Awareness & Critical Thinking (ACT) Program:
How School Librarians Can Teach Children to Detect and Avoid Misinformation

Overview & Broad Statement of Need

Dr. Tara Zimmerman, assistant professor at Texas Woman's University (TWU), seeks funding in the amount of $399,890 through the Laura Bush 21st Century Librarian Program for the Awareness and Critical Thinking (ACT) Program. ACT is a three-year Early Career Research Development project to investigate and strengthen school libraries' role in educating students regarding the dangers of online misinformation, how to detect it, and how to avoid it. The ACT Program will accomplish this through the development, piloting, and implementation of a K-5 curriculum designed to specifically target this information literacy skill. The proposed ACT Program addresses Laura Bush 21st Century Librarian Program Goal 2, Objective 2.3: support the research of untenured tenure-track library and information science faculty, furthering the faculty member's long-term research agenda, career trajectory, and professional development.

Project Justification

Social media has become a common platform for the public to discuss opinions on critical social and political issues, such as social justice, gun control, immigration, and abortion (Lin & Chung, 2020). Unfortunately, much of the information shared and encountered suffers from context collapse (Raynes-Goldie, 2010), having been separated from its original content thread and timeline. Research has shown that false and misleading information can spread online more extensively and more quickly than true information (Vosoughi, Roy, & Aral, 2018). The unintentional spread of misinformation and the intentional spread of disinformation undermine public trust in media (Matthew, 2018) and make productive civil discourse more difficult. The explosion of online information has resulted in many individuals feeling information overload (Beaudoin, 2008), information anxiety (Hadavi & Farhadpoor, 2021), and even information avoidance (Case et al., 2005). Soroya et al. (2021) found that social media exposure resulted directly in both information overload and information anxiety. They concluded that the public should be trained as active information seekers to reduce information overload and information anxiety. Specifically, they recommend individuals learn to assess the reliability of information sources and types of media as well as individual messages.

Children may be especially vulnerable to misinformation because they are more attuned to online environments than adults and because their critical thinking and reasoning capabilities are still developing (Howard et al., 2021). Up to 75% of young people globally feel unable to judge the veracity of online information (Livingstone, Winther, & Saeed, 2019). Xu, Shtulman, and Young (2022) found that elementary school children perform poorly in detecting fake news, even when they perform well in other cognitive

measures. A literacy study in the UK found that children from disadvantaged backgrounds were even less likely to spot misinformation than their peers, concluding that "fake news is a serious problem for children and young people, threatening their wellbeing, trust in journalism, and democracy itself" (National Literacy Trust, 2018, p. 4). Young people generally care less about the accuracy of information, being motivated more by novelty, and this makes them more vulnerable to spreading misinformation (Herrero-Diz, Conde-Jiménez, & de Cózar, 2020). The ACT program addresses Laura Bush 21st Century Librarian Program Goal 2, Objective 2.3: support the research of untenured tenure-track library and information science faculty, furthering the faculty member's long-term research agenda, career trajectory, and professional development. Currently, school librarians are using a hodgepodge of different curricula and materials to teach information literacy skills to K-5 students, including resources from Civic Online Reasoning, Common Sense Media, the News Literacy project, and a popular series of YouTube videos by young adult author, John Greene. However, these resources are mainly directed toward older grade levels and are not adequate to address the needs of younger, K-5 students. We have identified the pressing need for training to give K-5 children the tools they need to detect and avoid misinformation. The target group for this project include K-5 school librarians (approximately 12 individuals across three large school districts in Texas, Oklahoma, and New York) as well as their students (approximately 624). By defining our target group as K-5 students, the ACT Program is filling a gap in available information literacy resources and curriculum aimed at this age group.

By teaching students in these early grades how to detect and avoid misinformation, we will provide them with critical thinking skills that will benefit them the rest of their lives as well as contribute to the well-being of society as a whole.The diversity of schools in these districts will ensure that the curriculum is tested by a wide range of students and educators representing different racial groups, economic backgrounds, and geographic circumstances. This diversity will help us design the ACT program to be transportable and scalable to schools of various types and sizes. The ultimate beneficiaries of the ACT project are all K-5 school librarians in the US, as well as all K-5 students who may benefit from this project in the long-term. By giving school librarians this tool to teach information literacy and awareness of misinformation, we are developing an intervention to address society's collective vulnerability to misinformation and implementing it at the K-5 level, with our youngest and most vulnerable citizens who will have the most impact on the long-term health of our information culture. While there are state and local programs addressing how school librarians teach their students to avoid and detect misinformation, there are no widespread, multi-state programs targeting this need. This is an important distinction because to significantly reduce the negative impact of problematic information on American society, it must be addressed at a national level.

