# Technical Review Coversheet

**Applicant:** Twin Cities Public Television, Inc (S295A200002)

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Questions

Selection Criteria - Significance

1. The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers the following factors:

   (i) The extent to which the proposed project will provide services or otherwise address the needs of students at risk of educational failure.

   (ii) The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies.

   (iii) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

Strengths:

Sub-criterion 1: The applicant begins to provide specific evidence in the letters on page e116 and e120 that the proposed project will provide ten one-hour programs a year for students age 5-8 from low-income communities. Evidence that project research will be conducted in low-income communities has also been articulated on p. e14. The proposal is grounded in educational research related to cultural responsiveness and media-enhanced learning, which helps to provide the scope of the project related to the needs of students at risk of educational failure. (p. e37 – p. e38)

Sub-criterion 2: There are several items in the proposal that provide evidence of new strategies. For example, the use of the "Transformative Transmedia Framework" and research-based equity strategies (as part of the current RTL "Hero Elementary" program) are new and important because the program would be both innovative and measurable. This is especially true when considering their new program "Mashopolis, which would be designed for diverse children and families in mind. They did an excellent job addressing the culturally responsive strategies in the proposal because they would include making resources available in Spanish and engaging the Latinx community to explore skills development in conjunction with future education and career pathways. (p. e29) Another item of evidence are the equity strategies shared from their previous RTL that are listed on p. e91, along with the projected number of children and families to be served within community organizations. This provides evidence of how the proposed project will provide services, while doing an excellent job incorporating them with the new strategies shared (p. e42) Finally, by incorporating workforce-aligned executive functioning skills into the proposal (p. e16), as well as intergenerational learning (p. e19), this also provides more evidence of the promising new strategies that this project includes..

Sub-criterion 3: The grant proposal includes a "pilot to scale" graphic of their previous RTL project, which indicates that 42 partners would be involved through the life of the project, providing evidence of the success of the current proposal. The applicant describes a “community collaboration” that relies on feedback from project advisors, educators, and participating families" p. (e29) Their plan to involve at least twenty-seven collaborative partners, contractual agreements, and letters of support is comprehensive. (on p. e115-e145) Evidence of some of the partners include Saint Paul Public Schools, Girls Inc. TN Valley, Smart Girls HQ, Volunteers of America of North Louisiana, YMCA of Metropolitan Washington, and the Boys & Girls Club of Central New Mexico, who all plan to require educators and staff to be involved in the program implementation through trainings and ensure that they complete professional development evaluations, post-program surveys, and interviews as well. This is reflected in the letters on p. e115 - e120, which satisfies the extent to which the services will maximize the effectiveness of program services. Another partner, Filament Games, (p. e128 - e129) also provides evidence of how they will help with the effectiveness of project services by creating engaging and appropriate video game content that support the learning objectives of the project, as well as deployment. (p. e128) Finally three very
well-known organizations – Khan Academy (p. e135), Harvard Graduate School of Education (p. 138), and the Erickson Institute – Graduate School in Child Development (p. e143) have all provided letters of support and expertise to the project. Because this is comprehensive, these services provided maximize the effectiveness of project services.

Weaknesses:
None

Reader’s Score: 10

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project. In determining the quality of the design of the proposed project, the Secretary considers the following factors:

(i) The extent to which the proposed project represents an exceptional approach for meeting statutory purposes and requirements.

(ii) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

(iii) The extent to which the proposed development efforts include adequate quality controls and, as appropriate, repeated testing of products.

Note: In responding to the Quality of the Project Design selection criterion, an applicant should include a detailed description of its proposal to develop and disseminate media and conduct outreach, as described in section 4643 (a)(1)(B)(i) through (v) of the ESEA.

Strengths:

Sub-criterion 1: The proposal focuses on 5 comprehensive components, which collectively represent an exceptional approach to the purposes and requirements. (p. e29 – e30) Of specific significance is the applicant’s approach to continuous improvement, assessments and analytics, including a gaming program and a family app, activities for families and children, developing educational resources, professional development training, studies with diverse communities and many other activities. Because these relate to the TPT’s Writer’s Mentorship Program, the comprehensive nature of the project appears to fully address the purposes and requirements, while also taking a unique approach to the purpose of the program (p. e30)

