and at the offices of Götabiblioteken. Amongst the interviewed personnel, we talked to the two library managers, one municipality librarian, and two regional project leaders working with digitalization projects. They were key informants for digital inclusion as they have been working specifically with digitalization questions, either in their management roles or on the library floor (or both) and were highly knowledgeable about our questions. Observations were carried during the national arrangements of eCitizen week at the municipal library, and in connection to interview visits, with a special focus on how single visitors received support. When the primary empirical material collection took place in 2018, knowledge on digital inclusion was limited among the professionals and we thereby brought in new perspectives and knowledge into their practices (Gunnarsson, 2016).

Digital divide and inclusion: current and previous research

In this section we present a short research review focusing on how the digital divide is approached and conceptualized, as well as the work of municipal libraries with inclusionary policies. We start with some central conceptualizations of digital divides, which will be followed by the research on the municipal libraries' roles in addressing challenges of digital divides. Although digital inclusion is directly related to the digital divide, the former being the solution to the latter, we found that the digital divide as a challenge was more focused in the literature compared with practices of digital inclusion. Also, our search in Web of Science showed that those studies focusing on digital inclusions tended to focus on cases in developing countries and in the context of other inequalities (Aziz, 2020; Beyene, Mekonnen, & Giannoumis, 2020; Robinson et al., 2020).

Previous research has found that social exclusion is a critical challenge for e-government adoption (Dutton, Helsper, & Gerber, 2009). Those groups with greatest needs for housing, employment, health, and social care are frequently unable to use web-based technologies and e-services (Blackburn, Read, & Hughes, 2005). In addition, digital inequalities continue to combine with race, class, gender, ethnicity, and other offline inequalities which affect life opportunities in multiple ways (Robinson et al., 2015).

Digital divide challenges have not decreased with time and effort, but rather seem to have changed their nature and focus as information technologies and digitalization advance in society. Studies by van Dijk and Hacker (2003) have previously projected that divides would differentiate with time and that the differential access of skills and usage would increase. ‘The usage gap’ was inherent to the evolution of information and network society (van Dijk, 2006; van Dijk & Hacker, 2003). Different and other groups seem to struggle, independently of age, gender, and socio-economic conditions (Jaeger, Bertot, Shuler, & McGilvray, 2012). Livingstone and Helsper's (2007) study of children and young adults’ online habits aimed to discuss ‘gradations in frequency’ of Internet use rather than the binary digital divide and discuss more nuanced and targeted inclusion policies, such as skills-based interventions, incentives of frequent use of online resources, the balance of online and offline routes to inclusion.

The digital divide was defined as a divide between those who do and those who do not have access to technology (Jæger, 2012). The concept of digital divides has now developed from a focus on access to digital infrastructure to include digital literacy and competence in many different shapes comprising to classical social divides (van Dijk, 2015). Most broadly, digital inclusion has been defined as the ability of individuals to access, use and benefit from information and communication technology (ICT) (Bertot, 2016). Based on existing policy frameworks in the European Union (EU) and internationally, the following components of digital inclusion have been: access to ICTs, the Internet, and broadband technologies, digital skills, ability to use these skills in learning, education, employment, health, and civic engagement (Palfrey, 2013). By contrast, the lack of inclusion can be measured in terms of; lack of access to ICTs, lack of perceived value of digital content and digital services, lack of ability to use of ICTs, concerns over privacy and security.

Other literature analyzes the phenomenon of the digital divide in the frame of equal ‘access to opportunities’ - a policy term principally used to enact sustainability goals (Bertot, 2016). The argument is that equal access to knowledge, social, economic, and civic opportunities will ensure sustainable livelihoods and communities. However, evidence worldwide show large disparities in access to opportunities, posing social pressures for participation, inclusion, and equity (Bertot, 2016). The phenomenon is present also in advanced democracies, with United States being no exception. In conclusion, there is no single definition of the concept of the digital divide in e-government research; instead, the term is used to cover several different aspects of exclusion from access to technology over competences to trust in technology. Thus, our analysis has been open to the stories told by the staff at the library since they address most of these aspects described as digital divides.

The legal policy context in Sweden

In 2011 and subsequently in 2017, the Swedish government presented national digitalization agendas for Sweden, updating the first one dating from 1995 (Government Offices, 2011, 2017). The purpose was to gather all ongoing initiatives into a coherent strategy to take advantage of the opportunities that digitalization offered people and businesses. It was built on the vision of making the country best in the world to employ the opportunities of digitalization. The agenda focused on digital inclusion and emphasized the increased usability of digital public services (Government Offices, 2011). To fulfil the strategic goals, the Commission for Digitalization was created, and the focus shifted from technical and digital infrastructures to the social change that digitalization implied (SOU 2016:89).

In May 2017 a new national strategy on digitalization in Sweden was approved building on the vision of a sustainable digital transformation (Government Offices, 2017). The overall goal for this priority area is that everyone in Sweden should be able to develop and use their digital skills to contribute and participate in the digital society. Five focus areas are addressed in the strategy: digital skills, digital security, digital innovation, digital leadership, and digital infrastructure. This strategy emphasizes the libraries' important role in the on-going work on increasing digital competences in the general public.

Aligning to the national digital agenda, several regional authorities have developed similar regional agendas aiming to address their specific challenges. The Region of Östergötland was one of the first to align its digitalization strategy with the national and European digital agendas. The regional agenda included five focus areas, where digital competence and participation were included as priority objectives. For the period of 2014-2016, the objective was to increase digital inclusion with particular focus of asylum seekers and refugees who came to the region during the refugee crisis (Länsstyrelsen, Regionförbundet Östsam, & Landstinget i Östergötland, 2013). The priorities in the regional agenda were connected to the Regional Development Plan which was a collective strategy for the region's development for economic growth. In this plan, digital exclusion was described as a challenge since digitalization of services has created different affordances for active and participative citizenship, enabling those who master digital technologies and disabling those who lacked digital skills. Also, in the plan, libraries were described as important information nodes to support digital literacy (Regionförbundet Östsam, 2012).

