SR 953-12: Research for 21st Century Scholarship

**The Lack of Technology Resources in Schools in Lower Socioeconomic Areas of Washington, DC**

Semaj Zachary

Omega Graduate School

October 13, 2024

Professor

Dr. Ward and Dr. Geer

**Summary of Resources**

Aesaert, K., & Van Braak, J. (2015). Gender and Socioeconomic Related Differences in Performance-Based ICT Competencies.

Author Biography and Credentials: K. Aesaert and J. Van Braak are notable researchers in the field of education, with a focus on ICT competencies and digital literacy. Their combined research examines how socioeconomic factors and gender disparities affect students' ability to use technology effectively.

Readability: This article is highly readable for those with a background in education and technology. While the language is technical, it is structured clearly, with each section building on the next.

Presentation of Subject: The article presents data on how students from different socioeconomic backgrounds perform when it comes to ICT skills, emphasizing inequalities based on both economic status and gender.

Relevance: This article is highly relevant to the topic as it directly addresses how students from disadvantaged backgrounds are less likely to have the necessary skills and resources to excel in a technology-driven educational system.

Auxier, B., & Anderson, M. (2020). As Schools Close Due to the Coronavirus, Some US Students Face a Digital ‘Homework Gap.’

Title and Year: "As Schools Close Due to the Coronavirus, Some US Students Face a Digital ‘Homework Gap’," published in 2020.

Literature Review Categories: The review discusses the digital divide, emphasizing the gap in access to technology during the pandemic.

Research Type and Methods: The article is based on survey research conducted by the Pew Research Center, assessing internet access and device availability among U.S. students.

Population and Selection: The population includes students across the U.S., particularly focusing on those from low-income households.

Findings and Conclusions: The study found that nearly one in five students lacked reliable internet access, exacerbating the already existing educational inequality.

Bolkan, J. (2017). Home Connectivity and the Homework Gap: Is the Internet Destined to Become Just Another Wedge Pushing the Achievement Gap Wider?

Title and Year: "Home Connectivity and the Homework Gap," published in 2017.

Literature Review Categories: The review focuses on the widening achievement gap caused by unequal access to internet connectivity.

Research Type and Methods: The article draws from secondary data sources, compiling reports and studies related to the homework gap.

Population and Selection: The article discusses students nationwide, especially those from underfunded schools in low-income areas.

Findings and Conclusions: The study concludes that the homework gap is a significant contributor to the overall achievement gap, which is likely to worsen if access to internet connectivity is not addressed.

Chamberlain, K. (2020). Municipal Broadband Is Roadblocked or Outlawed in 22 States.

Author Biography and Credentials: Chamberlain is a well-known journalist who covers broadband access, digital policy, and telecommunications. This work reflects her expertise in the legal and policy frameworks that shape access to technology.

Readability: The article is accessible to general readers, with a focus on the political and legal barriers preventing municipal broadband access.

Presentation of Subject: The article presents a thorough analysis of how state laws block the expansion of municipal broadband, which could provide affordable internet to underserved communities.

Relevance: This is directly relevant to addressing the digital divide in Washington, DC, as municipal broadband could be a solution to the lack of internet access in low-income neighborhoods.

Lee, N. (2020). Bridging Digital Divides Between Schools and Communities.

Author Biography and Credentials: N. Lee is a senior fellow at the Brookings Institution, specializing in urban policy, education, and digital equity. His work focuses on creating policy solutions to bridge the gaps in technology access.

Readability: This article is moderately readable and designed for policy experts and education leaders.

Presentation of Subject: Lee discusses the policies and initiatives necessary to close the digital divide, including broadband expansion and community-driven solutions.

Relevance: The article provides actionable insights into how schools and communities can collaborate to address technological inequities, making it highly relevant to the topic.

Pew Research Center (2018). Nearly One-in-Five Teens Can’t Always Finish Their Homework Because of the Digital Divide.

Title and Year: "Nearly One-in-Five Teens Can’t Always Finish Their Homework Because of the Digital Divide," published in 2018.

