

## **Abstract**

The School of Information Science & Learning Technologies and the Hook Center for Educational Renewal at the University of Missouri propose a one-year planning grant in the Community Anchors category to assess the capacity of rural school libraries as anchors for community mental health literacy efforts.

This capacity assessment will inform recommendations for a national agenda to strengthen policy, research, and technical assistance/training on mental health literacy for schools and communities, with a focus on school libraries and school librarians. A state-specific best practices resource guide featuring indigenous mental health literacy initiatives developed by local communities for local communities will be produced and can serve as an example of a state-level resource designed to support local schools and communities.

This project addresses the need for increased mental health support and resources for young people in rural communities. School mental health programs are viewed as one of the more effective ways to address children's mental health needs and reduce barriers to mental health supports, and school librarians can serve as community anchors for mental health literacy. To date, however, there are no best practices for how school librarians can and should work to support children's mental health needs, and their role in advancing children's mental health literacy has not been defined.

This project intends to clarify the role of school librarians in supporting mental health literacy and develop best practices and resources to be used by school librarians. Audiences to be addressed will include school librarians, school administrators, and researchers in the areas of school librarianship and school mental health. Intended outcomes are increased knowledge of the way school librarians can support children's mental health (librarians, counselors, school administrators) and the way rural mental health needs can be addressed most effectively (educators of librarians and counselors, decision-makers).

Project activities include a quantitative survey of mental health support administered to rural school librarians, counselors, and administrators; qualitative interviews and focus groups with rural school librarians, counselors, and administrators; environmental analyses of school libraries where best practices are happening; and development of recommendations for a national mental health literacy action agenda. Tangible products include a white paper discussing the state of rural mental health literacy for children and communities and the benefits and barriers to relying upon school librarians for support; curricular and training units on mental health literacy for in-service and pre-service school librarians, a guide to best practices and resources for mental health literacy for rural school librarians.

Several formal collaborators will serve on our advisory board and assist us with the research and development process, including Tonya Hays-Martin, Missouri Department of Mental Health; Barbara Jones, National Network of Libraries of Medicine; Mark D. Wiest, University of South Carolina School Behavioral Health Team; Missouri Association of Rural Education; Missouri Association of School Librarians; Missouri Association of School Administrators; Missouri School Counselor Association; and the Missouri State Library.

## Rural School Libraries Anchoring Community Mental Health Literacy

The School of Information Science & Learning Technologies and the Hook Center for Educational Renewal at the University of Missouri propose a one-year planning grant in the Community Anchors category to assess the capacity of rural school libraries as anchors for community mental health literacy efforts. This assessment will inform recommendations for a national agenda to strengthen policy, research, and technical assistance/training on mental health literacy for schools and communities, with a focus on school libraries and school librarians. A state-specific best practices resource guide featuring indigenous mental health literacy initiatives developed by local communities for local communities will be produced and can serve as an example of a state-level resource designed to support local schools and communities.

### **Statement of National Need**

*The persistent gap between mental health needs and resources for young people in this country is a public health crisis.*<sup>1</sup> One in five young people struggle with mental illness before they turn 18, but the average delay between the onset of their problems and the provision of treatment is 10 years.<sup>2</sup> Most of the young people who need mental health supports do not get them, but the majority of those who do receive those supports at their schools.<sup>3</sup> Many schools serve as the de facto children's mental health system, and schools have been identified as an ideal context for mental health service delivery.<sup>4</sup> The interdisciplinary field of Expanded School Mental Health has emerged as school mental health programs have been prioritized as a key public health strategy to improve children's mental health.<sup>5</sup>

I'm no expert, but we have to do more around mental health problems in this school. It's never been this bad, and I've been teaching for 23 years. I don't even know where to start. This community doesn't have many mental health resources, and our counselor is only part-time. There has to be a better option than consulting Dr. Google or telling families about the clinic 45 minutes away. I asked our principal and our librarian for help but, you know, none of us are really trained for this kind of thing.

***Rural Missouri Teacher***

*School mental health programs are viewed as one of the more effective ways to address children's mental health needs and reduce barriers to mental health supports.*<sup>6</sup> Nearly 15 years ago, *The President's New Freedom Commission on Mental Health: Transforming the Vision* laid the foundation for rapidly increasing and improving school mental health programs in the United States.<sup>7</sup> As emphasized by Weist and colleagues<sup>5</sup> through their best practice principles for Expanded School Mental Health, school mental health programs should provide a broad continuum of culturally-responsive supports ranging from promotion, prevention, and intervention for all young people and their families. Effective programs are delivered via shared funding and responsibility, quality training and technical assistance, continuous improvement, and stakeholder engagement.

