

5-2022

Public Libraries in Rural Arkansas: An Oasis in an Information Desert

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Public Libraries in Rural Arkansas:
An Oasis in an Information Desert

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts in Journalism

by

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Bachelor of Arts in Journalism, 1999

May 2022
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This thesis is approved for recommendation to the Graduate Council.

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Abstract

Public libraries in Arkansas are welcome, but those found in rural Arkansas are almost a necessity. The public uses the library for more than just checking out books or their email: it's become a community gathering place for all walks of life, regardless of age or economic status. When the Covid-19 pandemic hit the state, libraries also became essential for education, medicine, news, and employment, nearly overloading their resources and shining a spotlight on technology, or the lack thereof, that so many public libraries are needing. With the Arkansas governor planning an upgrade on broadband technology and the federal government passing a bill to get services to more areas of the country, this thesis shows how and where those improvements would be best served and why they are needed as soon as possible.

Acknowledgements

I will give thanks to you, O Lord my God, with all my heart. And will glorify Your name forever. Psalms 86:12

Thank you, Mom and Dad, for your encouragement, your love, and the free room and board during Grad School. I don't even know how to pay it back.

Thank you to all the professors I had the honor of learning from at the University of Arkansas School of Journalism and Strategic Media. After so many years of being away from a classroom, I had almost convinced myself that coming back was ridiculous, even after being told (repeatedly) I would be fine. They were right, of course.

Thank you to Dr. Jee Young Chung for being such a wonderful teacher and advisor, and Professor Tiffany King for being on my committee. I deeply appreciate all your helpful comments and encouragement.

Thank you, Dr. Rob Wells, for getting me 95% of the way through this whole process. You have been my cheerleader, editor, and sounding board and I can safely say I would have thrown in the towel on this thesis more than once if you hadn't been there telling me to keep going and swearing every time we had a Zoom call, "I mean it, this is a really good idea!". Your students are all very lucky to know you and learn from you. I was a better student thanks to you.

Special thanks to Dr. Ronda Mains, Dr. Lia Uribe, Dr. Justin Hunter, Kelli Van Pelt, Kim Jones, Nastassja Riley, LaTrice Lusk, Elyse Cano, and so many others in the Department of Music for your constant encouragement and the threat of pestering me for the remainder of eternity if I didn't finish this thesis. I owe you guys a lot of coffee.

The list of friends to thank would be a whole ream of paper long, so I'll just say if we're friends,
THANK YOU.

I save my last thanks for the two people most responsible for helping me get back to school and being a graduate student at all.

Professor Emeritus Dale Carpenter is one of the kindest souls on this planet. I had him as a teacher when I was an undergraduate student and after so many years and so many students under his tutelage, I was certain he'd never remember who I was. Imagine my surprise when I learned he not only remembered me but was instrumental in helping me get into the Journalism graduate program. Thank you so much for your kind words and making me swear at your retirement party that I would graduate. Promise kept.

Professor Larry Foley is going to be written up in the annals of U of A history someday as one of those teachers students flocked to, because they simply had to. Good teachers attract students like iron filings to a magnet and Foley is one powerful magnet. I consider myself lucky not only to know him, but to have been mentored and taught by him. Some of the best lessons I've ever learned in or out of journalism were in his classes. I've no doubt that after "Uncle Walt" Walter Lemke, Larry Foley will be the other name students remember generations from now as being instrumental in creating phenomenal journalists from the University of Arkansas working around the world. Thank you so very much.

Table of Contents

Introduction	1
Literature Review	2
Broadband in Arkansas.....	5
Theory	8
Public Sphere Theory	9
Dialogic Theory.....	10
Methods	12
Research Questions	13
Findings	15
Discussion	30
Conclusion	35
References	39

Public Libraries in Rural Arkansas:
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Introduction

The library of the 21st century isn't having a renaissance. A renaissance would imply they had nearly disappeared and are being rediscovered as something more than a card catalog, Dewey decimal system, and a shushing librarian. Today's libraries are both innovative hubs of technological advancements for patrons to experience and quiet stations of study and reflection. The dichotomy of social gathering place and separate muted area almost seems like an oxymoron but is lived out daily within nearly every public library. Now add in a lack of telecommunications services in rural areas of the state and a global pandemic requiring a near overhaul of everything we know and suddenly the public library becomes more than a place for reading the daily newspaper and instead becomes an essential service for thousands of people in all walks of life.

This thesis is about how the digital divide is affecting rural Arkansas and how one institution in all of these varied communities -- the public library -- is an essential link to address that problem. In rural Arkansas, a public library will be a public "hotspot" for broadband connectivity, an oasis in an information desert. It also looks at how librarians in these deserts become more than just gatherers of information, but workers whose resources are not only vital, but underrated when needed most.

This thesis will engage with the following questions: how are librarians addressing these digital demands from its patrons? What are the gaps and how can they be filled? With no

internet available, or internet that is below the definition of broadband speeds, the only places the public can turn to are schools or libraries.

The world works online now, and people need to be able to communicate at the same speed as everyone else which is why, if broadband internet speeds in Arkansas are behind so many other places in the state, the public library is the only free source of help available. As one librarian stated, “our internet services are a help to the general public. Our services allow people to access services such as tax forms, immigration and visa services, job applications and employment opportunities, online schools, medical information, free legal forms, keeping up with friends and family and entertainment reasons to name a few”.

An information desert “refers to both geographic areas without libraries or perhaps internet access, as well as groups of people – the elderly, possibly, or non-English speakers, or people without cell phones or home computers – lacking the ability to access available resources” (Mckale, 2016).

Literature Review

Libraries have been and are vital to a free society’s democracy. President Franklin D. Roosevelt was quoted as saying that “Libraries are ... essential to the functioning of a democratic society ... libraries are the great symbols of the freedom of the mind (Ditzion, 1957)”. Ensuring that Arkansas also possessed such freedoms, the citizens have been the ones to start libraries that expanded as time went on, even to getting money from Andrew Carnegie

to have more than one permanent place for all to enjoy. According to the Encyclopedia of Arkansas:

Earlier efforts to create libraries...included the library of the Little Rock Debating Society in the 1830s and newspaper publisher William Woodruff's circulating library in the 1840s. After the Civil War, the Mercantile Library opened in the city and was available to professional men. After a merger with the Marquand Library, created for use by employees of the St. Louis and Iron Mountain Railroad, the library was acquired by the Young Men's Christian Association. It eventually ceased operations. The Woman's Cooperative Association opened a library in the Arsenal building (which later became the MacArthur Museum of Arkansas Military History) in 1897, and members of the association could use the library, as could non-members who paid a fee.

Thanks to the philanthropy of Andrew Carnegie, cities across the country were able to request grants to start libraries. In 1906, the first Arkansas city to be approved to build a Carnegie Library was Fort Smith, which officially opened in 1908. Three more Carnegie Libraries were approved and built not long after: Little Rock (1910), Eureka Springs (1912), and Morrilton (1916). Of these four, Eureka Springs and Morrilton are still using the original buildings as public libraries. Overall, Arkansas has 235 public libraries in 75 counties.