In the municipality of Motala, site of the studied DigidelCenter, the municipal committees developed a yearly Planning Conditions document that guided the municipal administration. For 2018, one planning condition was digitalization of municipal services. The same year the municipal council adopted their digitalization policy 'Plan for Digitalization in Motala Municipality for 2018-2023'. The policy emphasized that the municipality should work for inclusion of all its inhabitants in the digital society (Motala municipality, 2018). Based on the five national focus areas, the plan broke these into eleven focus areas adapted to the municipality's conditions, needs, and democratic mission. The plan addressed values such as: equally secure and accessible digital services, individual integrity and autonomy, transparency of municipal case management, and co-production of services (Motala municipality, 2018). The plan also took up the principle of *digital first*, meaning that the communication and service access by the inhabitants shall be initiated online.

Library inclusionary practices

By facilitating access to learning, economic, health and civic engagement opportunities, libraries engage in a critical part of digital inclusion services, which is a vision for the role of libraries in a democratic society (IFLA/FAIFE, 2016, 2020). However, this is not always the case in practice, as it was shown by the work of Pateman and Williment (2017) based on library services in the UK and Canada, that looked specifically at their inclusionary work with disadvantaged members of society. They found that libraries were most successfully serving middle class users, and that they remained frightful, alien, and intimidating institutions for most marginalized, socially excluded people (Pateman & Williment, 2017). As a result, they proposed a *community-led model of library services* that would be primarily driven by specific community needs and different professions addressing these needs (ex. social workers, psychologists, public servants), rather than solely the professional librarianship. Stevenson and Domsy (2016) have critically analyzed different models of library services, including

community-led services, and have problematized the managerial logics and down-rationalization tendencies of front-line librarians, which are pivotal in guiding and supporting citizen access and navigation of the complex webs of services in increasingly digitalized societies.

Based on extensive national survey data, Bertot (2016) found that in the United States public libraries delivered essential services such as free access to ICTs, training in digital literacy skills, and structures to provide access to opportunities. The most used services in some public libraries were assistance in applying for jobs (completing online job applications) and navigation of employment databases and other digital sources of job opportunities (Bertot, 2016). Public libraries also play a role in providing robust e-Government, as some of the most used services Bertot noted were services to assist individuals to access and use online government forms and e-services. Bertot (2016) has also found that urban libraries offered 20% more programs and services compared to rural libraries.

Importantly, American libraries encountered challenges in their work with guidance and assistance on e-government services. Among the key challenges Bertot et al. (2013) have identified related to resources, staff and infrastructure are too few workstations to meet demand; time limit at the work station, not allowing enough time for certain groups to fulfil the tasks; connection speed; enough staffing and the necessary expertise among the staff. Studying the libraries as an e-government intermediary, Bertot et al. (2013) observed a paradox. On the one hand, libraries increasingly engage in innovative practices to meet users' needs for access and assistance on e-government services, on the other hand, their role in the e-service delivery chain is commonly ignored, undervalued, and underfinanced. This paradox is interesting to have in focus and follow up when looking at the Swedish context. We noted that despite different organizational and institutional contexts of the libraries, their practices oriented towards access to information and services as well as challenges connected to them are similar among different countries.

In the Swedish context, a mapping survey of municipal library activities found that in 2016, 8 out of 10 municipal libraries offered activities targeting digital inclusion and participation (Norberg, 2017). Norberg (2017) also found that most libraries offered activities falling within library's own services (about 80%), such as teaching and tutoring on Legimus/talking books, e-book applications and information literacy. The study also showed that most libraries (about 60%) provided teaching and tutoring on use of mobile phones and tablets, testing of digital technologies and scheduled hours for users' questions on specific needs related to Internet, apps, information or computer usage.

Importantly, in Norberg's (2017) study the librarians raised questions of user-integrity and responsibility that emerged when they had access to user's personal information during tutoring and support activities. Such situations emerged for example when users asked for help on Internet-banking, in insurance issues or in booking trips. While 30 % of the libraries did not take any action in situations involving integrity and responsibility risks, the approach of the majority was to teach and show the navigation sequence in an e-service, but not actively make the decisions for the user (Norberg, 2017). The study found that the motivation behind the decision to support in those cases was the reason that there were no other actors in the local community to help on a daily basis.

The legal context for libraries

Public libraries, as part of their democratic mission for citizen literacy, play a key function in making the Internet more available and open for all inhabitants (Bertot, 2016; Jaeger, Gorham, Sarin, & Bertot, 2013; McShane, 2011). Shortly after the Internet launched, many libraries had free use of connected online-computers (Bertot, McClure, & Jaeger, 2008; Gurstein, 2013; Higgs, Langford, & Fry, 2013). In Sweden, the *folk* library as institution, upon which the municipality library is build, has traditionally had the role of cultural and democratic educator (Fichtelius, Enarson, Hansson, Klein, & Persson, 2017; Olsson Dahlquist, 2019). In the context of advancing digitalization, the library's role has expanded to include digital literacy by ensuring access to information, support learning, and facilitate access to public services through free digital infrastructure.

The mission and the mandate of the Swedish public library is based on existing legislation that stipulates the democratic right to be digitally included. Since 2014, the new Library Act establishes the universal accessibility and the role of libraries in promoting transfer of knowledge, free opinion building and participation as key values of a democratic society (The Library Act, (SFS 2013:801). Paragraphs 2 and 7 focus on digital literacy as a democratic value (Swedish Library Association, 2015):

“§2 The libraries in the public library system shall promote the development of a democratic society by contributing to the transfer of knowledge and the free formation of opinions. The libraries in the public library system shall promote the status of literature and an interest in learning, information, education, and research as well as other cultural activities. Library activities shall be available to everyone.²”

“§7 Public libraries shall in particular promote reading and access to literature. Public libraries shall act to increase knowledge about how information technology can be used for the attainment of knowledge, learning, and participation in cultural life.”