Sub-criterion 2: The applicant’s use of the embedded analytics and assessments provide evidence of continuous improvement strategies embedded in the proposal, as well as how the outcomes are specified and measurable. The project design relies on its’ Transformative Transmedia Framework (TTF), which begins to uniquely address the content of the project address the goals, objectives, and outcomes. (p. e37) The applicant also includes a logic model that provides clarity on the specifics of the activities, along how they will be measured. (p. e43) The project evaluation also makes this very clear. (p. e61 – p. e64)

Sub-criterion 3: The applicant provides evidence of the testing of products through the evaluation component of the project as it will test various media elements. (p. e14) The program also implies that it will use pilot testing to help establish quality controls and repeated testing (p. e40) This is a strength of at least one of their staff, as she is expert in playtesting and usability testing (p. e59) They also have a track record based on their experience in managing many large federally-funded grants. (p. e53) This provides further evidence of the expertise involved in this project in establishing quality controls and testing of products.
Weaknesses:
Sub-criterion 2: Some of the goals referenced in the application are vague and need more specificity related to how they will be achieved in measurable ways. (p. e19, e32, e33, e153) This is particularly true related to the areas of outreach strategies, executive function, and media. (p. e19) The specific outreach to educators and parents was vague as it didn’t include the specific components and details. This was also true of the specifics of the professional development component. (p.19) The book collection, as well as the discussion guide are also vague and needed more detail to provide evidence of how they would support the goals and outcomes. (p. e21, e39)

This criterion was thoroughly discussed and my score reflects my professional assessment of this section

Reader’s Score: 22

Selection Criteria - Strategy to Scale

1. The Secretary considers the applicant’s strategy to scale the proposed project. In determining the applicant’s capacity to scale the proposed project, the Secretary considers the following factors:

(i) The applicant’s capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to further develop and bring to scale the proposed process, product, strategy, or practice, or to work with others to ensure that the proposed process, product, strategy, or practice can be further developed and brought to scale, based on the findings of the proposed project.

(ii) The likely utility of the products (such as information, materials, processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths:
Sub-criterion 1: The proposal includes comprehensive team member roles and qualifications in line with the scope of the project. These appear on p. e54 - e59. Because their distribution plan includes many diverse platforms, their funding was appropriate to the scope of the opportunities to broadcast the applicant's program. (p. e49 and e222) Their distribution plan also seems very thorough as evidenced on p. e75. At least one member of the personnel also has expertise in public media distribution, furthering strengthening their program plans. (p. e87) Their plan to distribute digital content such as a PBS kids website, app with games, PBSLM, as well as PBS Parents, suggests that they will be successful in scaling the proposed project (p. e222) In addition, the inclusion of the advisory board members, the partner qualifications, as well as the letters of support further strengthen the applicant's capacity as they all offer intellectual capital and supports necessary to ensuring the proposed project can be brought to scale. (p. e58 – e61) Considering the scope of this grant proposal, the budget (p. e6) and the extremely detailed budget narrative (p. e237 – e271) aligns with supporting all aspects of the comprehensive research model employed. They also specifically address this sub-criterion on p. e53, which is comprehensive and helps provide additional evidence of their ability to bring this scaled program to fruition. Finally, the contract on p. e122 – p. e123 provides even more evidence of how they are ensuring the program, practices, and other processes will be further developed.

Sub-criterion 2: This grant proposal will develop a range of educational media products, along with a media and gaming platform that includes assessments, as well as a companion website, which would be used in a multitude of settings (p. e32 – p. e36) This is also demonstrated in the evidence with the partnerships, that would utilize the information and materials in their organizations (p. e127 – p. e131)
Weaknesses:
None

This criterion was thoroughly discussed and my score reflects my professional assessment of this section.

Reader's Score: 25

Selection Criteria - Quality of Management Plan

1. The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:

(i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

(ii) The qualifications, including relevant training and experience, of key project personnel.

(iii) The relevance and demonstrated commitment of each partner in the proposed project to the implementation and success of the project.

Strengths:
Sub-criterion 1: The management plan provides appropriate detail to satisfy the requirements related to accomplishing project tasks. Evidence of this is in the clearly defined responsibilities of the personnel and partners (p. e54 – p. e58, p. e115 – p. e121, and p. e125) The timeline on p. e54 provides further evidence of the development activities as they related to how the program will be further developed.