Forty-two percent of Arkansas is considered rural. A study done in 2017 by the University of Arkansas Division of Agriculture: Research and Extension states that Arkansas continues to rank among the five states with the highest poverty rates (19.2 percent in 2014) in the country. Poverty in the rural Delta and Coastal Plains remained substantially higher than

poverty in urban counties. Pockets of extreme poverty remain throughout the state with 19 counties having a rate of 25 percent or greater (U of A Division of Agriculture, 2017)

While the median income for Arkansas is around \$42,000 per year, the reality is that the poverty rate for the state is at 17%, compared to the national average of 13% (UNC Hussman School of Journalism and Media, 2019). In some counties along the Mississippi Delta for a family of four (Abernathy, 2020), the median income is less than \$30,000 per year. Factoring in the cost of rent or mortgage, food, electricity, insurance, medicine, and automobile maintenance, adding one more bill to the budget is simply not doable.

What do rural communities need most from libraries? Libraries are hubs of information and communication. According to the University of North Carolina's Walter Hussman School of Journalism and Media, Arkansas is considered a news desert as distribution of print media has fallen 31 percent from 2004 to 2019 (Abernathy, 2020). With print media distribution having dropped, and local tv news hampered by the end of analog broadcasting going to digital/HD broadcasting, the rise of individuals moving to obtain their news by internet has taken off.

Now the push is for availability of streaming services and with that, a populace that can access those services through their local public libraries. But with that push comes the ability to handle the added broadband load. The Covid-19 pandemic challenged what Arkansas could do and what public libraries could handle when schools and workplaces were forced to go online to continue running as normally as people knew.

Today's libraries build communities by offering classes that anyone can attend, helping children with homework, enabling adults to stay informed of what is happening in the digital world, helping to protect our basic freedoms through easily accessible information, allowing citizens to register to vote, and help communities cope with the unexpected, especially in cases of natural disasters. Libraries can be ground zero on ways to help change our nation for the better through communication.

Broadband in Arkansas

According to BroadbandNow.com, almost 78% of Arkansans have access to Broadband internet at 25Mbps (megabits per second) or better--which the Federal Communications Commission defines as being high-speed internet--and yet, the state is still ranked as 41st in broadband access. There are 530,000 people (or about 17% of the state's population) in Arkansas without access to a wired connection capable of 25mbps download speeds (Broadband Internet in Arkansas, 2020). According to statista.com, while almost 75% of Americans claim to own a computer, the speeds at which the computer can be used differ greatly (Desktop/laptop ownership among adults in the United States from 2008 to 2019, 2020).

The governor of Arkansas, Asa Hutchinson, proposed in May 2019 to increase residential broadband internet access by 2022, when his term would expire. Known as the Arkansas State Broadband Plan, it proposed a thirteen-step plan on how to get grants from the federal

government, as well as agreements from companies that provide broadband access like AT&T, CenturyLink, and WindStream to expand their fiber and coaxial cable access.

As stated in the Governor's Broadband Plan:

“Broadband has become so essential to the modern American way of life that government can't be indifferent when people lack access to it. In Arkansas and across the nation, broadband is used by students to complete their homework. Broadband is essential for patient access to telehealth services. Broadband is used for countless functions in daily life ranging from public safety and emergency response to shopping, government, e.g., to pay taxes, renew driver's licenses, report on work and job search activities to retain eligibility for unemployment benefits or Medicaid, or find out where to vote. In some cases, broadband availability may save taxpayers money by enabling people to get cheaper health care or find jobs and get off welfare. Economic development depends on rich networks of specialization and trade, and these networks depend on transport and communications networks, of which broadband has become a crucial part. Areas lacking broadband service are at a disadvantage in achieving modern knowledge and productivity, and often experience job losses, economic deterioration, and out-migration. The geographical barriers creating a digital divide in Arkansas can be mitigated if universal or near universal access to high-speed internet becomes a medium-term policy goal.”

In August 2019, Governor Hutchinson announced the creation of the Arkansas Rural Connect (ARC) program which would provide grants to qualifying communities of at least 500

people to deploy high-speed broadband to its residents. This would build on an act passed by the Arkansas Legislature; Act 198 of 2019. Before Act 198, government entities were forbidden to provide broadband to the public by the Telecommunications Regulatory Reform Act of 2013.

In June 2020, the governor's plan was updated to include the latest updates to bids by internet service providers, as well as how the state was coping with changes in everyday life due to the COVID-19 pandemic. The need for Arkansans to work from home, for children to attend school from home, and expand telehealth services for the state showed what the state could provide at a moment's notice, and also pointed out the glaring absences where high-speed internet was still unavailable.

In November 2021, President Biden's Infrastructure Bill, also known as The American Jobs Plan, was signed into law, thus appropriating \$1 trillion dollars for rebuilding roads, bridges, transit systems, and expanding high-speed internet service across the United States (Naylor & Walsh, 2021). The President had specifically added a section regarding the expansion of broadband access.

It will bring affordable, reliable, high-speed broadband to every American, including the more than 35 percent of rural Americans who lack access to broadband at minimally acceptable speeds (FACT SHEET: The American Jobs Plan, 2021).

Education, Public Libraries, and the Need for High-Speed Internet

Regarding education in Arkansas, public school enrollment declined by 15 percent in the Delta and 10 percent in the Coastal Plains. Six rural counties lost 20 percent or more of their

public school enrollment. In 2010, Arkansas ranked 44th nationally in the percentage of adults with high school diplomas and 49th in the percentage of people with college degrees. An associate's degree was the highest level of educational attainment for only 6 percent of Arkansans compared to 8 percent nationally (U of A Division of Agriculture, 2017).

If there were more public libraries available for those people living in the more rural areas of the state, would there be growth in the number of students and adults completing high school diplomas or GEDs? What would that do for those wanting to go further for bachelor's degrees? The ability to research schools and discover scholarships, grants, and awards could give each person a chance to further themselves and then possibly return to the area or region and pass on their knowledge, thus continuing a cycle of hope rather than one of cynicism.

With such a disparity between areas of the state, it is understandable why companies are hesitant to spend billions of dollars to increase internet and wireless capabilities when there's next to no one living in vast spaces. But the fact is that there are people living in remote parts of the state, and it is to everyone's benefit if they are able to access the same resources that those in more urban areas enjoy.

Theory

In order to really look at the underlying beliefs around public libraries and their necessity to enhance sociological growth and discourse, this thesis will be guided by two theoretical concepts: the public sphere theory of Jürgen Habermas and the dialogic theory of public relations.