*School mental health programs may be particularly impactful in rural communities where there is a significant need for accessible, acceptable, and appropriate mental health supports.*<sup>8</sup> Research suggests rural communities have lower rates of mental health service utilization than non-rural communities, likely due to a lack of accessible mental health supports and greater stigma associated with seeking mental health supports.<sup>9</sup> Rural

school mental health programs are uniquely situated to address these challenges by 1) improving and increasing access to mental health supports and 2) improving community mental health literacy.<sup>10</sup>

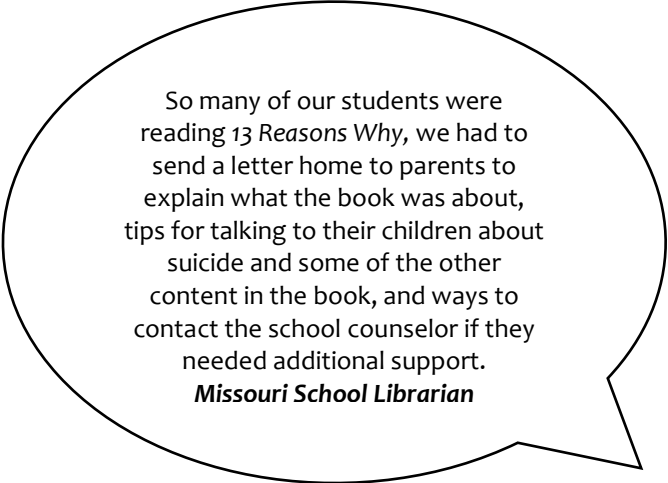
*Mental health literacy is a key component of a public mental health approach.*<sup>11</sup> A public mental health approach prioritizes population-level investments in policies, practices, programs, and processes to address the full spectrum of mental health promotion, prevention, intervention, and recovery. Mental health literacy (MHL) provides groundwork for mental health prevention, intervention, and recovery. MHL includes knowledge of and beliefs about mental health and mental illness, as well as information on how and when to seek help and/or advise others to seek help.<sup>12</sup> Emphasizing mental health as a key component of overall health, MHL efforts can help reduce the stigma associated with mental health/mental illness and increase mental health promotion and prevention. School mental health programs can improve MHL among their student population and the broader community through classroom-based curriculum as well as direct/indirect psychoeducation geared towards parents and family members. These efforts may be particularly effective in rural areas where schools are often a central focus of a community.

*A growing body of evidence shows the need for practical information on how state, regional, and local education agencies can support effective rural school mental health programs.*<sup>13</sup> The children's mental health system is complex, multi-sectored, multi-disciplinary, and evolving. State and county agencies vary in their capacity to address children's mental health systems.<sup>14</sup> For example, teacher education programs provide little if any formal training on children's mental health, and in-service teachers continuously indicate the need for more training in this area.<sup>15</sup> Rural schools areas are especially vulnerable, as they often have fewer experienced staff members, high personnel turnover, and low levels of funding.<sup>13</sup> Inadequate and fragmented infrastructures at the state and national levels impedes the development of the kinds of high-quality training and technical support that make it possible to support communities in developing and advancing school-based mental health programs. Within and across states, these factors contribute to a widening disparity in access to child and adolescent mental health service. Moreover, these factors also exacerbate the prevailing emphasis on mental *illness*, which diminishes the broader impacts that a focus on public mental *health* might produce.

*Public libraries have been dealing with mental health issues for years.* Public libraries have been on the front lines of public health, primarily through the provision of consumer health information.<sup>16</sup> More recently, libraries have provided nurses and crisis intervention, as well as information and referral services for mental health issues.<sup>17</sup> However, many school libraries have not had conversations around mental illness, even though they work with children and teenagers who suffer and need support.

*School librarians can serve as community anchors for mental health literacy.* In rural communities, public libraries, schools, and churches are community anchor institutions.<sup>18</sup> School librarians touch the lives of children, teachers, other school professionals, and often parents, too.<sup>19</sup> Rural school librarians can play a role in making health information available, if they have training and support.<sup>20,21</sup> They can play a similar role for mental health information, particularly since school mental health has been prioritized as a key mechanism to address this public health crisis.

*To date, there are no best practices for how school librarians can and should engage with state, regional, and local education agencies as part of a broader, systems-level initiative to improve children's mental health.* The most common library-based approach is bibliotherapy. Bibliotherapy uses reading about mental health to support the mental health needs of clients, though it is “not the solution for deep-seated psychological problems.”<sup>22</sup> While bibliotherapy provides one potential support for students' mental health, this approach underutilizes school librarians' existing abilities and competencies, particularly as they relate to working with teachers and other school professionals to create a school community that supports mental health. Moreover, these approaches likely underemphasize key aspects of a public health approach to mental health (e.g., reactive v. proactive, promoting mental health).