The ACT program was inspired by the PI's eight years of experience as a K-12 librarian and builds upon the PI's previous work studying the prevalence of online misinformation in society as well as how to teach individuals to detect and avoid it (Alsaid et al., 2020; Khader et al., 2021; Zimmerman, 2018, 2022; Zimmerman et al., 2019, 2020a, 2020b, 2022). She uses mixed methods to study information behavior, misinformation, and information literacy. The PI's previous work focused on the dangers of misinformation in a variety of contexts. The ACT Program builds upon that research by developing an intervention aimed at teaching school children how to avoid and detect misinformation, reducing the threat posed by misinformation to future generations.

Project Work Plan

The ACT Program will be developed over a three-year period and will consist of three main phases, described below. The research team will include the PI, advisory board, and a graduate student in an ALA-accredited Master's program, who will assist with data collection and data analysis. (See detailed description of qualifications of advisory board members in Project Design - Year 1 section below.) This research will address the following research questions:

- RQ1:To what extent do school libraries teach information literacy skills, specifically identification of misinformation, to K-5 students?
- RQ2: What technology and information literacy skills, approaches, and teaching programs would be most effective in increasing students' awareness of misinformation and ability to detect it across a range of different populations and lived experiences?
- RQ3: How effective was the implementation of this program, evaluated based on both objective measures of students' understanding of and ability to detect misinformation as well as on the subjective experiences of students, librarians, and other stakeholders?
- RQ4: What steps can be taken to promote ongoing support for and professional development of K-5 school librarians using this curriculum to educate students in detecting and avoiding misinformation, taking into consideration the different lived experience that has impacted their information literacy learning and engagement?

The framework for this study is information literacy as sociocultural practice, acknowledging it is based in practical understandings of context-specific behaviors and interrelated goals (Lloyd, 2009). In addition, we use a design thinking approach (Loh et al., 2021) as we conduct a thorough needs assessment beginning with gathering input from school librarians as well as students. The methods for this study will be based in participatory design and action research (Beneteau et al, 2020; Spinuzzi, 2005; Yip et al., 2019). Action research was selected because it uses a systematic process of examining evidence, and participatory design was

chosen because it is a methodology that uses input from all stakeholders to increase understanding and better meet their needs.

First, we will work with K-5 school librarians to find out what they are teaching students regarding detecting and avoiding misinformation. Based on these findings, we will help develop a curriculum to address this need and observe school librarians as they implement the new curriculum for one school year. We will gather feedback from the school librarians and their students regarding their experience with the curriculum, assess its impact on students' understanding of how to avoid and detect misinformation, and then refine the curriculum based on this feedback. As the PI for the Awareness and Critical Thinking Program, my long-term goal is to make this refined curriculum available to all K-5 school librarians nationwide at no cost to encourage the spread of misinformation education.

We will collect survey data from school librarians in Year 1. In Year 2, we will conduct interviews with participating school librarians and students in participating school districts as well as collect survey data from them focused on the implementation of the created curriculum throughout the year. This data will be used in Year 3 by an evaluator to assess the effectiveness of the intervention and help us redesign and improve the curriculum accordingly before making it widely available. The PI has connected with TWU's Institutional Review Board (IRB) to begin the process of securing IRB approval. As discussed in the Performance Management Plan, we will be surveying and interviewing school librarians throughout the three-year period in order to understand their needs and incorporate those into the ACT Program.

Project Staff

Project staff will consist of the PI, a graduate research assistant, four-member advisory board, participating school librarians, a curriculum developer, and a curriculum evaluator. The PI, Dr. Tara Zimmerman, has eight years of experience as a K-12 school librarian and will use a mixed methods approach to lead the research team. The graduate research assistant will support the team by transcribing, managing, and helping to analyze data for the project. This position will be filled once the project has been funded and begins. An advisory board for the project will be convened, consisting of four individuals with expertise in this field who will be compensated for their time contributed to the project. The advisory board will consist of: 1) a school librarian who has significant experience teaching information literacy skills to students across and range of grade levels (Andrea Fetterly of Genesee Valley BOCES); 2) a school administrator who oversees libraries and librarians, bringing understanding of the overall goals, as well as obstacles, faced in K-5 schools (Amanda Kordeliski, Norman Public Schools); 3) a curriculum specialist with experience designing curriculum and learning activities for K-5 students (Dr. Dan Krutka, Ph.D., Department of Social Studies Education, University of North Texas); and 4) a learning technology specialist who brings diverse perspectives on integrating