Public Sphere Theory

Jürgen Habermas and theory of media has an essential element in Democratic societies. He defined the “public sphere” as a “virtual or imaginary community which does not necessarily exist in any identifiable space” (Habermas, 1962 translated 1989). He also called it “made up of private people gathered together as a public and articulating the needs of society with the state”. Public Sphere Theory is an important modern framework to understand the role of media in advancing democracy and so it will be a useful tool in analyzing the role of libraries in rural Arkansas and residents’ efforts to use digital communications.

Habermas wrote “The Structural Transformation of the Public Sphere” in 1962 and proposed four elements which Meral Özbek winnowed down in 2004:

1. Every contributor should have an equal chance to start the conversation, ask questions, discuss, examine, and propose.
2. Everyone should have the right to question the determined discussion topics.
3. Everyone should have an equal chance to declare their wants, desires, and emotions.
4. Speakers should have the right to declare their statements on the procedures of discourse and the practice of these procedures, and if they are excluded through the discussions, they should have the freedom to express their position and the relations of hegemony which limited their expression (Özbek, 2004).

The idea of the public sphere was not a new one. The gathering of men to discuss ideas and topics has been popular as far back as ancient Greece, but Habermas stipulates that due to

changes in historical circumstances it laid the bedrock for a new civic society. The main structure had begun as early as the 1700's, but really caught on during the industrial revolution when the middle class began asking their own questions and not taking everything told to them by the ruling classes as absolute truth. According to the journalist David Randall, "In Habermasian theory, the bourgeois public sphere was preceded by a literary public sphere whose favored genres revealed the interiority of the self and emphasized an audience-oriented subjectivity" (Randall, 2009). Suddenly, the idea that a person could only listen to what was given to them by "the state" (aka the government, feudal lords, the upper classes, etc.) was considered ridiculous and even irresponsible. If people wanted to truly change the way their world was built, it would have to be by cooperation between the public as a whole and leaders, whether elected or already in place.

With this idea, gathering places specifically designed for the discussion of society and a debate between the bourgeois took off. The late 1700's saw rapid growth in salons, literary clubs, and coffee houses, especially throughout Europe with the industrial revolution creating a growing class of citizens never seen before: the "middle" class.

Dialogic Theory

Dialogic Theory (Kent and Taylor, 2002) is a persuasive analytical framework to understand the interaction between rural Arkansas residents and their public libraries. At the heart of this theory is how corporations or government institutions can better build trust and credibility in their communications with the public. If businesses, corporations, non-profits,

etc., truly wanted to understand what their patrons and customers wanted, they were going to have to open themselves up and embrace the five characteristics of dialogue as well as embracing it as an orientation.

Kent and Taylor proposed five features of dialogue: mutuality, which is the recognition of the relationship the public and organizations have together; propinquity, describing the spontaneity that organizations have with the public and asking their input about issues before making final decisions; empathy, working to see the other side's point of view and supporting those decisions; risk, sharing information that could, without permission, potentially be used in a manner prohibitive to the original goal; and commitment, working to ensure that everyone acknowledges each side's view, works to compromise, and understands the responsibility of that knowledge.

Each of these are necessary to significant and productive dialogue among the publics and those wanting to disseminate information. Each of these are necessary to significant and productive dialogue among the publics and those wanting to disseminate information. These concepts will guide the framework of survey questions to rural librarians to see if they are meeting the public's needs.

Using the dialogic communication theory that Kent and Taylor (2002) described, many non-profit organizations must use digital, social, and mobile technologies to attempt to reach as much of the low-income or homeless populations as possible. If they do not have access to libraries or community centers to check the internet, those in need must rely on smartphones to contact programs they use, whether that be homeless shelters, food kitchens, walk-in clinics,

etc. Program directors find the dialogic principles that build the theory—risk, mutuality, propinquity, empathy, and commitment—are imperative to follow in order to reach those most in need of their services.

In using dialogic theory, directors and employers can put themselves in people's experiences and help them by listening to their needs and concerns as well as attempting to help them find solutions. Not dismissing their problems or ignoring them goes a long way to establishing trust. PR and communications directors must meet low-income publics as they are and avoid the dangers of dismissing their needs and concerns. Working with people and instituting ideas and solutions for problems they face using dialogic communication theory is the best way to truly meet their needs as they need them.

Methods

The methods being chosen for this thesis are more qualitative as I want to know more about why libraries are functioning the way they are, who the people involved in the decision-making are, what future plans are being put in to motion to keep libraries alive in the 21st century and beyond, where libraries need to reach in Arkansas, and how communications, public relations, and journalism can help bridge the gap between a skeptical public and libraries.

1. The author gained access to the Arkansas Library Association's inter-library communications and their public library listserv which goes out to every library and librarian in the state. It has been in use for over 15 years. I have mined these resources for data and

uncovered patterns of how the state's public libraries have grown and changed, as well as seeing people's thoughts and reactions to any new data or government funding.

2. Survey of librarians. I distributed a Qualtrics survey to 235 librarians to not only ask basic questions of those working in libraries, but to get a more pointed view of where and how internet access is used by patrons. Are they making more of an effort than is necessary or do they feel their hands are tied by governmental red tape? How has COVID-19 complicated not just the digital divide between rural and urban areas, how does it also affect how they serve their patrons?

Research Questions

RQ1: Are the libraries serving as public spheres and thus serving the information needs of rural people in this digital age?

One of the issues concerning public libraries in rural areas is the ability to really reach people where they are, even without a physical building. Although that is a goal for each library, the ability to serve patrons through all new forms of technology is fueling the desire to make sure that regardless of platform, the library can be reached and accessed with no difficulties.

Something I want to look at is whether a public sphere is manifested when the public itself is unable to come together physically but must rely on technological help to make that happen. If the rural public lacks the ability to connect through broadband, how much of a disadvantage are they facing and is there any way to bridge the gap?

If the public are hindered due to a public health emergency, such as the COVID-19 pandemic, it appears to put both urban and rural residents in the same boat as neither group can gather face-to-face but must now rely on internet that would be taxed to the limit when the state shut down all but the most essential services. Does this give rural Arkansans more of an advantage or disadvantage?

RQ2: How are the libraries communicating with people in rural areas that lack digital connectivity?

No public library in the state is completely without some kind of internet service, but it is clear that those in more populated areas enjoy more of a variety of options on how they can access what their local libraries offer. So, for those whose closest neighbor can be a five-minute drive away or more, what does a family do when their public library isn't anywhere near them? Not only that, but what do they do when their internet services are poor, they lack the financial ability to upgrade, and the infrastructure surrounding them is a decade or more behind other cities? What have libraries been doing to make sure that no matter where a person resides, they're still able to read, research, study, and explore all that the library offers? I want to look at what public libraries are doing to make their services available to everyone, regardless of either group's location.

RQ3: What are the gaps in libraries' service for rural patrons in digital communications services?