In addition to the national legislation, there are regional and local policy documents steering the libraries. In these cases, there is a Regional Library Plan focusing on activities and content in all libraries within the regions, even if they are managed by the municipalities. This plan also points out the importance of integration of new technology and digital development to increase digital inclusion, in line with the library's democratic mission (Region Östergötland, 2016). To ensure that all libraries in the region of Östergötland can and will work with questions about digital society, digital inclusion and media and information knowledge there is a public servant working on the Regional Library cooperation with these questions.

Policy implementation

There have been several approaches and policies to enhance digital competence in Sweden, mainly through the school context and for employees in the labor market (Hatlevik, Ottestad, & Throndsen, 2015). In 2009, the regional library cooperatives received national funding for the project called 'IKT-lyftet' (Competence development for information and communication technology). The project aimed to open a dialogue between libraries and other actors who work with questions about folk education. The dialogue's purpose was to find a way to work with

² Translation of The Swedish Library Association

increased digital inclusion. A central goal in the project was to initiate a national campaign on digital inclusion with activities in the Swedish municipalities. In December 2010, a manifest advancing cooperation to increase the society's digital inclusion was signed by 16 different national organizations and departments. This led to the start of the national campaign Digidel2013.

Digidel2013 had the goal to make half a million Swedes more digitally included. The campaign was driven by a large network of libraries and adult education associations. The campaign was one of the largest initiatives in questions of digital inclusion and competence. After the campaign, the work has been continued by a network called Digidel. The network arranged two campaign weeks every year called *eMedborgarveckan* (*eCitizen week*) and *ALL DIGITAL Week* (Digidel, 2016). *eCitizen's week* is a national campaign to promote digital literacy and use of e-services in order to increase civic digital participation. In 2019 the national campaign week has reached about 8000 visitors through 370 activities, organized in 69 municipalities (Digidel, 2019). *ALL DIGITAL Week* is a European campaign for professionals working with increased digital participation and targets lifelong learning for information and technology literacy, critical thinking and media literacy, cyber and information security literacy, among others.

Library activities in the region: Introducing the case study

The Region of Östergötland is situated in southeastern Sweden and is home for about 480,000 inhabitants (RKA, 2017b), making it the fifth largest region in Sweden. Most of its 13 municipalities have a widespread geographic position (Figure 1), which has important implications on digital infrastructure and access to public services, especially in the municipalities lightly populated or those with so called 'shrinking' populations³ (Erlingsson, Syssner, & Ödalen, 2015; Syssner, 2014). Compared to other regions, Östergötland scores lower than the average in terms of economic and social sustainability (RKA, 2017a). The region also scores higher than the average in terms of households receiving municipal financial assistance (ca 40% compared with 30% on average as per 2015, RKA, 2017a), indicating that there are more households in need of support in different ways. In addition, the region has an aging population that is expected to affect organization of services, both public and private (Erlingsson et al., 2015). During the immigration crisis of 2015, Sweden received 162,877 asylum seekers (double as many as in 2014), including over 35,369 unaccompanied children and youth (five times as many as in 2015) (Migrationsverket, 2014, 2015). This is important to have in mind when we address problems of digital inclusion, as formulated in this study.

³ Especially challenging is the situation of the so-called 'shrinking municipalities': Kinda, Valdemarsvik, Ydre, Åtvidaberg, and Ödeshög.

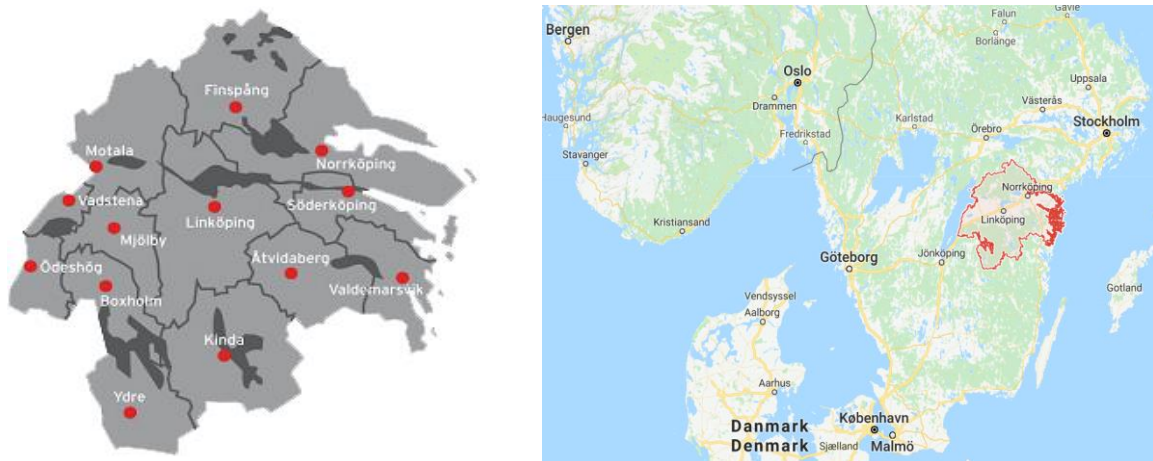


Figure 1. Geographic representation of the region and municipalities of Östergötland.
Source: Länsstyrelsen, Google maps.

Regional Library Cooperative

The regional library cooperative, also called *Götabiblioteken*, is a part of the Region of Östergötland and has a mission to work for equal access to media, information and good library service to all the region's inhabitants (Region Östergötland, 2016). The cooperative is responsible for municipal libraries, university libraries, hospital libraries and other special libraries in the region. It encourages and supports the public libraries work with knowledge development, cooperation, and quality (Region Östergötland, 2016).