So many of our students were reading *13 Reasons Why*, we had to send a letter home to parents to explain what the book was about, tips for talking to their children about suicide and some of the other content in the book, and ways to contact the school counselor if they needed additional support.

**Missouri School Librarian**

## **Purpose**

The proposed project will evaluate the capacity of rural school librarians to support school and community mental health literacy. We will: 1) assess if and how rural school librarians are involved in school and community mental health efforts; 2) determine local best practices developed indigenously by school librarians and/or school personnel to promote mental health literacy; and 3) document how those practices came about (i.e., identify the local levers of change that encouraged these practices). Findings will be used to develop a national action agenda for promoting mental health literacy via school and public libraries, as well a state-specific resource guide that can serve as an example

*Why school libraries?* Libraries are traditionally viewed as providing information, as being nonjudgmental and available to all users. Some people with mental health issues have described the library as a “therapeutic landscape,” in that the space is familiar, welcoming, comforting, and empowering.<sup>23</sup> School librarians strive to make their libraries a place of refuge for marginalized students, including demonstrating an ethic of care through their instruction, collections, and facilities.<sup>24</sup> Research on school librarian-school counselor partnerships indicate that these have been productive in developing a “spirit of community.”<sup>21</sup> Librarians are widely accepted as key stakeholders in efforts to improve literacy, but their potential role in advancing mental health literacy has not yet been fully defined.<sup>25</sup>

Nationally, the number of rural school librarians and school counselors is about equal. The 2011-12 Schools and Staffing Survey found 29,790 paid professional school library media staff in rural areas, as well as another 18,600 library aides, for a total of 48,390 school library personnel; there were 31,800 rural school counselors, plus 10,080 psychologists and 6,310 social workers.<sup>26</sup> These two professions have not typically worked together, but sharing MHL practices and resources is a natural fit for school librarians who want to improve their schools and their communities in a manner consistent with their mission to the school.

The American Association of School Librarians (AASL) says “The mission of the school library is to ensure that students and staff are effective users of ideas and information.”<sup>27</sup> AASL’s framework to evaluate the role of the school librarian includes three major categories: 1) teaching for learning, 2) building the learning environment, and 3) empowering learning through leadership.

This project supports AASL guidelines in Teaching for Learning by pairing school librarians and school counselors, school psychologists, and/or school psychologists to support school mental health programs and providing librarians with a curriculum geared toward MHL; in Building the Learning Environment by providing a list of materials to support learners’ mental health needs and teachers’ needs for MHL, by building advocates who recognize how school librarians contribute to MHL, and by providing materials for school librarian professional development; and in Empowering Learning through Leadership by providing school librarians an opportunity to lead and model MHL best practices.

### **Goals and Outcomes**

This planning grant will support a capacity assessment to determine: 1) current efforts among rural school libraries to promote community mental health literacy and 2) the current individual, organizational, and community capacity of rural school libraries to promote community mental health literacy. Implications of findings for policy, research, practice, and training will include recommendations for a national action agenda, implemented at the state level, to embrace rural school libraries as a vehicle to promote mental health literacy in rural communities.

*Goal 1: Determine current efforts among rural schools and communities in Missouri to promote mental health literacy with a focus on roles/functions of school libraries and school librarians.*

With this goal, our intent is to determine what existing mental health literacy practices may currently be ongoing in rural schools and communities, particularly activities undertaken by school librarians in school libraries. We seek to identify how those practices were implemented and if they were effective. We are specifically looking for local best practices – those practices that emerge from local communities to respond to local community issues and/or are the most effective within their communities – and the “levers for change” that created those practices. Our strategies are:

- 1) Convene advisory board comprised of representatives of primary stakeholder groups in Missouri who are interested in this problem of practice (see **Letters of Support** from: Missouri Association of Rural Education (MARE), Missouri Association of School Librarians (MASL), Missouri Association of School Administrators (MASA), Missouri State Library (MSL), Missouri Association of School Counselors (MSCA), Missouri Association of School Psychologists (MASP), School Social Workers Association of Missouri (SSWAM), Tonya Hays-Martin (Librarian411)). The purpose of the advisory board is to provide guidance to promote project success both in terms of meeting stated goals and objectives and contributing meaningfully to ongoing, systemic improvement efforts related to school mental health and libraries in Missouri and nationally.
- 2) Review and synthesize available data/information on existing local, regional, and state resources designed to support rural school mental health, rural school and public libraries, and school/community mental health literacy efforts. As part of the review, conduct environmental scan of existing school/public library resources pertaining to mental health. For example: Librarian411

was designed to help Missouri's public libraries better serve people with a variety of mental health issues and disabilities (see **Letter of Support** from [Tonya Hays-Martin \(Librarian411\)](#); Missouri State Library [behavioral health resource page](#) (see **Letter of Support** from [Missouri State Library \(MSL\)](#)). Developing a baseline understanding of existing resources informs strategic data collection.