Clearly, if a county is small enough, there is usually only one library available and often, not located close by to where daily visits are even feasible. This is where having an internet service that is capable of being easily accessed by anyone is imperative. While being able to have any internet at all is a concern with those living in a rural area, the library itself hopes to at least have the broadband speeds that allow downloading books, music, and/or video on a consistent basis.

The problem comes when the library can't serve the public due to poor infrastructure or lack of funding to afford new technology. It's also hindered when the public itself is unable to access broadband speeds because tech companies refuse to expand in rural areas, claiming a lack of interest or being unwilling to set aside the budget to upgrade facilities and equipment. The sudden need of people who had to have these services available due to the Covid-19 pandemic was an intense spotlight on why these infrastructure issues need to be addressed as soon as possible and why companies who have lagged behind on upgrades to existing facilities seemed to do so due to profit more than assisting their customers.

It isn't that the library chooses to withhold what they have, it's simply that they lack the capability to expand and grow through no fault of their own. So, then the image presented is that libraries have outgrown their use and there is no point in their continued existence. Nothing could be further from the truth. But I wanted to see what librarians felt was their toughest challenge when they had to operate and continue to operate differently than at any other time in modern history.

Findings

An email survey was sent February 22, 2021, to 235 librarians via the Arkansas Library Association, which has 291 member libraries, both public and academic. There were 34 responses, of which 32 contained enough information for analysis. Key findings from the survey and the relevant research questions are below.

RQ1: Are the libraries serving as public spheres and thus serving the information needs of rural people in this digital age?

The responses showed that a public library fulfills the role of a public sphere, a gathering of private people where they articulate the needs of society. As one survey respondent replied, “Computer access at the library is an economic engine for the whole community.” If the public does not possess the technology or know-how, librarians can step in and help guide their patrons into gathering the knowledge they need at that time. Each day brings a sample of that town’s concerns and needs, and the public library must be able to not just meet their needs, but the needs of the people who will come in the next day and the day after that.

Of the survey responses, nearly every librarian had the same desire for their library of how they can each discover new ways for them to best serve their patrons, especially during this time of COVID-19 restrictions.

As one librarian said, “When COVID hit and we had to close our doors to the public for about 12 weeks, we really saw this. Our library system closed its doors to public access, but we implemented curbside checkout and printing services from day 1 and never stopped serving our communities. We kept our WiFi on 24/7 at all locations, loaned tablets to people who had come

to use the computers so that they could access the internet from their cars instead and set up mini food pantries on bookcarts outside.

During the COVID-19 lockdown beginning in March 2020, the ability of people to carry on with their daily assignments and errands came to an abrupt halt as schools and businesses across the country were closed along with the services provided by public libraries. This became a serious roadblock for many because they weren't just using internet services for fun or social interactions--many needed to use the internet just to deal with financial, educational, legal, or medical issues. The public sphere was showing cracks because the safest way to gather was now through a computer or smartphone screen and on a massive scale never before attempted.

Another librarian described how her institution serves as a public sphere: "Patrons use our access for a multitude of purposes. Some use it for elementary, high school, and college course access and work. Newton County Library (NCL) also houses the county's GED program, and GED students complete their coursework using the library's internet access. Many people use the library's internet, computers, and printing service to print return labels, tax documents, financial documents, invoices, resumes, you name it. We have had several people come in for assistance with finding information about their Covid-relief stimulus payments. We have people use our services for virtual meetings, including legal interviews, job interviews, and visits with family. Some people are looking for entertainment. Pre-Covid, one of our elderly patrons would spend hours a day listening to music from his youth.

Job searching, unemployment benefits, and college application processes have all moved online.”

Economic engines that, when stilled, deeply affected local Arkansas communities (Kochhar & Bennett, 2021). The free gathering of people is essential in a capitalistic marketplace, but how does that new marketplace function when no one can safely gather, except virtually? Over 2.4 million in March 2020 alone had to file for unemployment and COVID benefits (Stettner & Pancotti, 2021), the sheer necessity of public libraries and the services they offered were imperative, but libraries were also having to shut down along with nearly all other businesses. Many, especially in rural areas, had to come up with ideas on how to stay available to their patrons even when the building was closed, and the employees were having to keep their distance. Whether that be tents put up outside to have some computers and printers available for people to use as needed, having more hotspots to move around town for free Wi-Fi, or adding contactless delivery services for patrons who were unable to get certain books online but could check out from the library in print form. Many were learning that the public sphere could be successful through new ways of communication and innovation. Just because we couldn't be six feet apart to talk didn't mean we had to be worlds apart either.

When pandemic assistance was offered, the only way many could obtain information about their payments or how to sign up for extensions was through library computers. For those who had lost their jobs because of the pandemic, filing for unemployment, and applying

for new jobs required internet access. Something many people had to do as quickly as possible as Arkansas was not going to extend unemployment assistance past a certain time.

Under the CARES Act responding to the COVID-19 pandemic, all states received access to federal funding to provide additional weeks of Pandemic Emergency Unemployment Assistance (PEUC) benefits to people who exhausted their regular state benefits, and Pandemic Unemployment Assistance (PUA) to many others who lost their jobs through no fault of their own but who were not normally eligible for UI in their state. These and other pandemic-related emergency UI programs ended nationwide the first weekend of September 2021, but many states stopped providing these federal benefits before that. Arkansas only provided up to 16 weeks of regular benefits (The Center on Budget and Policy Priorities, 2021).

Another librarian whose branch is at the base of the Ozark Mountains said the internet access is essential for access to common services: “This access is crucial to economic and workforce development--how can you file your taxes, look for a job, or file your unemployment if you can't get online (something that was forcefully brought home to us due to COVID when businesses were closing, people were losing their jobs, and the unemployment office was closed). Without internet those most vulnerable to COVID would also be unable to use a Teledoc option to protect them from potential exposure during a medical office visit. “

“Internet services are really one of the essential services we provide the community at this point. When COVID hit and we had to close our doors to the public for about 12 weeks, we really saw this. Our WiFi was on, and people could email us things for us to print and deliver

curbside, but some people just needed access to the computers. There were no public computers available in all of Carroll County during that time.”

Almost all respondents said their libraries offered Wi-Fi access around the clock, but one was unable to do so, for reasons over which they had no control. “We only offer Wi-Fi during our library working hours due to break-ins and loitering after hours. The local police department advised we limit Wi-Fi to working hours to prevent this problem. I wish we could offer our access around the clock for those who work and/or are unable to come during our working day.”

More and more libraries are expanding their buildings to include areas of discourse and debate. Lower floors or those closest to the front of the building set up tables or even coffee bars for people to gather and spend time talking to friends, learning new crafts, holding group study sessions, or just people watching.








RQ2: How are the libraries communicating with people in rural areas that lack digital connectivity?

The library of the 21st century is growing and evolving to meet what the public demands, but what happens when the public need is greater than demand? During the Covid-19 pandemic, it wasn't that people visiting libraries wanted to use a computer to do basic tasks. They needed computers to connect with the outside world that had suddenly been sequestered indoors. Children needed school, adults needed to look for jobs, the sick needed to either see a doctor or find out about desperately needed benefits.