Digital inclusion is emphasized and prioritized also in the action plan of the regional library cooperative (Region Östergötland, 2016). Some examples of development projects are digital media buses, Crossmedia and Media- and information knowledge (Wihlborg & Engstrom, 2017). These three projects aimed to both increase the inhabitant's digital inclusion but also to increase the librarians own digital competence and develop different methods for how the library itself can work with digital inclusion in their own municipality.

DigidelCenter in Motala

The municipality of Motala has a long history of difficulties in developing their broadband infrastructure, due to that some geographic areas were sparsely populated and included several distant rural areas, besides the urban area. Statistics from 2015 showed that only 58% of the households in the municipality had access to broadband with fiber connection. The library service, in terms of digital competence and access to the Internet, for the inhabitants got more important when the broadband access was very low (Motala Municipality, 2017).

The action plan of Motala library for 2015-2018 indicates that the library had the responsibility to develop the inhabitants' digital competence and continuously work with an increased digital inclusion to support the society's democracy and an active citizenship (Motala Municipality, 2015). In 2016 the library initiated "IT-guide" - a project aiming to integrate unaccompanied asylum-seeking youths. Youth were arranging Internet cafés

on Saturdays where elderly people could come with their questions about digital and technical issues. In line with the action plan, the library has initiated the DigidelCenter. The idea of a digital service center came from a project in a nearby municipality named Mjölby, where the concept proved successful. DigidelCenter in Motala gained national funding and was a role model for digital inclusion in Sweden, being used by the national government in their promotion DigidelCenters (Government Offices, 2018).

The Librarians' perspectives on the problem of digital inclusion

The librarians working with these issues in the local libraries needed to include new work activities and learn to manage other challenges. In order to understand the perspective of the libraries in relation to problems of digital divide it is important to understand how the role and the nature of libraries' work on digital literacy have changed while society advances its digitalization efforts. It was clear that the libraries' practices have changed following the ICT development and library's mission to ensure access to different information channels and to provide information services for all inhabitants with a diversity of needs. The changes followed the developments in digitalization of government services, but these also involved challenges for the libraries' inclusionary activities, as we will show in the examples presented below.

Organization challenges in practice

According to the interview material, the increase in media channels and the diversity of information have involved more access to information for more groups, which has fundamentally affected the way libraries work, the content, and form of their services. Different ICT tools and applications were acquired to enable access to information and participation of persons with functional disabilities (for example users with dyslexia, cognitive disabilities or sight impairment) in totally new ways and required new work methods and competencies from the staff to address this new diversity of needs. For the libraries, it has meant more and diverse users of their services, different and more diversity in service needs, different ICT solutions and different questions related to technology to attend to. The library manager in Motala explained:

The library's modus operandi has changed fundamentally. We manage currently a much wider range of media formats - both analog and digital. We have the complete range of users and issues. It has become more complex; you have to think much more. We are in essence working with much more information today. And we provide more help for self-help in accessing and navigating information through digital tools. (Library manager, Motala)

One central challenge for the library is to keep pace with information technology development and its enabling affordances to the wider and more diverse groups of users and their needs. Accessibility to information and knowledge acquires complexity as it is mediated by more technologies. Libraries need to keep up with knowledge about the new digital media landscapes. The following interview quote illustrates this challenge:

The modern public library must respond to completely different needs, in order to feel relevant and important to the people. The great challenge for today's library is to open the doors to the digital world, and help people navigate the digital information jungle. The library is a digital knowledge

disseminator, which helps bridge the knowledge gap in our society when it comes to using digital media. It is about democracy and education in our times.’ (Librarian, Motala)

Resources: Personnel, knowledge and update, time

Through the interviews all informants made clear that most of the issues of digital inclusion have to be addressed outside the scheduled programs (i.e., workshops, courses, etc). Visitors are asking for support on a drop-in basis, daily, at the information desks. Their questions are diverse and most of them require solving specific problems on the spot, such as accessing an e-service through e-ID log in, accessing bank account or filling in forms for income support services. For the staff this becomes a question of time and prioritization, since some issues take time to solve. Time is also an issue when support is given in the form of teaching or instruction, so called ‘help-for-self-help’, intended to guide the user in solving their problem, rather than presenting a ready solution or choice. One of our interviewees explained:

It is a problem of personnel. As for example yesterday afternoon, when I worked at the information desk, we had a lot to do. We had many issues coming and some of these took much longer time. We had to push ahead. These issues require know how, especially the teaching part. And it is difficult to manage in terms of time. Most often they come with a problem that they need to solve on the spot. It is difficult to tell them to come later. (Librarian, Motala)

Another example of time-consuming, know-how requiring questions, but also a situation when the question needed to be solved on the spot:

A woman with visual impairment approached me for assistance with Legimus [a program for people with reading and writing difficulties]. She asked for help with transferring digital talking books from the library computer to her own DAISY player. The process itself is difficult to manage if you have that kind of visual impairment. It did not work either when we would do it together. It needed troubleshooting and better understanding of the problem. I could not help her then because I had not enough time.’ (Librarian, Motala)

This also shows that the users are increasingly coming with questions in connection with other authorities and banking e-services. Helping with such questions requires more knowledge about how the respective authority services work and the technologies connected to them. Helping the user in such cases (ex. logging in on the personal pages and following a service procedure) involves following a service procedure correctly and sending relevant information:

The other day, a man in his forties approached me for help. I believe he was either starting new studies or he was returning to studies. He needed to apply for an additional CSN [The Swedish Board of Student Finance] loan. At CSN they advised him to apply online, through their webpage. The man came to us. Here we have a knowledge issue. I as a librarian have not enough knowledge about CSN loan application system. It was a long time since I had to deal with them or their services. I’m not updated at all on this stuff. But at the same time who else could help this man? (Librarian, Motala)

In situations like this, when the user opens up their personal profile for others to make decisions pursuing a service or troubleshooting for a technical problem, issues of personal integrity and responsibility become central. This was emphasized by two of the librarians we interviewed. They both had experienced such ethical challenging situations when for example helping users with access to their private Internet bank account and Facebook Messenger (Observations during eCitizen week, 2017-10-12).