- 3) Survey rural school librarians, school counselors/psychologists/social workers, and school administrators in Missouri to identify local best practices related to promoting mental health literacy (see **Letters of Support** from: [Missouri Association of Rural Education \(MARE\)](#), [Missouri Association of School Librarians \(MASL\)](#), [Missouri Association of School Administrators \(MASA\)](#), [Missouri State Library \(MSL\)](#), [Missouri Association of School Counselors \(MSCA\)](#), [Missouri Association of School Psychologists \(MASP\)](#), [School Social Workers Association of Missouri \(SSWAM\)](#)).
- 4) Use feedback from advisory board and findings from survey to identify rural school and rural school librarians with existing mental health literacy programs/activities. Develop limited number of "case studies" using interviews, review of archival data, and/site visits to learn explore local best practices in greater depth.

*Goal 2: Determine the current individual, organizational, and community capacity of rural school libraries to promote community health literacy*

With this goal, our intent is to determine the capacities of rural school libraries to promote mental health literacy. We anticipate that different schools will have different capacities to develop, implement, and sustain any activities related to community mental health literacy. These capacities should inform the development of scalable strategies/initiatives to increase scalability and sustainability. Our strategies are:

- 1) Combine/adapt existing survey tools into single measure designed to assess general capacity/readiness for rural school libraries to anchor community mental health literacy activities. For example, survey could include items/scales from existing surveys that assess: general capacity/readiness at the individual/organizational, and community levels (e.g., Flaspohler et al.)<sup>28</sup>; school district capacity (e.g., Fixsen et al.)<sup>29</sup>; capacity for school mental health (e.g., Feigenberg et al.)<sup>30</sup>; and/or mental health literacy (e.g., Wood & Wahl)<sup>31</sup> (see **Letters of Support** from [Mental Health Education Integration Consortium \(MHEDIC\)](#) & [Dr. Mark Weist](#)).
- 5) Survey rural school librarians, school counselors/psychologists/social workers, and school administrators in Missouri to assess general capacity/readiness for rural school libraries to anchor community mental health literacy activities (see **Letters of Support** from: [Missouri Association of Rural Education \(MARE\)](#), [Missouri Association of School Librarians \(MASL\)](#), [Missouri Association of School Administrators \(MASA\)](#), [Missouri State Library \(MSL\)](#), [Missouri Association of School Counselors \(MSCA\)](#), [Missouri Association of School Psychologists \(MASP\)](#), [School Social Workers Association of Missouri \(SSWAM\)](#)).
- 2) Use survey and survey results to develop brief focus group protocol designed 1) validate quantitative survey and 2) to collect qualitative data that can ground quantitative findings with more detailed, nuanced examples (see **Letters of Support** from [Mental Health Education Integration Consortium \(MHEDIC\)](#) & [Dr. Mark Weist](#)).
- 3) Conduct brief focus groups with rural school librarians, school counselors/psychologists/social workers, and school administrators in Missouri during regularly scheduled regional/state meetings of

state professional organizations (see **Letters of Support** from: Missouri Association of Rural Education (MARE), Missouri Association of School Librarians (MASL), Missouri Association of School Administrators (MASA), Missouri Association of School Counselors (MSCA), Missouri Association of School Psychologists (MASP), School Social Workers Association of Missouri (SSWAM)).

*Outcome 1: Summarize findings with focus on implications for policy, research, practice, and training.*

As an outcome of our study, we intend to produce a white paper that discusses:

- 1) the current landscape of rural school mental health and mental health literacy efforts (drawing from current interdisciplinary scholarship and grounded with examples of local best practices identified through this study);
- 2) methods for assessing general capacity/readiness for rural school libraries to anchor community mental health literacy efforts;
- 3) opportunities to strengthen interdisciplinary scholarship on rural school mental health and mental health literacy efforts, including improving methods for assessing capacity/readiness and the potential of networked learning approaches designed to identify, evaluate, and elevate local best practices;
- 4) benefits of and barriers to relying upon rural school libraries and/or school librarians to anchor community mental health literacy efforts;
- 5) whether policies should be created to encourage mental health literacy education for school librarians;
- 6) and appropriate mechanisms for delivering a continuum of professional development on mental health literacy for pre-service school librarians, paraprofessionals, and practicing school librarians.