technology into educational programs for K-5 students (Paige Littlefield of the K20 Center for Educational and Community Renewal, University of Oklahoma). The advisory board will meet as a group monthly via Zoom to discuss project direction and goals as well as timeline, budget, and other details. Individual advisory board members will be consulted for their expertise as needed.

Twelve K-5 school librarians will be selected from the three participating school systems (four from each school system), and they will teach the curriculum to as many students as possible during the Year 2 implementation period. Specific librarians have not been selected yet; this will be based on a combination of school demographics and local school administrator recommendations. We have recruited a curriculum developer, Faith Rogow, who has 30 years of experience teaching information literacy skills to elementary-age students. Working alongside the PI and advisory board, she will develop the curriculum at the end of Year 1 and revise it based on the feedback the two subsequent years. Finally, we have recruited a curriculum evaluator, Dr. Lin Moore, who in Year 3 will assess the success of the ACT Program's curriculum and implementation using standardized measures in order to determine the overall effectiveness of the project.

The ACT Program aims to develop a practical resource for current school librarians to use in teaching K-5 students to detect and avoid misinformation, particularly online. While information literacy is a major focus of what school librarians need to teach their students, there is not a comprehensive, widely available resource specifically targeted to meet this need. We will draw from the American Association of School Librarians' national standards to inform this project and the development of the curriculum. These standards are evidence-based and outline best practices in information literacy education.

Project Design

The PI will plan, execute, and manage this project, with the support of the advisory board and librarians from participating school districts.

- *Year 1:* To address research questions 1 and 2, the project will begin with a survey of Texas, Oklahoma, and New York state school librarians with the support of the Texas Association of School Librarians, Oklahoma School Librarians, New York Library Association Section of School Librarians, American Association of School Librarians, and International Association of School Librarianship. An email message describing the survey and its purpose will be distributed through these organizations, including a link to the survey in Qualtrics. Participants will be offered a $10 electronic gift card for completing the survey. This survey will assess information literacy skills currently being taught in K-5 school libraries, focusing on ways in which misinformation is addressed. Participants will be asked to sign a consent form, and then the first section of the survey will consist of demographic questions about the librarian, their teaching experience, and their school. The second section of the survey will contain specific

questions about ways in which the librarian has taught or is currently teaching students information literacy skills focused on detecting and avoiding misinformation. The final section of the survey will consist of open-ended questions asking the librarian for their assessment of their students' needs regarding understanding the dangers of misinformation and how best to relate this information to them, including different teaching approaches, technologies, and standards addressed. The survey will be administered through Qualtrics, where data will be collected and housed. Survey results will be analyzed using descriptive statistics as well as qualitative thematic analysis (Braun & Clarke, 2006).

An advisory board for the project will be convened, consisting of four individuals with expertise in this field who will be compensated for their time contributed to the project. First, we will recruit a school librarian who has significant experience teaching information literacy skills to students across and range of grade levels. Second, a school administrator who oversees libraries and librarians will be recruited, bringing understanding of the overall goals, as well as obstacles, faced in K-5 schools. Third, we will recruit a curriculum specialist with experience designing curriculum and learning activities for K-5 students. Fourth, a learning technology specialist will be recruited to the advisory board to bring diverse perspectives on integrating technology into educational programs for K-5 students.

Based on findings from the survey, the PI and advisory board will work with a curriculum specialist to design a program addressing the need for information literacy education focused on identifying and avoiding misinformation in schools. National School Library Standards outlined by the American Association of School Librarians (ALA, 2022) will serve as guidelines during the curriculum development process. The curriculum will be developed with activities for K-5 students by grade level with both one-time lessons and longer units for extended teaching through a semester.