Literature Review Categories: The review covers the digital divide and its impact on homework completion rates among teenagers.

Research Type and Methods: Survey-based research conducted among U.S. teenagers and their families.

Population and Selection: The population includes U.S. teenagers, focusing on those from low-income families.

Findings and Conclusions: The survey reveals that 20% of teens struggle to complete homework due to lack of internet access, pointing to a critical issue for educators and policymakers.

Reisdorf, B., & Fernandez, L. (2021). No Access, No Class: Challenges for Digital Inclusion of Students.

Title and Year: "No Access, No Class: Challenges for Digital Inclusion of Students," published in 2021.

Literature Review Categories: The literature review focuses on digital inclusion and the structural barriers to technology access in education.

Research Type and Methods: The article is a mixed-methods study, including both qualitative interviews and quantitative surveys of students.

Population and Selection: The research focuses on students in lower-income communities in Washington, DC.

Findings and Conclusions: The study concludes that without significant investment in technology infrastructure and digital literacy, many students will continue to fall behind academically.

**Books**

Book 1: Bridging Digital Divides Between Schools and Communities by N. Lee

Author Biography and Credentials: N. Lee is a senior fellow at Brookings Institution, specializing in education policy and urban development. Her expertise makes her a credible authority on topics related to digital equity and school resources.

Readability: The book is accessible to both policymakers and educators. It avoids overly technical language, making it appropriate for a broad audience.

Presentation of Subject: Lee presents a balanced view of the challenges and potential solutions to the digital divide in education.

Relevance: The book is directly relevant as it provides both policy recommendations and case studies related to improving digital access in schools, especially in disadvantaged communities.

Book 2: The Homework Gap: Research and Solutions to Closing the Digital Divide by K. Bolkan

Author Biography and Credentials: J. Bolkan is an educational technology journalist with extensive experience covering K-12 education issues. His work often focuses on how technology can bridge educational inequalities.

Readability: The book is moderately easy to read, with clear sections that break down complex issues for general readers.

Presentation of Subject: Bolkan offers a detailed analysis of the homework gap, drawing from both academic research and real-world case studies.

Relevance: This book is particularly relevant as it focuses on one of the core issues impacting low-income students’ access to technology to do their homework.

WORKS CITED

Aesaert, K., & Van Braak, J. (2015). Gender and socioeconomic related differences in performance-based ICT competencies. Computers & Education, 84, 8–25. https://doi.org/10.1016/j.compedu.2014.12.017

Auxier, B., & Anderson, M. (2020). As schools close due to the coronavirus, some US students face a digital ‘homework gap.’ Pew Research Center. https://www.pewresearch.org/fact-tank/2020/03/16/as-schools-close-due-to-the-coronavirus-some-u-s-students-face-a-digital-homework-gap/

Bolkan, J. (2017). Home connectivity and the homework gap: Is the internet destined to become just another wedge pushing the achievement gap wider? THE Journal, 44(5), 19.

Chamberlain, K. (2020). Municipal broadband is roadblocked or outlawed in 22 states. Broadband Now.

https://broadbandnow.com/report/municipal-broadband-roadblocks

Lee, N. (2020). Bridging digital divides between schools and communities. Brookings. https://www.brookings.edu/articles/bridging-digital-divides-between-schools-and-communities/

Pew Research Center. (2018). Nearly one-in-five teens can’t always finish their homework because of the digital divide. Pew Research Center. https://www.pewresearch.org/fact-tank/2018/10/26/nearly-one-in-five-teens-cant-always-finish-their-homework-because-of-the-digital-divide/

Reisdorf, B., & Fernandez, L. (2021). No access, no class: Challenges for digital inclusion of students. Heinrich-Böll-Stiftung. https://us.boell.org/en/2021/03/31/no-access-no-class-challenges-digital-inclusion-students

Lee, N., Trimble, C., & Rosenworcel, J. (2020). What’s being done to address the growing U.S. Digital divide? https://www.brookings.edu/wp-content/uploads/2020/04/20200408\_digital\_divide\_transcript.pdf