*Outcome 2: Produce best practices/resource guide for rural school libraries anchoring community mental health literacy in Missouri.*

As an outcome of our study, we will produce a best practices/resource guide specific to Missouri schools/communities based on findings from the proposed study. This guide is intended to be used by professional organizations and other stakeholders supporting this project, as well as other stakeholders, to: 1) disseminate resources to practitioners across the state, 2) highlight the value of state-level collaborations across disciplines/professions, 3) advocate for greater collaboration at the regional and state levels, 4) raise awareness of school and community mental health as a critical need in this state, and 5) emphasize the valuable contributions of school libraries and school librarians in Missouri,

*Outcome 3: Develop recommendations for national action agenda, implemented at the state level, for rural school libraries as a vehicle to promote mental health literacy in rural communities.*

As an outcome of our study, we will develop recommendations for a national action agenda, implemented at the state level, informed by the white paper detailed above (see Outcome 1). This product is intended to be more prescriptive and include opportunities and threats related to fulfilling recommendations (e.g., funding, partnering with state organizations, weakening of public education system, and differences in state infrastructures). We will include several practical outcomes that will have a direct impact on rural school librarians' ability to support mental health literacy.

## **Project Design**

The proposed project is a mixed method design. All methods will be informed by feedback from the project advisory board in consultation with national scholars (see **all Letters of Support**). Participant selection, data collection, data analysis, and project timeline are described in more detail below.

*Participant Selection and Data Collection.* The baseline needs/resource assessment (including environmental scan) will be conducted via archival data review methods using available data and resources. The survey of school librarians, school counselors/psychologists/social workers, and school administrators will be distributed online (using Qualtrics) to the membership of the professional organizations participating on the advisory board for this project. We will identify local best practices by contacting schools identified by members of the advisory board and/or survey participants who indicate a willingness/interest in being contacted when they complete the online survey. Further exploration of those local best practices may include interviews, review of existing resources, and site visit(s). Focus group participants will be identified using a method developed collaboratively with professional organizations represented on the advisory board (e.g., one organization may suggest purposeful sampling of personnel representing each of their regional groups). Focus groups will be conducted in conjunction with regularly scheduled state/regional meetings to increase participation and maximize resources.

*Data Analysis.* Descriptive and/or inferential statistics will be used to analyze quantitative data as appropriate. For example, quantitative data gathered through the baseline needs/resource assessment (including the environmental scan) will likely be analyzed descriptively. Based on sample size and representation from different professional groups, data from the online survey could be analyzed using more sophisticated approaches. Thematic analyses will be conducted on qualitative data (again, as appropriate to address primary aims of the current study).

*Project Timeline.* The 12-month project will be conducted from October 1, 2017 through September 30, 2018. The co-PIs and graduate research assistant will complete this project in several steps.

<b>Timeline</b>	<b>Objective</b>	<b>Activities</b>
Month 1 ( <i>October 2017</i> )	Establish a method of reciprocal collaboration with stakeholders	Develop advisory board group with representation from key stakeholders and establish plan for regular two-way communication on project.
Months 1 & 2 ( <i>October and November 2017</i> )	Develop draft summary of existing resources and circulate to pertinent stakeholders.	Review and synthesize available statewide data/information on school mental health needs/resources with a focus on rural schools and communities, as well as school libraries.



Months 1 & 2 ( <i>October and November 2017</i> )	Combine/adapt/expand survey to meet project needs.	Identify existing survey tools (general capacity/readiness at individual, organizational, and community levels; mental health/mental health literacy; school mental health capacity); combine/adapt/expand survey to meet project needs.
Months 2 & 3 ( <i>November - December 2017</i> )	Finalize survey and all methods for data collection, including timeline/logistics for regional focus groups	Adapt survey, circulate to leadership group for feedback.
Months 4-5 ( <i>January &amp; March 2018</i> )	Collect qualitative data.	Run focus groups.
Months 4-6 ( <i>January – March 2018</i> )	Collect quantitative data.	Survey school librarians, school counselors, school administrators, and other stakeholders in rural communities across the country on current motivation, resources, and organizational climate to pursue this initiative.
Months 4-6 ( <i>January – March 2018</i> )	Identify rural schools and communities with mental health “local best practices” underway.	Analyze survey data.
Month 6 ( <i>March 2018</i> )	Collect data on questions that arise from surveys, focus groups, and other interactions.	Interview selected participants.
Month 7 ( <i>April 2018</i> )	Determine appropriate scope for school mental health library resource analysis.	Analyze interview data, revisit other data collected.
Month 8 ( <i>May 2018</i> )	Resource analysis and observation of best practice facilities.	Visit and observe libraries that follow best practices.
Months 9 - 10 ( <i>June - July 2018</i> )	Gap analysis.	Identify themes in rural MHL needs and gaps in present MHL resources and awareness.