- *Year 2:* Based on findings from the survey, the PI and advisory board, one of whom is a curriculum specialist, will design a program to address the need for information literacy education focused on identifying and avoiding misinformation in schools. Drawing on advice from the advisory board and curriculum specialist, the curriculum will be developed with activities for K-5 students by grade level with both one-time lessons and longer units for extended teaching through a semester. The PI will partner with the school library programs in Denton (TX) Independent School District (ISD), Norman (OK) Public Schools, and Genesee Valley BOCES (NY) schools to implement the program. Twenty-four schools in the three participating school districts will be selected to participate in the program, with half of those being in a control group. A *priori* power analysis was conducted using Optimal Design software to determine the minimum sample size in each school using clustered randomized design with repeated measures. With the power set at .8, alpha level of .05, moderate effect size of .4 (δ), and intra-class

correlation of .05, a minimum sample size of 23 are required in each school in order to reach adequate power. With consideration of 10% attrition rate or invalid cases, a total of 624 students are needed (26 in each school) at the beginning of the study. Half of the sample (312 students) will be in the program. Twelve librarians serving different grade levels will be recruited to implement the curriculum at individual school sites (four in each district). These librarians will be asked to implement the curriculum with as many students as possible between September 2024 and March 2025, and they will be compensated with a stipend for participating in the program.

The librarians will have several options for implementing the curriculum with students. We will provide materials and teaching plans for single sessions, short multi-session units, and longer multi-session units. Single sessions may be used when a librarian has the opportunity to meet with a class one time to do a broad overview of the importance of detecting and avoiding misinformation. Multi-session units may be used when a librarian collaborates with a classroom teacher to do more in-depth studies, either self-contained or as part of another project. Short multi-session units will consist of 2 to 5 sessions, and long multi-session units will be 6 to 10 sessions, with flexibility built in for different types of applications and school needs. The librarians will work with teachers at their individual school sites to implement the types of programs that work best with the teachers' schedules and instructional needs.

The program may be implemented by participating librarians and schools any time between September 2024 and March 2025, giving librarians flexibility to implement the program at the best time for their school's schedule. Individual pre-tests and post-tests for students at each grade level will be developed along with the curriculum and provided for school librarians to administer. These assessments will be used with all students regardless of which implementation option they participate in (single session, short multi-session, or long multi-session). Participating librarians and selected students (8-10) students in each school or until data reaches saturation) will be interviewed individually after experiencing the curriculum to collect data about implementation, stakeholder response, and overall impacts of the ACT Program. Repeated measures ANOVA or MANOVA will be performed to examine the effectiveness of the program over time as compared to the control group. Interview data will be analyzed using Nvivo software and thematic analysis (Braun & Clarke, 2006).

- *Year 3:* An evaluator from the TWU College of Professional Education outside of the School of Library and Information Studies will be recruited to perform a review of the program. Using the ACT Program's research questions as a guide, the evaluator will assess the success of the piloted curriculum in meeting its stated goals. Expert recommendations from the evaluator, along with data collected from participants

will be analyzed and used to modify and improve the curriculum and teaching plans as needed. A full, scaffolded version of the curriculum and teaching plan will be created online and made available for free to all public schools for implementation, along with teaching tips and examples gained from the program. The research team will launch and promote the curriculum by attending LIS workshops and conferences, presenting it to all school librarians nationally, and giving examples of its implementation and effectiveness with students. Anyone who downloads and uses the program will be offered a $10 electronic gift card for completing a follow-up survey about the curriculum and their experience using it. Research findings from the ACT Program will be shared with library professionals, academics, and participating educators. Papers and presentations will be submitted to regional, state, national, and international conferences. Manuscripts will be submitted to peer reviewed journals (e.g., *Journal of the Association for Information Science and Technology, Library Quarterly*), practitioner publications for school librarians and administrators (e.g., *Knowledge Quest)*, and venues that reach both audiences (e.g., *School Library Journal, Library Trends)*. A short video will be created to promote the ACT Program and the freely downloadable curriculum, and this video will be shared via state and national school library organizations to encourage dissemination. The Performance Measurement Plan will be used throughout the project to monitor effectiveness, efficiency, quality, and timeliness. Using this plan as an ongoing tool will ensure we deliver measure results and accomplish stated goals.

Diversity Plan

Misinformation often targets vulnerable and/or marginalized populations, and the ACT Program aims to educate all public, K-5 students against this type of manipulation. The project's advisory board will be intentionally selected to reflect diversity through an array of perspectives, demographics, and lived experiences. The curriculum we develop will provide a useful tool for K-5 librarians to help them teach students how misinformation often intersects with issues of diversity, equity, and inclusion. The Digital Products Plan addresses in detail how this curriculum will be created using AASL standards, piloted through three large school systems, revised based on librarian feedback, and made available at no cost to all public school librarians.