Sub-criterion 2: The scope of all of the key personnel's qualifications is vast and several have terminal degrees, demonstrating their experience and advanced training. This evidence appears on p. e54 – p. e58 and in the details of their resumes. (p. e77 – p. 114) Specifically, they appear to have all the needs of the proposed project covered in the areas of expertise included in the narrative including a Project Director who has been successful in other programs, a Lead Digital Producer who has expertise in game design and research, as well as experts in educational programming, producers, content managers, an outreach manager, a producer and many others. (p. e54 – e58) This speaks to the scope of expertise needed in accomplishing the project tasks, and in staying on track with the timelines and milestones required in the program.

Sub-criterion 3: The depth of commitment of each of the partners is demonstrated through letters of support and partner agreements. (p. e115 – p. e145) This evidence suggests a great deal of work has been done to establish these partnerships for the sake of the success of the project.

Weaknesses:
Sub-criterion 1: The professional development timeline that was included about their previous grant project does not include dates for the milestones. (p. e227) Another weakness was that it was not clear who was responsible for the milestones since this was vague. A similar graphic with specific timeline dates for the current proposal would improve it. This would provide more evidence.

Sub-criterion 2: Although positions have all been labeled and described, quite a few personnel candidates have not been identified so it is not clear what their expertise would be in the project. Although roles have been defined, the qualifications haven't been determined for the unfilled positions. (p. 238 - 239) The salary for Jennifer Borland appears to be very high.
for this project and in relation to other staff, as well as the other research staff. (p. e263)

Selection Criteria - Quality of Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:

   (i) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

   (ii) The extent to which the methods of evaluation will provide timely guidance for quality assurance.

   (iii) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project’s effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Note: We encourage applicants to review the WWC Procedures and Standards Handbook for technical assistance on evaluation: https://ies.ed.gov/ncee/wwc/Handbooks.

Strengths:

Sub-criterion 1: The objective performance measures are clearly identified and well connected to the project objectives (p. e274 – p. e276), as well as references to both qualitative and quantitative data (p. e71, p. e153, p. e174, p. e181) Their three research questions were very clear, along with impact for the project. (p. e62 – e63)

Sub-criterion 2: At least 1 of the partners have indicated they will be involved in quality assurance testing resources (p. e130), which provides some evidence for this sub-criterion. Evidence of ongoing evaluations will include analytics associated the games in the project, along with embedded EF assessments. (p. e35) This suggests that they will help guide quality assurance. Further evidence is included in the project evaluation, which is comprehensive and helps provide further evidence in this area. (p. e63 – e72)

Sub-criterion 3: The application articulates that it would include a quasi-experimental study designed to meet the WWC standards. It also articulates that it would include a focus on research and a randomized control group, which begins to address this sub-criterion. (p. e160)

Weaknesses:

Sub-criterion 1: Although they included a randomized-control of children through a trial designed to meet WWC standards, which is also included in Appendix D, more detail was needed to understand the specifics. (p. e63) It isn’t clear from the narrative what specifically is being studied in conjunction with meeting the WWC standards. Based on this information, more detail about it how specifically this project relates to the WWC standards is needed. Considering the information presented, it is difficult to assess to what extent the proposal would be effective in addressing the WWC standards.

Reader’s Score: 19
## Technical Review Coversheet

### Applicant:
Twin Cities Public Television, Inc (S295A200002)

### Reader #3:
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Selection Criteria - Significance

1. The Secretary considers the significance of the proposed project. In determining the significance of the proposed project, the Secretary considers the following factors:

   (i) The extent to which the proposed project will provide services or otherwise address the needs of students at risk of educational failure.

   (ii) The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies.

   (iii) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

   Strengths:

   The applicant clearly identified a need to provide educational media that will support young children's development of executive functioning (EF) skills supported by current data and research and described a plan to address these needs. It included employers' identification of these needs as well as age appropriate EF skills for young children (pages 2-9).

   The applicant described plans for the proposed project that incorporate community collaboration, cultural responsiveness, and best practices for media-enhanced learning (page 9). These plans build on existing strategies and incorporate the promising strategy of focusing on EF skills for young children.

   The partners identified by the applicant are likely to strengthen the proposed project and maximize the effectiveness of its services, because the proposed project will include consultants with experience in career readiness, educational media, and executive function which are necessary for project implementation (pages 37-38).

   Weaknesses:

   No weaknesses noted.

Reader's Score: 10

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project. In determining the quality of the design of the proposed project, the Secretary considers the following factors:

   (i) The extent to which the proposed project represents an exceptional approach for meeting statutory purposes and requirements.