It is becoming an issue now, where to draw a line, how long shall we go with helping them? (Librarian, Motala).

Such a development is currently generating a certain discontent internally at the libraries and the staff is divided about who should take responsibility for such questions.

The others [i.e., public and private authorities] are sending their customers to the library: the insurance agency, the bank, the employment agency [i.e., to help them with their issues]. There are different meanings about this, there is a certain irritation [among the libraries] – shall we be a municipal office? Some sees the possibilities that this situation opens for the library, but at the same time one realizes that it is a bit problematic when other public authorities are sending their users to us to solve their problems. The other authorities should also help. They are also responsible for this. (Library manager, Motala).

To conclude, these perceptions point to a need for resources to enhance and support digital inclusion. The libraries lack such resources despite the general and often clearly set policy ambitions on digital inclusions. There is a need for resources in many aspects, not just time and staff, there is also a need for more competences, support to the librarians, technology and not at least guidelines on privacy and ethical issues.

Perceptions of digital inclusion problems

Librarians have the mission, as part of their profession, to support users in their access to information. But the growing numbers of questions of digital problems and practical issues the librarians receive on the daily basis makes new tensions in their daily work. They are witnessing that there exists a problem of digital literacy today. They emphasize that contrary to the common picture, these problems are present in all population groups. There is no single socio-economic factor defining who is asking for this help at the library today.

But it is also clear, as shown already more than ten years ago in studies on digital inclusion (Norris, Fletcher, & Holden, 2001; Warschauer, 2003), that those already in socially vulnerable situations, such as those suffering from disabilities, with a long sick-leave or being long-term unemployed are affected even more as services are digitalized. According to our informants, current national measurements of Internet usage and literacy do not reach all the groups and do not measure community members' abilities to solve problems of digital character on the daily basis.

It is obvious that we have digitally excluded today. These people can be found in all population groups. "Svenskarna och Internet" [Swedes and the Internet] are calling the different groups, but they don't reach to everybody.

There are many who are outside and are difficult to reach. And some of these turn to us, at the library. Also, there are those people who are excluded in other areas too. It is difficult for them to get on the labor market if one has a disability, is unemployed, is sitting at home, does not have access to computers and information, cannot choose among options, and cannot understand how to proceed with an application. We have so many who come to us. (Manager Regional Library, Linköping)

According to the librarians, the common picture that digital literacy increases as community members get more accustomed to information technologies and the Internet is not quite accurate. The problem persists in practice, although there is increasing interest and motivation with many of the users to learn:

We see that people are much more unaccustomed with technologies than the pre-vailing picture likes to show. The impression is that we have used computers and Internet for ages. But we see that many are not used (to the technologies). We see the whole scale: from those who are afraid and unaccustomed, those who are ashamed of their limited knowledge or abilities, to those who have given up, with 'this is not for me' attitude. But we see that people are curious. There are those who have got a tablet as a Christmas present and they come to us to get started. People are not so used [to technology] as we think. It's unbelievable how many come to us, and these are not necessarily elderly or immigrants. (Library manager, Motala)

The user-groups have increased as technology opens new opportunities to access information. For example, digital software such as Legimus and increasing digitalization of literature stocked in the national library database makes it possible for more groups to use talking books-services. This is welcomed by the libraries, as more groups gain access to books they have previously had difficulties with, or was impossible to read. But this has brought up a new array of specific needs and questions that the library received and was expected to address:

Before there were just those with visual impairment who borrowed talking books. Today we have many more, including people with dyslexia, or related speech and writing difficulties. This means more and different types of questions that we get to address. But this is good because digitalization helps making these books available for more users in need. This means we can reach and provide access and literacy to more groups. (Library manager, Motala)

The librarians also witnessed that the questions at the helpdesk have changed. Many of the users bring their own devices and are asking for help with programs and services connected to the library's own services:

The questions are different, many bring with them their own tablets or smartphones and want to get help with various features, download apps, get started with different programs, transfer pictures, book tickets, manage files, using the Internet bank, lend e-books, download talking books, etc. Both Drop in and the booked tutorial [i.e., library services] are very appreciated. (Librarian, Motala)

The questions at the helpdesk have changed. Self-lending of books has freed up time. Now we get so many more questions on civic engagement, on technology, on computer use. How are going to manage all this? What resources do we have to manage this? Up to some point we have resources, but we need to use them smartly. The self-lending frees up time for more tutoring. (Library manager, Motala)

Taken together this shows that the libraries become a general meeting point for different types of digital problems that people in general are facing. There is a broad, open, and democratic approach to help and improve digital inclusion in general. Thus, we concluded that librarians have a broad and open-minded perception of what they see as digital inclusion, and thereby they contribute to bridge digital divides and address a diversity of needs.

Conclusions and further research

This case-based analysis has built on a field study focusing of librarians' perceptions of how they addressed digital inclusion questions in their daily practices. The overall impression was that at the time of the study the librarians lacked sustained competence development and resources to manage the new and changing demands coming from evermore diverse group of users to guide and support digital inclusion activities. Even if there were specific and successful projects, the bulk of tasks concerned supporting visitors with problem solving in their daily use of digital technologies in relation to private and public e-services.