Officially recognized as a Hispanic Serving Institution (HSI), Texas Woman's University is well-positioned to understand and serve minority and underserved populations. We will work with school systems in Texas, Oklahoma, and upstate New York to determine specific school sites for this project so that participating school librarians will encounter the broadest possible range of students and experiences. Diversity is a key factor in the success of the ACT Program because the curriculum developed must be scaffolded across grade levels, generalizable for all types of schools and communities, and accessible for students with a range of

abilities. The curriculum and implementation process will be inclusive of schools, educators, and students from a variety of economic and geographic circumstances (rural/urban/suburban). The majority of the student population in Denton ISD is non-white (57.7%), over one-third are economically disadvantaged, and one-fifth are English language learners. In Norman Public Schools, 44.6% of students are non-white and one-third are economically disadvantaged. The Genesee Valley BOCES serves three counties in upstate New York, which extend over 1,800 square miles and 22 school districts, serving more than 24,000 students. These three school systems encompass a range of geographic locations, demographics, and socioeconomic circumstances that can be targeted to maximize diversity of students participating in the ACT Program.

This study focuses on information literacy and identification of problematic information as sociocultural practice and uses participatory design to include a range of perspectives and voices of those who will be affected by this intervention. In both Year 1 and Year 2 relevant participants and communities will be actively involved in identifying the challenges and opportunities in this type of information literacy education, as well as helping to develop and implement the curriculum. By including input directly from school librarians and K-5 students, the ACT Project demonstrates a commitment to inclusion of the school library workforce in development of information literacy education and will help to strengthen the Library and Information Science field's commitment to diversity, equity, and inclusion. The advisory board will bring an additional layer of diversity of experience, thought, and expertise to the project.

Project Results

The outcome of the ACT project will be an educational tool for school librarians across the US that they can use to help K-5 students detect and avoid misinformation. This tool will help to build the information literacy teaching skills of school librarians while also providing students critical skills they need to be thoughtful consumers of information. This curriculum will be easily modified and scaffolded for use with all levels of primary and secondary students, and it will be available in a variety of formats to fit the schools' needs, ranging from a full course curriculum to separate mini-lessons that can be combined with regular classroom content. By making this tool available to all public school librarians, along with research and talking points explaining the need for these specific information literacy skills for K-5 students, the ACT project will spur awareness of the need to incorporate this teaching into formal education and equip school librarians to teach these skills.

It is a top priority of the PI during this project to learn what needs to be done to make the ACT Program sustainable beyond the initial three-year project. We will work with TWU to host the curriculum on a website that will be maintained by the university in order to sure ongoing, no cost access for public school librarians. We will seek funding to maintain free access to the curriculum for all K-5 public school librarians, as well as

additional funds to continue updating the materials to ensure they remain accurate and relevant in the ever changing information environment. In this way, the ACT Program can continue to thrive, providing a vital resource to the school librarians who serve our youngest citizens. As these students gain information literacy skills, enabling them to detect and avoid misinformation, the broader impact of the project will be realized - a more tech savvy populace that is empowered to use critical questioning and thinking in their online information behavior and is better able to avoid being misled by misinformation.

Project Work Plan Year 1

ACT Program Project Timeline	Year 1											
Task	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24
Announce project	■											
Secure IRB approval		■										
Finalize advisory board participants		■										
Convene advisory board virtualy			■									
Draft, test, and finalize Year 1 survey instrument				■								
Finalize survey dissemination details with partner organization					■							
Distribute initial survey						■						
Collect and clean survey data							■					
Analyze survey data								■				
Draft curriculum									■	■		
Pre-test curriculum with librarians											■	
Finalize curriculum											■	
Write up Year 1 findings												■
Submit Year 1 findings for publication												■

Project Work Plan Year 2

ACT Program Project Timeline	Year 2											
Task	08/24	09/24	10/24	11/24	12/24	01/25	02/25	03/25	04/25	05/25	06/25	07/25
Initial meeting with school librarian participants	■											
Monitor pilot applications of curriculum		■	■	■	■	■	■	■				
Interview school librarians			■	■	■	■	■	■				
Survey school librarians			■	■	■	■	■	■				
Survey student participants			■	■	■	■	■	■				
Finalize data collection									■			
Outline needed revisions to program										■		
Revise curriculum											■	
Write up Year 2 findings												■
Submit Year 2 findings for publication												■