   (ii) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

   (iii) The extent to which the proposed development efforts include adequate quality controls.
and, as appropriate, repeated testing of products.

Note: In responding to the Quality of the Project Design selection criterion, an applicant should include a detailed description of its proposal to develop and disseminate media and conduct outreach, as described in section 4643 (a)(1)(B)(i) through (v) of the ESEA.

Strengths:
The proposed project meets the statutory purposes and requirements for Ready to Learn, because it includes a plan to create a series of television programs in English and Spanish designed to help children develop their executive functioning skills, corresponding games and applications, and educational and training materials for families and organizations, and national distribution. The applicant provided comprehensive information about its specific plans for each deliverable and outreach, indicating its implementation is well planned (pages 10-23). The applicant also includes a thorough plan for research on the effectiveness of the proposed project (pages 22, 48-51).

The logic model illustrates the project’s inputs, activities, outputs, and broad short and long-term outcomes which will be beneficial in implementation and increase the likelihood of achieving its desired impact (page 23). It provides a clear graphic that shows the main elements described in the application.

The proposed project will fully involve parents by showing them how to increase their children’s awareness about different careers but also by exposing them to new career possibilities (pages 10, 14-15). Well-developed outputs and outcomes can help ensure a project achieves its expectations.

The applicant included sufficient quality controls and repeated testing of products through several rounds of formative testing with families and informal educators that will be used to inform any needed project modifications for continuous improvement (page 45).

Weaknesses:
The project’s outcomes are not clearly specified and measurable (page 23). For example, a short-term outcome for children listed is “Participation in EF enhancing activities” and a long-term outcome for children is “Understanding the essential skills needed to pursue a career in their field of interest.” It will be difficult to determine if goals and outcomes have been achieved without a measurement.

This criterion was thoroughly discussed and my score reflects my professional assessment of this section.

Reader’s Score: 23

Selection Criteria - Strategy to Scale

1. The Secretary considers the applicant’s strategy to scale the proposed project. In determining the applicant’s capacity to scale the proposed project, the Secretary considers the following factors:

   (i) The applicant’s capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to further develop and bring to scale the proposed process, product, strategy, or practice, or to work with others to ensure that the proposed process, product, strategy, or practice can be further developed and brought to scale, based on the findings of the proposed project.

   (ii) The likely utility of the products (such as information, materials, processes, or techniques) that will result from the proposed project, including the potential for their being used
effectively in a variety of other settings.

Strengths:

The applicant has effectively demonstrated its ability to develop and bring the proposed project to scale. It has a history of producing several science television series for children that include interactive experiences and educational outreach programs and have demonstrated impact. For example, evaluations of its SciGirls series showed teachers’ support for its ability to build girls’ confidence and increased their awareness of and interest in STEM careers (pages 24-28).

The applicant demonstrated its ability to manage the project as it brings it to scale based on its 30 years of experience producing high-quality television for children, its continued collaboration with diverse stakeholders and partners, its ability to manage other similar large projects, and its ability to sustain previous projects (pages 24-28).

The proposed project includes a plan for broad dissemination across television and media as well as through professional conferences. It described how its partners will assist in scaling up the proposed project (pages 28-32). The products resulting from the proposed project are likely to be used effectively in a variety of settings.

Weaknesses:

No weaknesses noted.

This criterion was thoroughly discussed and my score reflects my professional assessment of this section.

Reader's Score: 25

Selection Criteria - Quality of Management Plan

1. The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:

   (i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

   (ii) The qualifications, including relevant training and experience, of key project personnel.

   (iii) The relevance and demonstrated commitment of each partner in the proposed project to the implementation and success of the project.

Strengths:

The applicant is likely to achieve the objectives of the proposed project on time and within budget, because it has a history of successfully implementing similar projects and has appropriate procedures in place to manage this initiative (page 33).

The proposed project includes a basic timeline with activities and identifies the year when each will occur (page 34). This provides a general overview of the project’s main activities (television, digital, outreach, and research). This can help guide the project.

The applicant identified eight key individuals who will be the Core Project Team and described their qualifications and overall responsibilities (pages 34-38). These individuals all appear to have relevant training and experience for their roles in the proposed project: The Project Director, Lead Digital Producer, Project Development Lead, and Executive Producer.
have managed similar projects, conducted research, and developed other educational programs.