Months 11 - 12 (August - September 2018)	Produce and disseminate products from grant findings.	Write white paper, create tools and plans for school librarians participating in school and community mental health efforts, and educational units.
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### **National Impact**

Across the United States, one in five children ages 13-18 has or will have a serious mental illness, and the average delay between onset of symptoms and seeking/receiving care is 8-10 years.<sup>32</sup> Almost 40% of students with a mental health condition age 14 and older who are served by special education drop out of school, the highest dropout rate of any disability group.<sup>32</sup> Suicide is the second leading cause of death for 10-14 year olds and 15-24 year-olds, nationally and in Missouri.<sup>33</sup> Missouri ranks 35<sup>th</sup> in the nation on mental health workforce availability.<sup>34</sup> Rural communities lack accessible, acceptable, and appropriate mental health supports. Residents of rural communities report more “poor mental health days” than nonrural residents, but rural areas have less access to mental health providers than to other medical providers.<sup>35</sup>

**This project will assess the capacity of rural school librarians to support school and community mental health literacy, and in so doing, provide the groundwork to develop a scalable program to help school librarians in rural areas provide mental health information resources to students, teachers, and other school personnel.**

Our *performance goal* is to strengthen school libraries as essential partners in addressing their community needs. By assessing the capacity for school librarians to provide mental health literacy information and provide mental health literacy support, and through documenting local best practices occurring at area libraries, we will provide additional support for rural children’s mental health, while at the same time allowing school librarians to do what they do best – working cooperatively with teachers and providing leadership to ensure a supportive educational environment for students.

The one-year grant period does not give us time to pilot test our resources and actions in the school setting, but we will *measure our success at reaching our target goal* through our advisory board’s feedback on the documents we have produced and the positions and policies we recommend.

While our program is primarily focused on the state of Missouri, we intend to share the plan with other states for their use and modification. Our intention is to help states equip and empower school librarians to be catalysts for community mental health literacy, and we recognize that this will look different in every state, as every state has different structures for their mental health and education systems. Our intention is to develop tools and processes that are scalable at a broader level, with details to be adjusted as necessary in each state. To do this, we intend to make all products resulting from this grant freely available under a Creative Commons ShareAlike license, and to share our experiences with representatives from other states who may contact us via the Hook Center or be recommended by our advisory board.

Products resulting from this project include:

#### Lists of mental health literacy information resources

- These lists of resources will be based on our findings from the survey and interviews, and will be distributed to focus group participants to serve as a conversation starter and to provide an incentive to

encourage their participation. It will include both books and resources for purchase and free web resources that teachers and librarians can begin using immediately.

An outline of scalable actions for mental health literacy support

- Because schools will have different levels of support, different resources, and different levels of commitment, we will produce a list of scalable actions that rural school librarians can take to support mental health literacy. This will range from scenarios like “Activities for one person with minimal funding” to “Creating a school-wide system of support.”

A white paper discussing our findings and making recommendations for state-level practices across the nation

- This white paper will discuss the strengths, limitations, and local best practices of school librarians in supporting school and community mental health literacy, policy recommendations for encouraging school librarians to provide community mental health literacy and support, and how to provide mental health literacy support for pre-service and in-service school librarians and paraprofessionals.

Training modules for pre-service and in-service school librarians

- These modules will be based on our findings regarding needs and supports for school librarians, and will include syllabi, learning objectives, content, assignments, activities, and learning assessments.

**Key Personnel:**

- Denice Adkins, SISLT Associate Professor, contributes expertise in school libraries and information seeking of rural and marginalized communities.
- Beth Brendler, SISLT Assistant Professor, contributes expertise in serving diverse communities, collection assessment, and qualitative research methods.
- Melissa Maras, Assistant Director, Hook Center for Educational Renewal, MU College of Education, contributes expertise in school mental health, capacity-building, and community-engaged scholarship.

**Partners:** Tonya Hays-Martin, Missouri Department of Mental Health; Barbara Jones, National Network of Libraries of Medicine; Mark D. Wiest, University of South Carolina School Behavioral Health Team; Missouri Association of Rural Education; Missouri Association of School Librarians; Missouri Association of School Administrators; Missouri School Counselor Association; Missouri State Library

Letters of support from many of our partners are attached with this proposal. Partners’ strengths will be utilized in a variety of ways:

- Providing access to rural teachers, administrators, and school librarians, and encouraging their participation
- Serving on our advisory board to provide guidance and feedback regarding our findings and recommendations
- Helping us to develop partnerships with rural school districts across the state
- Reviewing products Assisting with the dissemination of results, both state-wide and nationally

**Budget:** The budget for this planning grant will be approximately \$50,000, and will include funding for personnel to conduct research (SISLT faculty, Hook Center Assistant Director, and a graduate research assistant), as well as travel costs for researchers to visit rural areas for interviews and environmental scans. The primary budget needs are staff and travel time, with some supplementary funds for producing printed materials to distribute at conferences and to school personnel.