Project Work Plan Year 3

ACT Program Project Timeline	Year 3											
Task	08/25	09/25	10/25	11/25	12/25	01/26	02/26	03/26	04/26	05/26	06/26	07/26
Make curriculum available online	■											
Monitor curriculum downloads	■											
Promote curriculum nationally		■	■	■	■	■	■	■				
Draft, test, and finalize end-user survey instrument		■										
Distribute survey to end-users			■	■	■	■	■	■				
Analyze Year 3 data									■	■	■	
Write up Year 3 findings										■	■	■
Publish Year 3 findings												■

Digital Products Plan

● <u>***What digital products will you create?***</u>

Content created for this research project will include multiple survey instruments (Doc and PDF), interview scripts (Doc and PDF), interview recordings (MP4) and transcripts (Doc and PDF), a survey dataset (initially CSV but ICPSR will make available in a variety of formats), and digital curriculum/teaching materials (PDF and HTML). The curriculum will be aligned with the American Association of School Librarians (AASL) national standards for information literacy education. All of these products will be created using applications such as Microsoft Office, Google Suite products, and Adobe Acrobat. Digital file formats will include HTML, DOC, PDF, and CSV.

● ***How will you make your digital products openly available (as appropriate)?***

Curriculum created for the ACT Program will be publicly available online via standard web browsers and will be licensed under a Creative Commons Attribution-Non-Commercial license. This license allows others to remix and adapt the curriculum for non-commercial purposes, with proper attribution. The project's survey dataset will be anonymized and submitted to the TWU's Institutional Repository, Repository@TWU, for preservation and access at the end of the project. Other materials, such as confidential interview recordings and transcripts will not be made openly available.

● ***What rights will you assert over your digital products, and what limitations, if any, will you place on their use? Will your products implicate privacy concerns or cultural sensitivities, and if so, how will you address them?***

Materials created during the ACT Program, including research instruments, will be released under a Creative Commons license. The anonymized survey dataset will be deposited with TWU institutional repository.No data that would allow participants to be individually identified will be released in any of the shared datasets. Written and/or recorded consent will be obtained for all survey responses as needed, and survey and interview protocols will be approved by the TWU IRB.

● ***How will you address the sustainability of your digital products?***

Survey data will be archived in the Repository@TWU institutional repository. The Repository@TWU is facilitated by the TWU Libraries, who are committed to the long-term preservation of works collected in the repository and ensuring accessibility to a global audience. All interview recordings will be destroyed at the end of the project, and all transcripts generated from those recordings will be stored in a shared, protected drive.

Data Management Plan

The ACT Program will manage, share, preserve, document, and enable reuse of the data we collect throughout the project in the following ways:

- In Year 1, quantitative and qualitative data will be collected through a multi-state survey of school librarians in January 2024. The first part of the survey will yield quantitative results (demographics, years/types of teaching experience, etc.), while the second part will consist of open-ended questions that will require qualitative analysis. This data will be used to help develop the ACT Program curriculum.
- In Year 2, quantitative data will be collected in several ways: surveying school librarians piloting the ACT Program curriculum, and pre- and post-assessments of students. Additionally, qualitative data will be generated through interviews with the school librarians and possibly observations of class sessions where the curriculum is being used. The Year 2 data will be collected from October 2024 through March 2025 and will be used to understand the strengths and weaknesses of the piloted curriculum and to make necessary revisions before its full rollout.
- In Year 3, data collection will occur between September 2025 and March 2026. Quantitative data will be collected from users who download the freely available curriculum, including demographics, usage plans, how they learned about the curriculum, and more. Additional quantitative and qualitative data will be collected by surveying users of the curriculum after they have implemented it with students to gather their feedback and experiences.

Sensitive Information: The proposed research requires IRB review, and the PI will submit an IRB application for approval in August 2023. Personally identifiable information may be collected in the process of surveying and interviewing participants; however, we will anonymize all individual identifiers before releasing the data publicly. All results from the surveys will be reported in the aggregate. Individual survey and interview responses will be kept confidential, and no individuals or specific school districts will be named in public output. Contact information will be obtained from participating school librarians for the purpose of distributing stipends for their work, but this information will be kept separately from all survey and interview data collected. All personally identifiable information will be removed before the datasets are deposited in the Texas Woman's University data repository at the end of the program.