The applicant provided information on its partners (pages 38-41). These organizations have experience successfully implementing similar projects. Their letters of commitment clearly described what they planned to contribute to the proposed project. For example, the Director of Field Day will lend his expertise in development and data infrastructure, and the Chief Learning Officer of Khan Academy will contribute expertise in development of games and using digital data.

**Weaknesses:**

The project timeline does not indicate who will be responsible for completing each task or identify specifically when each activity will be completed (page 34). Without this information, it is unclear if the project activities will be completed on schedule. For example, the activity “Television - Animation” will occur during years 2-5, but there is no information on which aspects will occur during which years and who will be ultimately responsible for them.

Several key individuals in project leadership, such as Supervising Producer, Digital Asset Manager, and Public Relations/Publicity Manager, have not yet been identified. The applicant included very limited information on their responsibilities and no information on the qualifications but has allocated significant funding for their salaries (Budget Narrative page 3). The qualifications and responsibilities of these individuals are not clear.

**Reader's Score:** 17

**Selection Criteria - Quality of Project Evaluation**

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:

   (i) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

   (ii) The extent to which the methods of evaluation will provide timely guidance for quality assurance.

   (iii) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project’s effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Note: We encourage applicants to review the WWC Procedures and Standards Handbook for technical assistance on evaluation: https://ies.ed.gov/ncee/wwc/Handbooks.

**Strengths:**

The applicant plans to use a well-qualified, experienced external evaluator (page 41, Appendix D pages 7-10). This will help ensure an unbiased assessment of the impact of the proposed project.

The evaluation plan includes three research questions and four exploratory questions that will guide the evaluation. These questions are well-aligned with the activities of the proposed project and will provide an accurate assessment of the impact of the proposed project on children, caregivers, and informal educators as well as to determine the efficacy of the elements of the project (pages 42-43, Appendix D pages 14-16).

The evaluation plan described a comprehensive plan of up to twelve rounds of formative research to support development of the project (pages 45-47, Appendix D pages 19-20). This is likely to provide timely guidance and help determine any
needed project modifications during development, because the revisions will be based on input of families and informal educators who have used project resources in their development phase as well as expert reviews from content developers, scholars, and research consortium. This wide-ranging examination by varied types of users will be beneficial as the final project is developed.

The applicant identified objective performance measures in the evaluation plan. It plans to use validated measures of children’s executive functioning skills, such as cognitive flexibility, working memory, and inhibitory control to measure the impact of programming (pages 49-50, Appendix D pages 31-33). This will provide important information on project outcomes.

The evaluation for the proposed project is likely to produce evidence about the project's effectiveness that will meet the What Works Clearinghouse standards without reservations, because it uses random assignment, includes a plan for attrition, an appropriate sample size, an appropriate level of minimum detectable effect size, and a thorough plan for analyzing data (page 51, Appendix D pages 23-24).

Weaknesses:

It is unclear if the randomized control trial evaluation will be randomized at the family level or by site (pages 48-49, Appendix D pages 29-30). If families are randomly selected, those in the control group and the experimental group are likely to be in the same community and there may be cross-contamination. The applicant did not indicate how this will be addressed.

Reader's Score: 19
## Technical Review Coversheet

**Applicant:** Twin Cities Public Television, Inc (S295A200002)

**Reader #5:** **********

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(i) The extent to which the proposed project will provide services or otherwise address the needs of students at risk of educational failure.

(ii) The extent to which the proposed project involves the development or demonstration of promising new strategies that build on, or are alternatives to, existing strategies.

(iii) The extent to which the services to be provided by the proposed project involve the collaboration of appropriate partners for maximizing the effectiveness of project services.

Strengths:

A clear rationale for the need to teach executive functioning to young learners at risk for academic failure is presented in a clear, thoughtful manner. The argument presented for the need for these learners to improve their executive functioning skills in order to be better prepared for the future workforce is convincing. The description of the components of executive functioning and reports from research on the key executive functioning skills that companies consider critical was important to the case argument. These aspects of the narrative provided rationale for how this project could address the needs of young children at-risk for executive functioning difficulties, and the importance of addressing these needs at an early age.

The intentional use of intergenerational learning, and the use of community spaces where families and community members already gather are creative ways outlined by the project to meet the needs of the target community. These deliberate choices on the use of space and families within the community demonstrate an attempt to aid in community participation and involvement, as well as the learning of all community members, from young children to adults. Further the use of culturally responsive approaches (i.e., continual feedback from the community) and community collaboration (as demonstrated by the letters of support from a variety of partners) further extend the aim of effective project services and supports.