One librarian described the range of services provided through their internet access: “We put up a sign next to the highway that says, "Wi-Fi 24/7", and our parking lot traffic has increased exponentially. Some pull in for a few minutes. Some stay much longer. Some are local. Some are tourists or other visitors or simply passers-by. There is not another organization in the town, possibly not in the county, who simply offers Internet to anyone who needs it without any expectations. In a world where so much is technology-based, this service is absolutely critical and definitely a help to the general public. Some people use our Wi-Fi to submit business reports and other work-related forms. Some people use our Wi-Fi in the parking lot, and we never know why. We don't need to.”

The smaller the population in an area, the less likely an internet service provider will spend the money to outfit their equipment with the most up-to-date, expensive, high-speed availability for internet services. While some would think it would be more beneficial to do so, what with residents in rural areas being more in need of reliable service in case of emergency or because the ability to access information could be too far away to travel for such things as school or employment, corporations only see money and the more people buying their services, the better. But certain businesses tend to get more attention in that area than others--public libraries being one of the biggest. They get funding from the state and the federal government to improve their services for patrons and a percentage is always set aside to improve and upgrade internet services. When the majority of the population falls below the poverty line, this upgrade in availability is crucial.

One respondent said, “In our region, the lowest price for internet is \$50/month and many people living below the poverty line cannot afford this.”

Provider	Starting monthly price*	Download speed range	Tech	State availability
 AT&T	\$49.99	5 – 1,000 Mbps	DSL, fiber	70%
 Cox	\$29.99	10 – 940 Mbps	Cable	24%
 Windstream	\$19.99	25 – 1,000 Mbps	DSL, fiber	22%
 Xfinity	\$29.99	15 – 2,000 Mbps	Cable	20%
 Suddenlink	\$34.99	100 – 1,000 Mbps	Cable	19%
 CenturyLink	\$49.00	3 – 940 Mbps	DSL, fiber	15%
 HughesNet	\$39.99	25 – 25 Mbps	Satellite	99%

*Pricing per month plus taxes for length of contract. Additional fees and terms may apply. Pricing varies by location and availability. All prices subject to change at any time. May or may not be available based on service address. Speeds may vary. As of 06/12/20.

The above chart shows the biggest internet service providers in Arkansas (Allconnect, 2020), but doesn't list every provider available. There are actually 52 service providers in the

state (Internet Providers in Arkansas, 2021), all with different starting prices. If a person is using their phone or tablet from Verizon, T-Mobile, Cricket, or AT&T wireless for their internet service, those prices are also far above what most can afford, especially if the person or family's data plan is the most basic one offered.

One of the most impressive additions to library services was the extension of Wi-Fi range with hotspot devices that could be moved around town or even checked out. A hotspot is a physical area or location where you can connect a device to the internet. So, if residents were unable to come to the library, the library came to them.

One survey respondent said, "Right before COVID hit we had started circulating hotspots. This has been popular but reaches only a few people really as the number of hotspots we have is very limited and it is beyond our budget to really get more. In fact, this year our budget is a bit smaller than last, and we are having to take two hotspots out of circulation (down to circulating just three)."

Another described the same thing their library had begun. "Following the pandemic, we coordinated with local businesses throughout the county to set up 'Community Hot Spots' to assist students and others to access the internet for remote learning and other essential needs. The program was so successful, we continue to provide 8 community hotspots throughout the county. Furthermore, we circulate a collection of 50 hotspots, which provide access in hard-to-reach areas of the county. The hot spots check out for two weeks, and we have heard stories of

neighborhoods sharing to assist children in virtual learning. I feel our libraries internet services benefit the community greatly, as 35% of our county is without access to internet.”

While all schools in the state could provide internet services while children were at school, trying to teach or attend classes when kids were stuck at home proved to be a challenge, especially for those who live in very rural areas where broadband access is non-existent. Daily lessons weren’t the only issue with which families had to grapple according to one librarian.

“The further you go north from I-40, the fewer internet access options are available, the worse your cell service becomes, and for the most part, the poverty level greatly increases. Bottom line: our library system provides internet access to those who are too remote to have access to it at home and/or can't afford it.”

This librarian said their institution sought to address another problem, thereby showing how libraries contribute in other ways as public spheres. “However, arguably the greatest impact of all was when the schools closed in March 2020, especially for rural students in homes with no internet who were also unable to access the school meals (almost 70% of students receive free/reduced meals in rural Pope County). As a former middle school teacher, I can attest to the difficulty for students trying to focus on learning while they are hungry--try attempting to implement virtual learning in an area where the homes have no internet, the

family has little money, and the children are now missing 2 of their daily meals (for some, their only consistent daily meals).”

In 2019, the city of Little Rock, the Central Arkansas Library System, and the Arkansas Hunger Relief Alliance created the “Be Mighty” campaign to help feed school children over summer breaks. While the grant to create the aid ended at the beginning of 2020, the collaboration of individuals, businesses, and non-profit organizations had a schematic to fall back on when COVID-19 closed schools and children were at risk of going hungry without the two meals per day they would normally get (Millar, 2020). Some cities like Fayetteville and Springdale had food trucks from the school in front of libraries so those students who had been using the available Wi-Fi outside the building could also obtain a free meal just as they would in school.

A librarian stated, “However, arguably the greatest impact of all was when the schools closed in March 2020, especially for rural students in homes with no internet who were also unable to access the school meals (almost 70% of students receive free/reduced meals in rural Pope County). As a former middle school teacher, I can attest to the difficulty for students trying to focus on learning while they are hungry--try attempting to implement virtual learning in an area where the homes have no internet, the family has little money, and the children are now missing 2 of their daily meals (for some, their only consistent daily meals).”

With the world at a standstill, libraries still felt obligated to provide the public with services that really only they could provide. The librarians surveyed almost all agreed on this point and one pointed out:

“In our area while broadband is available, geography and economics combine to make it inaccessible to many people - either too expensive or just not available in the area they live in for any cost (hills and hollers don't make for good internet service at times). We definitely see a digital divide in our county on a daily basis. Even those with internet often only have phones to access it so cannot fill out certain online forms easily. People also rely on the library to print things that businesses and government agencies expect them to access online and download to sign, etc.”

Due to the library's diligence of making sure internet services were available to everyone, some patrons even went on to continue their education. “Because of the library's internet, we've offered Computer Basics for those who have little or no experience with a computer. One of the participants is now a 2nd semester non-traditional student at Northwest Arkansas Community College.”

“Internet at the library has been an integral part of our STEAM @ The Library program which includes robotics, circuitry, video editing, stop motion animation, 3D designs and printing, and computer coding. Because of the library's internet, we've offered morning and evening workshops in Google Suite so that people in our community could improve their digital skills in word processing, spreadsheets, and slides. Many companies now accept only online applications which is challenging for some people.”