The users turned to the library for support on services far beyond the libraries' responsibilities, like managing different Internet accounts, banking services, and use of e-services for health services like digital prescriptions for medicines. Users from vulnerable socio-economic situations and with functional disabilities struggled to access and manage digital services, a development that created new and challenging demands on librarians for support that oftentimes involved issues of integrity and security. The studied practices showed that there was a great need for support and personal coaching that was not fully acknowledged by municipal administrative and political leadership. New information literacy challenges emerged - both enabling and disabling - that required re-thinking the mission of the public libraries, their functions in an advanced digital democracy and rewiring the responsibilities and competence development of the library personnel.

The findings in our case study support the thesis that advancing digitalization, in terms of increasing complexity of information systems and extent of digital public services, involves different varieties of digital exclusions that shift in focus and nature (van Dijk & Hacker, 2003) and go beyond traditional divides such as class, genders, ethnicity (Bertot, 2016; Molnar et al., 2015). In line with Robinson et al. (2015), we also find certain evidence based on municipal libraries practices that inequalities resulting from digital literacy challenges combine with functional disabilities or social-economic vulnerabilities. However, current IT solutions can also provide enabling functions for these groups if appropriate literacy and IT support is made accessible through municipal libraries or other community service centers.

More attention to and research on the need for digital literacy for digital inclusion is paramount as the librarians experience the problem as being greater and more diverse in

nature than the measurements provided by surveys such as “The Swedes and the Internet”. More research with focus on practices addressing the diversity of needs for access to information and navigation of digital services is needed. There is also a need to discuss the policy implications of the demands of a general digital helpdesk and if the public libraries are the right place for this in a advanced welfare state where community members have many contacts with different public agencies. Based on our understanding that technological development of society and welfare services will involve various challenges of divides and exclusions, we have identified three directions for further research.

Firstly, since municipalities have a high degree of autonomy and responsibility for providing conditions for active citizen participation in local communities, it is important to analyze their policies and measures addressing exclusionary tendencies of digitalization and automatization of public services. In particular, it is important find out how they address digital inclusion in a more diverse society and the role, as well as the organization of front-line actors such as librarians and other professionals meeting citizens on a daily basis? Secondly, we have seen, in line with other studies (Bertot, 2016; Stevenson & Domsy, 2016; Thompson, Jaeger, Taylor, Subramaniam, & Bertot, 2014) that the librarians’ competences, both regarding digital tools and societal issues, are keys for enhancing digital inclusion and thus their competence development and working conditions are in turn a key area for further research. Finally, we agree with van Van Dijk (2020) that there is a crucial need to uncover the more qualitative aspects of what makes people digitally excluded in advancing digital society and how they experience digital exclusion in relation to social and economic exclusion.

Acknowledgements

This study was possible with the support from Carl Bennett Foundation. We are thankful to the informants from the Motala municipal library who have contributed with their time and knowledge about library practices of inclusion and challenges posed by digitalization.

References

- Alvesson, M., & Kärreman, D. (2011). *Qualitative Research and Theory Development: Mystery as method*. Thousand Oaks, CA: Sage Publications.
- Aziz, A. (2020). Digital inclusion challenges in Bangladesh: the case of the National ICT Policy. *Contemporary South Asia*, 28(3), 304-319.
- Bertot, J. C. (2010). Community-based e-Government: Libraries as e-Government partners and providers. *Proceedings of the 9th IFIP WG 8.5 International Conference, EGOV 2010*, Lausanne, Switzerland.
- Bertot, J. C. (2016, March 1-3). *Building Digitally Inclusive Communities: The Roles of Public Libraries in Digital Inclusion and Development*. [Conference presentation]. The 9th International Conference on Theory and Practice of Electronic Governance (ICEGOV '15-16), New York, NY, USA.
- Bertot, J. C., Gorham, U., Jaeger, P. T., Sarin, L. C., & Choi, H. (2014). Big data, open government and e-government: Issues, policies and recommendations. *Information Polity*, 19(1/2), 5-16.
- Bertot, J. C., Jaeger, P. T., Gorham, U., Taylor, N. G., & Lincoln, R. (2013). Delivering e-government services and transforming communities through innovative partnerships: Public libraries, government agencies, and community organizations. *Information Polity: The International Journal of Government & Democracy in the Information Age*, 18(2), 127-138.
- Bertot, J. C., McClure, C. R., & Jaeger, P. T. (2008). The impacts of free public internet access on public library patrons and communities. *The Library Quarterly*, 78(3), 285-301.
- Beyene, W. M., Mekonnen, A. T., & Giannoumis, G. A. (2020). Inclusion, access, and accessibility of educational resources in higher education institutions: exploring the Ethiopian context. *International Journal of Inclusive Education*, 1-17.
- Blackburn, C., Read, J., & Hughes, N. (2005). Carers and the digital divide: Factors affecting Internet use among carers in the UK. *Health & Social Care in the Community*, 13(3), 201-210.
- Digidel. (2016). *Digidels eMedborgarveckan 3-9 oktober 2016: En återblick*. Retrieved from <https://spark.adobe.com/page/WaYbYHLSyxpfG/>
- Digidel. (2019). *Pianobananer, digital älgjakt och en bloggande 107-åring. eMedborgarveckan 7-13 oktober 2019*.
- Dutton, W., H., Helsper, E., J., & Gerber, M. (2009). *Oxford internet survey 2009 report: the internet in Britain*. Oxford Internet Institute.
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532-550.
- Elowsson, M. (2009). *Service utan lokal närvaro? Förändringar av statlig direktservice i Dalarnas län under 2000-talet*. Report 2009:14, Institute for Futures Studies
- Erlingsson, G. Ó., Syssner, J., & Ödalen, J. (2015). *Strategier för att möta småkommunernas utmaningar*. SNS Analys nr. 26. Stockholm: SNS förlag.
- Fichtelius, E., Enarson, E., Hansson, K., Klein, J., & Persson, C. (2017). *Den femte statsmakten: bibliotekens roll för demokrati, utbildning, tillgänglighet och digitalisering*. Kungliga biblioteket, Nationell biblioteksstrategi.
- Government Offices. (2011). *ICT for Everyone - A Digital Agenda for Sweden*. Stockholm: åtta.45
- Government Offices. (2017). *For sustainable digital transformation in Sweden - A Digital Strategy*. Ministry of Enterprise and Innovation N2017.23 Retrieved from