Collaboration with community members and other partnerships are described in order to reach larger audiences and increase the effectiveness of the project. The applicant described a plan to seek regular feedback from the community with regard to the program and product deliverables. Specifically, the applicant describes the use of advisory groups that include diverse families and informal educators to assist in the development and continuous review of the products. By soliciting regular feedback, and using the feedback to adapt or make appropriate changes to the products, this collaborative effort could assist in maximizing the effectiveness of the project.

Weaknesses:

Throughout the narrative, executive functioning behaviors are described through the lens of the majority, middle-class family perspective (i.e., children must wait their turn quietly and patiently). Because of their intentional focus on equity, one consideration that the applicant might want to further evaluate is the community members’ expectation on what executive functioning is, in particular the behaviors that young children need to learn in order to be considered a successful member of society with regard to executive functioning. This consideration of the relationship between executive functioning and cultural responsiveness (i.e., how executive functioning behaviors differ across cultures and
how the project will account for these differences) would add further to the significance of the application. It may be necessary to expand upon the definition of executive functioning and/or discuss how they will incorporate different cultures’ perspective of appropriate ‘executive-functioning-type’ skills.

Reader’s Score: 9

Selection Criteria - Quality of Project Design

1. The Secretary considers the quality of the design of the proposed project. In determining the quality of the design of the proposed project, the Secretary considers the following factors:

(i) The extent to which the proposed project represents an exceptional approach for meeting statutory purposes and requirements.

(ii) The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable.

(iii) The extent to which the proposed development efforts include adequate quality controls and, as appropriate, repeated testing of products.

Note: In responding to the Quality of the Project Design selection criterion, an applicant should include a detailed description of its proposal to develop and disseminate media and conduct outreach, as described in section 4643 (a)(1)(B)(i) through (v) of the ESEA.

Strengths:
The goals of the project are clearly defined, with the aim of improving children’s executive functioning in order to prepare them for future careers in the workforce of tomorrow. The focus of executive functioning as a means to support the future workforce is supported throughout the narrative and explanations of the deliverables of the project. The key strategies that aim to be utilized across project components are outlined, such as the use of evidence-based strategies and iterative review and improvement of products (pp. 9-10). This demonstrates the thoughtful, intentional approach the project staff aims to utilize when developing the project materials and products.

The applicant describes the three different deliverables they plan to create, and also outline these outputs in the logic model (p. 23). The overarching outputs are addressed, with a rationale for these specific deliverable products.

One important component discussed in the narrative was the use of parents and informal educators’ voices to develop the products of the project (p. 16). The applicant also notes that the professional development provided by the project staff will be iterative and use “feedback from participating educators” (p. 22). These intentional choices to regularly consult the targeted population for the product would allow for improvements to be made as appropriate throughout the project.

Weaknesses:
Additional consideration is warranted on the educational and instructional practices that the project would use to teach executive functioning. Specifically, the use of fictional jobs and components of the programs said to be ‘teaching’ executive functioning skills should be evaluated. For example, one of the executive functioning-supporting components of the games include earning tools to solve problems. It is unclear how this would support executive functioning (i.e., what skill do the children have to exhibit in order to ‘earn’ said tools). Instructionally, for children to gain the skills to complete these tasks independently in the future, it may be more appropriate to require the identification of tools that would be needed or engage in problem solving to find the tools independently. Similarly, since the aim is to prepare young children for the future workforce, it is logical to utilize real jobs and those that may be in demand in the future. A rationale for describing fictional jobs is necessary to support their use.

Though there are descriptions of the outputs/deliverable items the project aims to create, there are not specific goals and objectives and how they will reach these milestones in order to reach these goals. In essence, there are not goals and objectives described for all of the outcomes. The timeline of the project notes different milestones, but these milestones
are not described in enough detail to be measurable (p. 34). It is not clear how the major outcomes will be reached without these specific milestones established at the onset of the project.

Finally, though the voices of the population of interest will be included throughout the development process, less information regarding the use of repeated testing of products’ impact was included in the narrative.

This criterion was thoroughly discussed and my score reflects my professional assessment of this section.