Another librarian said, “Prior to COVID-19, the Gravette Public Library was offering four Code Clubs, two of which were attended primarily by home schooled students.”

RQ3: What are the gaps in libraries' service for rural patrons in digital communications services?

One librarian stated, "We've always needed more bandwidth and more reliable service. There have been substantial improvements locally in recent years, but more work is needed. Federal E-Rate has helped us in upgrading internet service and network equipment. The Arkansas State Library is good to help libraries in the state to apply for E-Rate."

The universal service Schools and Libraries Program, under the direction of the Federal Communications Commission, commonly known as "E-rate," provides discounts of up to 90 percent to help eligible schools and libraries in the United States obtain affordable telecommunications and internet access but some are still unable to benefit from its services. The program is intended to ensure that schools and libraries have access to affordable telecommunications and information services (U.S. Department of Education, 2019).

The American Library Association says:

Initial feedback from the library community indicates changes to the E-rate program are having a positive impact, especially in increasing broadband capacity and Wi-Fi access. But not all libraries have yet benefited from the new provisions, owing to difficulties in the application process, delays in administration, and lack of awareness. Policy makers in the FCC, Congress, the White House, U.S. Department of Commerce, and elsewhere are urged to preserve and strengthen the E-rate program, empowering libraries and

schools to provide online opportunities for all Americans, whether in urban, suburban, rural, or tribal areas (American Library Association, 2021).

Several of the librarians surveyed were cautiously complementary of the E-rate program, but also had some of the same concerns others were facing with governmental red tape and frustration with not being able to access what was needed as much as they would like.

“If we were unable to apply for E-Rate services we would be unable to offer internet services to our populations. But many times, E-Rate still makes the affordability questionable.”

From another survey respondent, “We upgraded our internet services in 2019, from a DSL system to a fiber system, increasing our bandwidth from about 11 Mbps download and about 2 Mbps upload to 100 down and 100 up. We installed 2 new wireless access points with a broader range, so that Wi-Fi is available anywhere in our parking lot. This would not have been possible without eRate funding, which reduced our cost by 80%. Our system no longer crashes.”

Then sometimes the issues involve adequate hardware and physical space. As one librarian put it, “Our internet is good, but our physical computers are really old. Sometimes, we cannot do what patrons need on our computers because of that.”

Another said: “Having a high-speed, symmetrical connection is important, especially as the use of online conferencing apps and online learning platforms grows. This contract has just

been signed so this upgrade is still pending. Would also love to be able to offer more hotspots and more patron computers but budget and space in the library do not allow this.”

In spite of a lack of money, space, or upgraded technology, public libraries are pushing ahead. They can see the writing on the wall and know that even things that patrons need now will be outdated soon enough. Each library has to leave space open for things no one has come up with yet.

“We are ahead in our Technology Plan timeline. Computer use has increased 27% and library traffic has increased 95% between year-end 2016 compared to year end 2019. Because of awards (two of which were for Digital Skills programs) and donations, we were able to replace all public access desktops in 2020. Microsoft Philanthropies donated Microsoft Office licenses for the 12 public access desktops and 10 laptops that we use for computer and STEAM workshops. The acquisition of hotspots and a WiFi repeater will aid local families who do not have internet access at home.”

Speaking of affordability of internet access, one librarian said: “It is crucial that rural broadband access be increased--it has to be. And if talking about what the lack of it is doing to our people--the generational poverty it helps perpetuate--doesn't influence the powers-that-be to do it because it's the right thing to do, then maybe they'll do it because it's also a sound investment in economic development. After all, statistics show that every dollar invested in broadband returns almost \$4 to the economy.” In fact, a Purdue report from 2018 about rural broadband in Indiana backs up this assertion (Grant, Tyner, & DeBoer, 2018).

Regardless of challenges, libraries are still doing everything they can to ensure that no one will be unable to access what they provide. Purchasing more laptops, tablets, hotspots, and routers might be a start, but they are also proof to corporations that they are desperately needed in all parts of the state, not just certain areas.

As one librarian put it, “We [wish we] would have laptops and Verizon hotspots (only vendor that can provide internet service in most of Pope County once you get 15 miles north of the interstate) with unlimited data to loan out to every person who (for whatever reason) needs access.”

Another person said, “We've recently received two grants to purchase a total of 20 hotspots to be checked out to library patrons plus a WiFi repeater to boost the signal farther beyond the library's walls.”

Discussion

Initially, I had an idea in mind of what the comments and suggestions might be from the responses, but then when COVID-19 hit, much of what I had originally hypothesized not only came to fruition but also seemed to expand with the gravity of the situation. Yes, libraries are important and shouldn't disappear from the public sphere. But what happens when the whole world is put on hold and things that had been taken for granted are now precious and in great demand but unable to be realized?

Gathering for discussions about life in general, hobbies, education, medicine, politics, et cetera, has been done since the invention of language, but where does a person go that is free,

easily accessible, equipped with many different kinds of technology, and takes no issue with the length of time someone stays in the building? From the moment the doors open to the time they close, anyone visiting a public library can have all of the above, for as many days as they choose, even without purchasing a library card. And the librarians there will help anyone, regardless of gender, age, race, financial status, employment, education, or social status. The public library is possibly the last bastion of true democracy and why they uphold the public sphere and dialogic theories.

RQ1: Are the libraries serving as public spheres and thus serving the information needs of rural people in this digital age?

I believe this first research question to be affirmative. While each library was doing their due diligence before the global pandemic, they certainly pushed ahead even further during 2020 to keep people informed and in contact with others. While the general public could not gather at this time in person, the ability of each library to adapt and problem solve to help their communities goes to show that regardless of a situation, the public library will do whatever is necessary to help not just their patrons, but anyone who walks through their doors.

This was especially true in more rural areas of the state where the libraries were a lifeline to those who needed help with unemployment and COVID-19 benefits, telehealth visits, filing taxes, paying bills, or, more importantly, staying in touch with loved ones by email or Skype/Facetime/Zoom, etc.

One surprising finding involved the adamant belief by each librarian who responded to the survey that not only what they were doing was important, but also vital to the health of their communities: whether that be physical, mental, or economic.

Another unexpected finding involved the number of libraries that have started roaming hotspots throughout their city to allow more access for those unable to afford their own internet access or expanding the hotspots they already have. Showing the community and residents that the public library was available for each person is an example of “walking the walk and talking the talk”. If people wanted to know why some of their tax dollars were going toward a public library, this was a prime example of why libraries are still vital and necessary. Many might think libraries are past their prime, but instead they’re adapting to change just like everyone else.