Technical Requirements: Data will be available in standard file formats (e.g., .doc, .docx, .xls, csv) requiring commonly available hardware and software.

Documentation & Storage: During the ACT Program, all survey data, the survey instrument, and the consent language will be stored within Qualtrics licensed by Texas Woman's University. Survey consent agreements will be approved by IRB prior to survey distribution. Interview transcripts will be stored in Zoom and NVivo and on a protected drive. Metadata for all digital project data will be included to assist with organization and prepare for long-term archiving. Metadata strategies will be designed according to current best practices and relevant to the data type. On completion of the project, the PI will deposit all deidentified survey data described above, with applicable metadata, to the Texas Woman's University Institutional Repository for preservation and access, along with the associated codebook.

Management, Dissemination & Preservation: All deidentified project data from the surveys will be submitted to the Texas Woman's University Institutional Repository, Repository@TWU, for management, dissemination, and preservation. Once submitted for archiving, the Repository@TWU will ensure long-term data curation and access control. Scholarly articles derived from the projects will be published and made available through the TWU institutional repository. In accordance with IRB approval, all interview recordings will be destroyed at the end of the project, and all transcripts generated from those recordings will be stored in a shared, protected drive. TWU institutional repository can be found here: https://twu-ir.tdl.org/. We will review the data management annually, or more frequently if needed, during the project. If changes are needed prior to completion of the project, IMLS will be informed and consulted before implementation.

Organizational Profile
Create a one-page Organizational Profile for the lead applicant, addressing the following, and save it as a PDF. https://twu.edu/faculty-handbook/university-organization-and-governance/

Mission statement
Texas Woman's University cultivates engaged leaders and global citizens by leveraging its historical strengths in health, liberal arts, and education and its standing as the nation's largest public university primarily for women. Committed to transformational learning, discovery, and service in an inclusive environment that embraces diversity, Texas Woman's inspires excellence and a pioneering spirit. (https://twu.edu/about-twu/purpose-mission-vision-values-principles/)

The Texas Woman's mission statement was approved by the Board of Regents on November 16, 2016.

Governance Structure
Board of Regents
The Texas Woman's University Board of Regents is composed of nine persons, at least four of whom shall be women, appointed by the governor with the advice and consent of the Senate. The governor also appoints a tenth non-voting student regent. The Board of Regents oversees:
- **Office of the Chancellor and President:** Dr. Carine Feyten, Ph.D.
- **Division of Academic Affairs:** Dr. O. Finley Graves, Interim Executive Vice President for Academic Affairs and Provost.
- **College of Professional Education:** Lisa Huffman, Ph.D., Dean
- **School of Library and Information Studies:** Ling Hwey Jeng, Ph.D., Director

Service Area
Enrollment at Texas Woman's reflects its historical position with women making up approximately 88.8% of the Fall 2021 enrollment of 16,338. The student body included 60.1% undergraduates; 32.1%, who were enrolled in post-baccalaureate or masters programs and 7.8% in doctoral programs. (TWU Fact Book, 2022).

Texas Woman's is an ethnically diverse institution and received the fourth-highest diversity index rating on US News and World Reports 2021 "Best Colleges" Campus Ethnic Diversity report as well as ranking 2nd in Texas. (https://www.usnews.com/best-colleges/rankings/national- universities/campus-ethnic-diversity). Fall 2021 enrollment included 58.1% minorities, primarily African-American (18.0%) and Hispanic (28.3%). Texas Woman's is a federally designated Hispanic-Serving Institution as defined by the U.S. Department of Education.

Brief History of Texas Woman's University
An act of the 27th Legislature in 1901 founded the Girls Industrial College as a public institution that would become Texas Woman's University in 1957. The school had then and has now a dual mission: to provide a liberal education and to prepare young women "for the practical industries of the age" with a specialized education. Men have been admitted to TWU since 1972.

TWU continues today as a public university that offers a comprehensive catalog of academic studies, including baccalaureate, master's and doctoral degrees. Now in its tenth decade, the University has grown from a small college to a major university. TWU is the largest university primarily for women in the United States, with the main campus in Denton and health science centers in Dallas and Houston. (https://twu.edu/about-twu/brief-history-of-twu/)

TWU's library studies program has been graduating students for more than 80 years and is the most established program in the Southwest with continuous accreditation from the American Library Association since 1938. Current ALA accreditation has been renewed through 2025. (https://twu.edu/slis/)