- http://www.government.se/49c292/contentassets/117aec2b9bf44d758564506c2d99e825/2017_digitaliseringsstrategin_faktablad_eng_webb-2.pdf
- Government Offices. (2018). *Lyckat koncept för digital delaktighet ska spridas till fler* [Press release]. Retrieved from <https://www.regeringen.se/pressmeddelanden/2018/06/lyckat-koncept-for-digital-delaktighet-ska-spridas-till-fler/>
- Gunnarsson, E. (2016). *Action research for democracy: new ideas and perspectives from Scandinavia*. New York: Routledge.
- Gurstein, M. (2013). Beyond Access: Libraries are the New Telecentres. *The Journal Of Community Informatics*, 10(1).
- Gustafsson, M. (2017). Reassembling Local E-Government: A study of actors' translations of digitalization in public administration. [Doctoral dissertation, Linköping University]. Linköping Studies in Arts and Science. Linköping University Electronic Press, 718:132
- Hatlevik, O. E., Ottestad, G., & Throndsen, I. (2015). Predictors of digital competence in 7th grade: a multilevel analysis. *Journal of Computer Assisted Learning*, 31(3), 220-231.
- Hedemark, Å. (2005). Mötet mellan folkbibliotek och användare. *Svensk biblioteksforskning*(1), 7.
- Higgs, G., Langford, M., & Fry, R. (2013). Investigating variations in the provision of digital services in public libraries using network-based GIS models. *Library & Information Science Research*, 35(1), 24-32.
- IFLA/FAIFE. (2016). *Principles of freedom of expression and good librarianship*. Retrieved from <https://www.ifla.org/faife/mission>
- IFLA/FAIFE. (2020). *Library Pledge for Digital Inclusion*. Retrieved from <https://www.ifla.org/publications/node/93399>
- Internetstiftelsen. (2019). *Svenskarna och internet 2019*. Retrieved from www.svenskarnaochinternet.se
- Internetstiftelsen. (2020a). *Digitalt utanförskap 2020 Q1. En delrapport av undersökningen Svenskarna och internet [Digital Exclusion 2020 Q1. A Quartely Report on Sweden and the Internet]*. Retrieved from <https://svenskarnaochinternet.se/rapporter/digitalt-utanforskap-2020/>
- Internetstiftelsen. (2020b). *Svenskarna och internet 2020. [Swedes and the Internet]*. Retrieved from <https://svenskarnaochinternet.se/>
- Jæger, B. (2012, July). *New Frontiers in the Digital Divide: Revisiting Policy for Digital Inclusion*. [Conference presentation]. EGPA Annual Conference. Bergen, Norway. Retrieved from https://www.scss.tcd.ie/disciplines/information_systems/egpa/docs/2012/Jaeger.pdf
- Jaeger, P. T., Bertot, J. C., Shuler, J. A., & McGilvray, J. (2012). A new frontier for LIS programs: E-government education, library/government partnerships, and the preparation of future information professionals. *Education for Information*, 29(1), 39-52.
- Jaeger, P. T., Bertot, J. C., Thompson, K. M., Katz, S. M., & DeCoster, E. J. (2012). The intersection of public policy and public access: Digital divides, digital literacy, digital inclusion, and public libraries. *Public Library Quarterly*, 31(1), 1-20.
- Jaeger, P. T., Gorham, U., Sarin, L. C., & Bertot, J. C. (2013). Libraries, policy, and politics in a democracy: Four historical epochs. *Library Quarterly*, 83(2), 166-181.
- Kungliga biblioteket. (2020). *Bibliotek 2019. Offentligt finansierade bibliotek*. Retrieved from <file:///C:/Users/margu72/Downloads/Rapport-Bibliotek-2019.pdf>
- Livingstone, S., & Helsper, E. (2007). Gradations in digital inclusion: Children, young people and the digital divide. *New Media & Society*, 9(4), 671-696.