All these examples embrace the two theories defined earlier: dialogic theory and public sphere theory. Dialogic theory asks corporations and government entities to build trust and credibility in their communications with the public. By going above and beyond their usual duties, libraries in Arkansas during the COVID-19 lockdown worked to show communities that they would do whatever they could to keep everyone working as normally as possible. They made sure to get the word out about what services they could or could not provide and if they were unable to do something, explain who could help or when the libraries themselves could get that ability back.

If Habermas could define the public sphere as a “virtual or imaginary community which does not necessarily exist in any identifiable space” then 2020 would have been the year that

went further than even he imagined. Bringing communities together through classes, meetings, play time, school time, etc., all through online gatherings isn't exactly the "virtual" community he referred to, but in a parallel universe way, it kind of is. People's voices weren't silenced when forced to be physically apart, but only grew. Thanks to the ability of libraries to keep internet services alive for those unable to have it all the time, it was impossible not to be informed or join in conversations about the pandemic, vaccinations, elections, and other community issues everyone needed to know.

RQ2: How are the libraries communicating with people in rural areas that lack digital connectivity?

As stated earlier, residents of rural areas do have cellular service, albeit not as high speeds as found in more urban areas, but it does still exist. People do have the ability to access social media and the internet from their phones, and libraries seized on this by letting everyone know what their plans were as the pandemic continued (Allen, 2020). When one library was successful at a program or idea, word spread to other libraries until most were following the same blueprint but tailored to their specific communities.

The theoretical framework for this study anticipated some of the behavior described by the librarians, such as the addition of hotspots and setting up facilities outdoors to serve a public unable to do business as usual. Public sphere brings the outside in, even when "inside" is now defined as an internet chat room, message board, or email chain. The theoretical virtual has become a literal virtual through the World Wide Web. Dialogic is when patrons communicate with library staff and administration to propose changes and suggest alternatives

when the ability to gather in person is blocked due to a situation out of everyone's control. The public explained what they needed, and libraries provided what they could, when they could. If there were issues or complaints, the staff did what they could to fix the problem and if they couldn't fix it, they found a way around it. Everyone had to go through growing pains at first but adapted to the situation as best as they knew how.

While libraries themselves can work to better upgrade their own services through help from governmental programs, there's only so much they can do in a certain time frame and without spending all their valuable time in a bureaucratic maze. When libraries focus on items within public sphere and dialogic theories, they possess the support of the public to request and even demand changes as they've crossed the biggest hurdle: general support.

RQ3: What are the gaps in libraries' service for rural patrons in digital communications services?

When Gov. Hutchinson originally set out his broadband plan, the initial goal was to make sure everyone in the state had the ability to access internet service. Many areas of the state failed to meet even the basic standards of internet downloads and uploads, and with cell phone towers at a minimum in areas like the Delta region and the Ozarks, there was simply no way for people to have reliable service and not have to pay an exorbitant amount.

Then the COVID-19 pandemic tossed all the plans out the window, figuratively-speaking. Services that had been on the backburner were suddenly thrust forward because the general public absolutely needed the ability to work from home, study from home, heal from

home, and still stay in contact with the outside world all while staying inside. For a time at the beginning of the pandemic, data caps were lifted, and limits were halted as the majority of Americans struggled to maneuver in this new world (Lazarus, 2021), but now that vaccines are available and things are opening back up, cable and internet companies are raising prices and for those Arkansans on a fixed income, this simply isn't feasible.

What is feasible is what public libraries have been able to accomplish and offer both before and during the pandemic: a safe, secure, free service that is available nearly 24 hours-a-day, 7 days-a-week. If the governor's broadband plan is a step in the right direction for expanding the internet to a growing state, the public library is the proof that these things are necessary and absolutely should continue.

The library is very much a vital recipient of expanded and improved broadband communications. Their location in the state should be irrelevant; any library should be at the forefront of technology that the public needs to maintain daily life. The world has gotten smaller as we have attained the ability to share information more quickly and frequently than ever.

Conclusion

When I originally set out to write about libraries in Arkansas, things were generally straightforward--and then COVID-19 hit, and everything shut down. I had to re-envision my research.

Initially, I had an idea in mind of what the comments and suggestions might be from the responses, but after COVID-19, much of what I had originally hypothesized not only came to fruition but also seemed to expand with the gravity of the situation. Yes, libraries are important and shouldn't disappear from the public sphere, but what happens when the whole world is put on hold and things that had been taken for granted are now precious and in great demand but unable to be realized?

Over the course of this thesis, I wanted to see what public libraries have been doing and are continuing to do to be a service to their communities. What I didn't expect was seeing all of them coming together and daily finding new ways to ensure the continued health and happiness of individuals and families during an unprecedented crisis.

It's not unusual for public libraries to take on a ground zero role when an emergency happens. But an emergency that has lasted for almost two years and in ways that no one living has ever dealt with before is new territory. Librarians could easily escape into their stacks and find book after magazine after scholarly article about pandemics and illness and unemployment and then fade into history. Some believe that should be the role of all libraries (Zach, 2011). But Arkansas libraries have stepped up and been sources of help and security to thousands of people every day. Each library worker stayed put until they knew everyone that came seeking help each day had been helped.

The Wi-Fi and the hotspots are encouraging, but there's also the food trucks and the printing stations; the people on the other end of the phone helping individuals file their taxes or

register to vote, talk them through how to check out new books online or help find basic information when no one else knew the answer. Google really doesn't know everything.

It's been known for some time that public libraries are constantly fighting for their survival (Rothbard, 2016) (Thornton, 2015) (Hall, 2021). Whether due to state and/or local governments cutting funding, lack of resources or dropping patronages, they are now also having to deal with increased safety protocols, extra sanitizing, staff morale, and how to continue to make their spaces a gathering place when it's still not fully safe for everyone to gather (American Library Association, 2021).

Simply put, we need public libraries. What's more, libraries need us. Even before COVID-19 began raging around the world, the ability of individuals to have a place where they could freely gather and have a repository of information available at any time was a gift we took for granted. When we all suddenly found ourselves in a situation we'd only ever heard about or read about before, the library was still our square one.

Libraries must be welcome to change because the world is fluid. Communications 50 years ago are nothing like communications 25 years ago or even 5 years ago. There might have been some prescient individuals who were able to foresee things like the explosion of social media, the slow death of the newspaper, the growth of e-books and changing a library from a hushed hall to a community gathering spot, but if there were, they should have spoken up so everyone could have prepared accordingly.

Arkansas libraries have been no different to any other in the US. According to the American Library Association's State of America's Libraries 2021 Report, the same issues that affected rural libraries in Arkansas are the same issues that affected rural libraries in the other 49 states. And yet, each one was as unique as well. Community challenges are the same until they aren't. Issues that are important to Arkansans are often different than issues facing residents of other states, but the libraries that host them are all very similar.

As COVID-19 continues to stay at the forefront of everyone's lives for the time being, it will be interesting to see how public libraries shift yet again to embrace our new normal. Will there be more of an effort to improve on programs like Zoom or Teams to have events like book clubs or children's story times be a regular part of a library's services? Will they embrace more e-books or instead change how they check out physical books? Will local and state governments allot more tax dollars to libraries, especially since their services to so many Arkansans during the last two years has been lifesaving?