# Schedule of Completion

ACTIVITY	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Establish stakeholder reciprocal collaboration methods	█											
Develop draft summary of existing resources for circulation to stakeholders	█	█										
Combine/adapt/expand research instruments to meet project needs	█	█										
Finalize survey and data collection methods	█	█										
Collect qualitative data	█			█	█	█						
Collect quantitative data	█			█	█	█						
Identify rural school districts with best practices	█			█	█	█						
Collect data on questions arising from research methods and interactions	█					█						
Determine scope for school mental health library resource analysis	█						█					
Resource analysis and observation of best practice facilities	█							█				
Gap analysis	█								█	█		
Produce and disseminate products from research findings	█									█	█	█

## **DIGITAL PRODUCT FORM**

### **Introduction**

The Institute of Museum and Library Services (IMLS) is committed to expanding public access to federally funded digital products (i.e., digital content, resources, assets, software, and datasets). The products you create with IMLS funding require careful stewardship to protect and enhance their value, and they should be freely and readily available for use and re-use by libraries, archives, museums, and the public. However, applying these principles to the development and management of digital products can be challenging. Because technology is dynamic and because we do not want to inhibit innovation, we do not want to prescribe set standards and practices that could become quickly outdated. Instead, we ask that you answer questions that address specific aspects of creating and managing digital products. Like all components of your IMLS application, your answers will be used by IMLS staff and by expert peer reviewers to evaluate your application, and they will be important in determining whether your project will be funded.

### **Instructions**

You must provide answers to the questions in Part I. In addition, you must also complete at least one of the subsequent sections. If you intend to create or collect digital content, resources, or assets, complete Part II. If you intend to develop software, complete Part III. If you intend to create a dataset, complete Part IV.

## **PART I: Intellectual Property Rights and Permissions**

**A.1** What will be the intellectual property status of the digital products (content, resources, assets, software, or datasets) you intend to create? Who will hold the copyright(s)? How will you explain property rights and permissions to potential users (for example, by assigning a non-restrictive license such as BSD, GNU, MIT, or Creative Commons to the product)? Explain and justify your licensing selections.

All digital products will hold a Creative Commons CC-BY 4.0 copyright, which will allow sharing and adaptation of materials with attribution.

**A.2** What ownership rights will your organization assert over the new digital products and what conditions will you impose on access and use? Explain and justify any terms of access and conditions of use and detail how you will notify potential users about relevant terms or conditions.

The University of Missouri Columbia will exert no ownership rights over the digital products.

**A.3** If you will create any products that may involve privacy concerns, require obtaining permissions or rights, or raise any cultural sensitivities, describe the issues and how you plan to address them.

The digital projects that are created and published will not deal with personal information, and therefore will not involve privacy concerns. If they require obtaining permissions or rights, we will apply for those permissions, or if denied, create our own materials. We will work with an advisory board to ensure that our materials are culturally inclusive, but will make products available for adaptation so that they can be modified to meet the needs of specific cultures as needed.

## **Part II: Projects Creating or Collecting Digital Content, Resources, or Assets**

### **A. Creating or Collecting New Digital Content, Resources, or Assets**

**A.1** Describe the digital content, resources, or assets you will create or collect, the quantities of each type, and format you will use.

Digital content to be created will include a white paper, curricular materials, and handouts to support rural school librarians in developing services to support community mental health literacy. These will be saved as PDF documents.

**A.2** List the equipment, software, and supplies that you will use to create the content, resources, or assets, or the name of

the service provider that will perform the work.

Text-based materials will be produced using Microsoft Word and Adobe Acrobat.

**A.3** List all the digital file formats (e.g., XML, TIFF, MPEG) you plan to use, along with the relevant information about the appropriate quality standards (e.g., resolution, sampling rate, or pixel dimensions).

All documents will be saved and published as PDF documents.

## **B. Workflow and Asset Maintenance/Preservation**

**B.1** Describe your quality control plan (i.e., how you will monitor and evaluate your workflow and products).

We will create checklists and use project management software (e.g., Asana) to assess our workflow progress and production. We will evaluate the quality of products by asking our advisory board to review them against their knowledge of the populations to be served.

**B.2** Describe your plan for preserving and maintaining digital assets during and after the award period of performance. Your plan may address storage systems, shared repositories, technical documentation, migration planning, and commitment of organizational funding for these purposes. Please note: You may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (see 2 C.F.R. § 200.461).

Digital products will be stored on servers owned by the School of Information Science & Learning Technologies, and files will be backed up monthly. Digital products will also be made available through the University of Missouri's institutional repository, MOspace, held at the University of Missouri's Ellis Library.

## **C. Metadata**

**C.1** Describe how you will produce any and all technical, descriptive, administrative, or preservation metadata. Specify which standards you will use for the metadata structure (e.g., MARC, Dublin Core, Encoded Archival Description, PBCore, PREMIS) and metadata content (e.g., thesauri).