- Länsstyrelsen, Regionförbundet Östsm, & Landstinget i Östergötland. (2013). *Digital Agenda för Östergötland: 2014-2020*.
- McShane, I. (2011). Public libraries, digital literacy and participatory culture. *Discourse: Studies in the Cultural Politics of Education*, 32(3), 383-397.
- Mersand, S., Gasco-Hernandez, M., Udoh, E., & Gil-Garcia, J. R. (2019). Public libraries as anchor institutions in smart communities: Current practices and future development. *Proceedings of the 52nd Hawaii international conference on system sciences*.
- Migrationsverket. (2014). *Statistics on Applications for asylum received, 2014*. Retrieved from <https://www.migrationsverket.se/Om-Migrationsverket/Statistik/Asyl.html>
- Migrationsverket. (2015). *Statistics on Applications for asylum received, 2015*. Retrieved from <https://www.migrationsverket.se/Om-Migrationsverket/Statistik/Asyl.html>
- Molnar, A., Janssen, M., & Weerakkody, V. (2015). e-Government Theories and Challenges: Findings from a Plenary Expert Panel. *Proceedings of the 16th Annual International Conference on Digital Government Research*, Phoenix, AZ, USA.
- Motala Municipality. (2018). *Plan för Digitalisering i Motala kommun 2018-2023 [Plan for Digitalization in Motala Municipality 2018-2023]*. Retrieved from <https://www.motala.se/media/uploads/Digitaliseringsplan.pdf>
- Motala Municipality. (2015). *Action Plan of Motala Library 2015-2017*.
- Motala Municipality. (2017). *IT-infrastrukturprogram [IT-Infrastructure Program 2017-2020]. Dnr. 15/KS 0245*
- Norberg, I. (2017). *Insatser för digital kompetens på folkbiblioteken: En studie om folkbibliotekens arbete med digital delaktighet*. Retrieved from Stockholm: <https://skl.se/skolakulturfrid/kulturfrid/bibliotek/digitaldelaktighet.13039.html>
- Norris, D. F., Fletcher, P. D., & Holden, S. H. (2001). Is your local government plugged in? Highlights of the 2000 electronic government survey. *Washington, DC: International City/County Management Association*.
- Olsson Dahlquist, L. (2019). *Folkbildning för delaktighet : en studie om bibliotekets demokratiska uppdrag i en digital samtid*. [Doctoral dissertation]. Lunds universitet, Institutionen för kulturvetenskaper.
- Palfrey, J. G. (2013). *Bibliotech: Why libraries matter more than ever in the age of Google*. New York: Basic Books, A Member of the Perseus Books Group.
- Pateman, J., & Williment, K. (2017). *Developing community-led public libraries: evidence from the UK and Canada*. London: Routledge.
- Region Östergötland. (2016). *Regional biblioteksplan för Östergötland*. Retrieved from <https://regionbibliotekostergotland.se/wp-content/uploads/2019/04/biblioteksplan-2020-2023-orig-ny.pdf>
- Regionförbundet Östsm. (2012). *Regionalt utvecklingsprogram: 2030 för Östergötland*. Retrieved from <http://www.lansstyrelsen.se/ostergotland/SiteCollectionDocuments/Sv/lantbruk-och-landsbygd/landsbygdsutveckling/RUP.pdf>
- RKA. (2017a). *Region Östergötland. Hållbar utveckling: Ekonomisk, miljömässig och social hållbarhet*. [Data set]. Retrieved from <http://www.kolada.se/>
- RKA. (2017b). *Region Östergötland: Befolkning, arbetsmarknad, ekonomi*. [Data set]. Retrieved from <http://www.kolada.se/>
- Robinson, L., Cotten, S. R., Ono, H., Quan-Haase, A., Mesch, G., Chen, W., . . . Stern, M. J. (2015). Digital inequalities and why they matter. *Information, Communication & Society*, 18(5), 569-582.
- Robinson, L., Schulz, J., Dodel, M., Correa, T., Villanueva-Mansilla, E., Leal, S., . . . Khilnani, A. (2020). Digital Inclusion Across the Americas and the Caribbean. *Social Inclusion*, 8(2), 244-259.

- SALAR. (2017). *Classification of Swedish Municipalities*. Retrieved from <https://skl.se/download/18.6b78741215a632d39cbcc85/1487772640274/Classification+of+Swedish+Municipalities+2017.pdf>
- SFS 2013:801. *Bibliotekslag [The Library Act]*. Retrieved from Sveriges Riksdag: http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/bibliotekslag-2013801_sfs-2013-801
- Skill, K., Wihlborg, E., & Kaharevic, A. (2020). Digital diversity and an inclusive smart society: a novel methodological search for digital participation and sustainable development in a Swedish suburb. *Proceedings of the 13th International Conference on Theory and Practice of Electronic Governance*.
- SOU 2016:89. *Digitaliseringskommissionen: För digitalisering i tiden. Slutbetänkande*. [Digitalisation Commission: for a timely digitalisation. Final report]. Retrieved from https://www.regeringen.se/4af25c/contentassets/f7d07b214e2c459eb5757cea206e6701/sou-2016_89_webb.pdf
- Stevenson, S. A., & Domsy, C. (2016). Redeploying public librarians to the front-lines: Prioritizing digital inclusion. *Library Review*. Vol. 65 No. 6/7, pp. 370-385
- Swedish Library Association. (2015). *Promoting the development of a democratic society: The Swedish Library Act according to the legislator*. Retrieved from: <http://www.biblioteksforeningen.se/wp-content/uploads/2017/01/development-of-of-a-democratic-society.pdf>
- Syssner, J. (2014). *Politik för kommuner som krymper* (Vol. 4). [Policies for shrinking municipalities]. Linköping: Linköping University Electronic Press.
- Thompson, K. M., Jaeger, P. T., Taylor, N. G., Subramaniam, M. M., & Bertot, J. C. (2014). *Digital literacy and digital inclusion: information policy and the public library*. Lanham: Rowman & Littlefield.
- van Dijk, J. (2020). *The digital divide*: John Wiley & Sons.
- van Dijk, J. (2006). Digital divide research, achievements and shortcomings. *Poetics*, 34(4-5), 221-235.
- van Dijk, J. (2015). Internet skill levels increase, but gaps widen: a longitudinal cross-sectional analysis (2010-2013) among the Dutch population. *Information, Communication & Society*, 18(7), 782-797.
- van Dijk, J., & Hacker, K. (2003). The digital divide as a complex and dynamic phenomenon. *Information Society*, 19(4), 315-326.
- van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2017). The Relation between 21st-Century Skills and Digital Skills: A systematic literature review. *Computers in Human Behavior*, 72(Supplement C), 577-588.
- Warschauer, M. (2003). *Technology and social inclusion. Rethinking the digital divide*: Cambridge, Mass.: MIT Press.
- Wihlborg, E., & Engstrom, J. (2017, May 17-19). *Bridging Digital Divides through Digital Media Buses: An Action Research Study on Digital Inclusion in Sweden*. [Conference presentation]. Conference for E-Democracy and Open Government (CeDEM), Krems, Austria.
- Yin, R. K. (2009). *Case study research: Design and methods*. London: SAGE.