I feel with the Governor's initial plan to expand broadband in the state, it needs to be even bigger in scope than originally proposed simply because thanks to COVID-19, we can see that we've always been able to have the internet access we've wanted. Libraries could offer so much more but are held back due to corporations unwilling to expand. They shouldn't have to keep holding things together with metaphorical duct tape and a prayer. If public libraries are given the finances and technology they need, it will be fascinating to see where they could go if given half a chance.

References

- Abernathy, P. M. (2020). *The Expanding News Desert*. Retrieved from UNC Hussman School of Journalism and Media: <https://www.usnewsdeserts.com/states/arkansas/#1536357281308-2b08086c-aa7e>
- Allconnect. (2020). *Internet Providers in Arkansas*. Retrieved from Allconnect: <https://www.allconnect.com/local/ar>
- Allen, S. G. (2020, November 23). *Not open? No problem. Rural Libraries Push WiFi Into Community Spaces*. Retrieved from Public Libraries Online: <http://publiclibrariesonline.org/2020/11/not-open-no-problem-rural-libraries-push-wifi-into-community-spaces/>
- American Library Association. (2021). *Issues and Advocacy: E-Rate and Universal Service*. Retrieved from American Library Association: <https://www.ala.org/advocacy/erate>
- American Library Association. (2021). *State of America's Libraries 2021 | Special Report: Covid-19*. American Library Association.
- Broadband Internet in Arkansas*. (2020, February 6). Retrieved from BroadbandNow: <https://broadbandnow.com/Arkansas>
- Desktop/laptop ownership among adults in the United States from 2008 to 2019*. (2020, April 22). Retrieved from Statista: <https://www.statista.com/statistics/756054/united-states-adults-desktop-laptop-ownership/>
- Ditzion, S. (1957). *Arsenals of a Democratic Culture*. *University of Chicago Press Journals*.
- Encyclopedia of Arkansas. (2015, September 5). *Carnegie Libraries*. Retrieved from Encyclopedia of Arkansas: <https://encyclopediaofarkansas.net/entries/carnegie-libraries-6466/#:~:text=Bennett%2C%20the%20Fort%20Smith%20library,dedicated%20on%20January%2030%2C%201908.>
- FACT SHEET: The American Jobs Plan*. (2021, March 31). Retrieved from The White House Briefing Room: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>
- Grant, A., Tyner, W. E., & DeBoer, L. (2018). *Research and Policy INsights: Estimation of the Net Benefits of Indiana Statewide Adoption of Rural Broadband*. West Lafayette, IN: Purdue University.
- Habermas, J. (1962 translated 1989). *The Structural Transformation of the Public Sphere: An Inquiry Into a Category of Bourgeois Society*. Cambridge: The MIT Press.
- Hall, T. D. (2021, June 1). *To Survive, We Must Transform*. Retrieved from American Libraries Magazine: <https://americanlibrariesmagazine.org/2021/06/01/to-survive-we-must-transform/>
- Internet Providers in Arkansas*. (2021). Retrieved from HighSpeedInternet.com: <https://www.highspeedinternet.com/ar>
- Kent, M. L., & Taylor, M. (2002). *Toward a Dialogic Theory of Public Relations*. *Public Relations Review*, 21-37.

- Kochhar, R., & Bennett, J. (2021, April 14). *U.S. labor market inches back from the COVID-19 shock, but recovery is far from complete*. Retrieved from Pew Research Center: <https://www.pewresearch.org/fact-tank/2021/04/14/u-s-labor-market-inches-back-from-the-covid-19-shock-but-recovery-is-far-from-complete/>
- Lazarus, D. (2021, February 2). *Column: You're stuck at home. So, of course, cable and internet bills are rising (again)*. Retrieved from Los Angeles Times: <https://www.latimes.com/business/story/2021-02-02/column-cable-bills-going-up-again>
- Millar, L. (2020, April 2). *Little Rock's massive effort to feed kids amid the pandemic*. Retrieved from Arkansas Times: <https://arktimes.com/news/2020/04/02/little-rocks-massive-effort-to-feed-kids-amid-the-pandemic>
- mmckale. (2016, September 26). *Information Deserts*. Retrieved from LIS Theory: <http://listheory.prattsils.org/information-deserts/>
- Naylor, B., & Walsh, D. (2021, November 15). *Biden signs the \$1 trillion bipartisan infrastructure bill into law*. Retrieved from NPR: <https://www.npr.org/2021/11/15/1055841358/biden-signs-1t-bipartisan-infrastructure-bill-into-law>
- Özbek, M. (2004). *Kamusal Alan*. Istanbul: Hil Yayinlari.
- Rothbard, S. (2016, October 1). *If You Think Libraries Are Redundant, Read This*. Retrieved from Zocalo Public Square: <https://www.zocalopublicsquare.org/2016/10/01/think-libraries-redundant-read/events/the-takeaway/>
- Smith, A., & Anderson, M. (2018, March 1). *Social Media Use in 2018*. Retrieved from Pew Research Center: <https://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>
- Stettner, A., & Pancotti, E. (2021, March 17). *1 in 4 Workers Relied on Unemployment Aid During the Pandemic*. Retrieved from The Century Foundation: <https://tcf.org/content/commentary/1-in-4-workers-relied-on-unemployment-aid-during-the-pandemic/?agreed=1Ste>
- The Center on Budget and Policy Priorities. (2021, October 26). *Policy Basics: How Many Weeks of Unemployment Compensation Are Available?* Retrieved from Center on Budget and Policy Priorities: <https://www.cbpp.org/research/economy/how-many-weeks-of-unemployment-compensation-are-available>
- Thornton, S. B. (2015, June 3). *Small Libraries Struggle To Stay Open*. Retrieved from I Love Libraries: <http://ilovelibraries.org/article/small-libraries-struggle-stay-open>
- U of A Division of Agriculture. (2017). *Rural Profile of Arkansas 2017*. Fayetteville: University of Arkansas Division of Agriculture. Retrieved from <https://www.uaex.edu/publications/pdf/MP541.pdf>
- U.S. Department of Education. (2019, September 13). *E-Rate Program - Discounted Telecommunications Services*. Retrieved from U.S. Department of Education: <https://www2.ed.gov/about/inits/ed/non-public-education/other-federal-programs/fcc.html>

UNC Hussman School of Journalism and Media. (2019). *The Expanding News Desert*. Retrieved from UNC Hussman School of Journalism and Media:
<https://www.usnewsdeserts.com/states/arkansas/#1536357281308-2b08086c-aa7e>

Zach, L. (2011). What Do I Do in an Emergency? The Role of Public Libraries in Providing Information During Times of Crisis. *Science and Technology Libraries*, 404-413.