Basic descriptive metadata for the digital products will be manually created by the co-PIs (Adkins & Brendler). We anticipate using MODS for descriptive metadata. The local digital repository (hosted by the University library) cross-walks MODS records to Dublin Core for harvesting.

**C.2** Explain your strategy for preserving and maintaining metadata created or collected during and after the award period of performance.

Initial manual creation will use spreadsheets. Final metadata will be stored in the local digital repository with the digital files. Standards will be followed to facilitate enhancing of and sharing of the metadata through MOspace.

**C.3** Explain what metadata sharing and/or other strategies you will use to facilitate widespread discovery and use of the digital content, resources, or assets created during your project (e.g., an API [Application Programming Interface], contributions to a digital platform, or other ways you might enable batch queries and retrieval of metadata).

Metadata and content will be made available through MOspace, which is searchable via Google and other search engines.

## **D. Access and Use**

**D.1** Describe how you will make the digital content, resources, or assets available to the public. Include details such as the OMB Control #: 3137-0092, Expiration Date: 7/31/2018

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delivery strategy (e.g., openly available online, available to specified audiences) and underlying hardware/software platforms and infrastructure (e.g., specific digital repository software or leased services, accessibility via standard web browsers, requirements for special software tools in order to use the content).

Materials will be openly available online via MOSpace, the University of Missouri's institutional repository. Materials will also be stored on web servers provided by the School of Information Science & Learning Technologies. Monthly backups are performed.

**D.2** Provide the name(s) and URL(s) (Uniform Resource Locator) for any examples of previous digital content, resources, or assets your organization has created.

<http://sislt.missouri.edu/>

<http://libraryleaders.missouri.edu/>

<https://mospace.umsystem.edu/xmlui/>

### **Part III. Projects Developing Software**

#### **A. General Information**

**A.1** Describe the software you intend to create, including a summary of the major functions it will perform and the intended primary audience(s) it will serve.

**A.2** List other existing software that wholly or partially performs the same functions, and explain how the software you intend to create is different, and justify why those differences are significant and necessary.

#### **B. Technical Information**

**B.1** List the programming languages, platforms, software, or other applications you will use to create your software and explain why you chose them.

**B.2** Describe how the software you intend to create will extend or interoperate with relevant existing software.

**B.3** Describe any underlying additional software or system dependencies necessary to run the software you intend to create.

**B.4** Describe the processes you will use for development, documentation, and for maintaining and updating documentation for users of the software.

**B.5** Provide the name(s) and URL(s) for examples of any previous software your organization has created.

#### **C. Access and Use**

**C.1** We expect applicants seeking federal funds for software to develop and release these products under open-source licenses to maximize access and promote reuse. What ownership rights will your organization assert over the software you intend to create, and what conditions will you impose on its access and use? Identify and explain the license under which you will release source code for the software you develop (e.g., BSD, GNU, or MIT software licenses). Explain and justify any prohibitive terms or conditions of use or access and detail how you will notify potential users about relevant terms and conditions.

**C.2** Describe how you will make the software and source code available to the public and/or its intended users.

**C.3** Identify where you will deposit the source code for the software you intend to develop:

Name of publicly accessible source code repository:

URL:

#### **Part IV: Projects Creating Datasets**

**A.1** Identify the type of data you plan to collect or generate, and the purpose or intended use to which you expect it to be put. Describe the method(s) you will use and the approximate dates or intervals at which you will collect or generate it.

**A.2** Does the proposed data collection or research activity require approval by any internal review panel or institutional review board (IRB)? If so, has the proposed research activity been approved? If not, what is your plan for securing approval?

**A.3** Will you collect any personally identifiable information (PII), confidential information (e.g., trade secrets), or proprietary information? If so, detail the specific steps you will take to protect such information while you prepare the data files for public release (e.g., data anonymization, data suppression PII, or synthetic data).

**A.4** If you will collect additional documentation, such as consent agreements, along with the data, describe plans for preserving the documentation and ensuring that its relationship to the collected data is maintained.

**A.5** What methods will you use to collect or generate the data? Provide details about any technical requirements or dependencies that would be necessary for understanding, retrieving, displaying, or processing the dataset(s).

**A.6** What documentation (e.g., data documentation, codebooks) will you capture or create along with the dataset(s)? Where will the documentation be stored and in what format(s)? How will you permanently associate and manage the documentation with the dataset(s) it describes?

**A.7** What is your plan for archiving, managing, and disseminating data after the completion of the award-funded project?



**A.8** Identify where you will deposit the dataset(s):

Name of repository:

URL:

**A.9** When and how frequently will you review this data management plan? How will the implementation be monitored?