Reader’s Score: 20

Selection Criteria - Strategy to Scale

1. The Secretary considers the applicant’s strategy to scale the proposed project. In determining the applicant’s capacity to scale the proposed project, the Secretary considers the following factors:

   (i) The applicant's capacity (e.g., in terms of qualified personnel, financial resources, or management capacity) to further develop and bring to scale the proposed process, product, strategy, or practice, or to work with others to ensure that the proposed process, product, strategy, or practice can be further developed and brought to scale, based on the findings of the proposed project.

   (ii) The likely utility of the products (such as information, materials, processes, or techniques) that will result from the proposed project, including the potential for their being used effectively in a variety of other settings.

Strengths:
The applicant describes a history of successful completion of similar projects to demonstrate their capacity to complete large-scale projects in a timely manner, while managing the corresponding budget (pp. 24-26, p. 33). Specifically, the applicant discussed the history of creating STEM-related media for children, and their success with these programs.

A dissemination plan, which includes television and digital media in addition to educational and professional outreach, describes a thoughtful plan for how to market the proposed project to a variety of audiences. The contingency plan in case the proposed partnership does not occur demonstrates thoughtfulness on how to ensure these products will be best brought to scale. Additional educational partnerships and collaborations were described, as well as the use of these partnerships to determining marketing strategies that aim to increase the utility of the products across different communities. Key partnerships described the professional dissemination efforts, as well as letters of support from these partners, highlighted the applicant’s effort to ensure the proposed product would be utilized and applicable to settings outside of their local community.

Weaknesses:
The applicant proposed a large-scale project, one that requires numerous personnel and resources to create and sustain. One question regarding the ability for the applicant to scale this project would be the sustainability of the project across time, specifically how the applicant will continue to improve the products developed early on, while developing the later proposed deliverables. There were numerous key positions that were not currently filled, and it is difficult to determine how long these positions will take to be filled, which may delay the development and, therefore, scale of the project.

The applicant describes a dissemination plan that relies heavily on partnerships to bring the project to a larger scale. Since a letter of support was not provided by either expected partner, it is difficult to determine how much trust can be placed in these partnerships. The applicant may want to include additional information that would support the likelihood these partnerships will reliably assist in the utility of these products to the larger community. One of the key components of the proposed project includes the use of community spaces to increase community outreach and involvement. Given the stay-at-home orders that are in place across the nation, it would be valuable for the applicant to include information on
how they will utilize the funds and personnel on the project to attempt to still reach these communities, while ensuring safety for project staff and the community.

This criterion was thoroughly discussed and my score reflects my professional assessment of this section.

Reader's Score: 20

Selection Criteria - Quality of Management Plan

1. The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:

(i) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks.

(ii) The qualifications, including relevant training and experience, of key project personnel.

(iii) The relevance and demonstrated commitment of each partner in the proposed project to the implementation and success of the project.

Strengths:

A clear and thorough logic model is presented to guide the practices to be utilized during the term of the proposed project. The budget narrative describes the use of funds across personnel and activity, with itemized descriptions for purchases anticipated throughout the course of the project. Appendix D focused on the research and evolution of the products, but gave a more descriptive picture of the timeline for developing each aspect of the product (i.e., when each product should be completed) than the narrative provided.

The roles and responsibilities of the key project members are thoroughly described within the narrative, along with their qualifications for such tasks. Further information regarding the professionals are included within their resumes and CVs. The numerous members of the project, including the project director and lead digital producer, who have been involved in similar successful projects (i.e., Hero Elementary) show that the members are qualified to work on the proposed program and have experience in successfully implementing educational media products for children.

The sample documents from previous projects provide exemplars for how the key professionals on the projects have previously worked together. The letters of support from numerous key partners, including the members of the advisory panel, demonstrate a commitment to the project. The variety of organizations that provided letters of support demonstrate the commitment from a diverse group of partners that support the success of the project.

Weaknesses:

Though general guidance was provided on the roles of each key member within the project, it was not clearly defined what responsibilities each member would take on. Specifically, the timelines and expectations from each member was not established within the application. Further information regarding the objectives for each outcome of the project, with corresponding team members responsible for these milestones, would aid in the management plan for the proposal.

The budget describes numerous key roles that have yet to be filled (e.g., research manager, outreach coordinator, etc.). It is not clear what the qualifications would be for these team members, nor the training and expertise that should be expected for them to have in order to be qualified for the position. The project narrative focuses continually on informal educators, though the target population span early childhood and elementary settings. It may be important, given the exemplars provided from previous projects, to include 'formal' educators (e.g., teachers, counselors, etc.) as advisors or stakeholders during the development or evaluation phases. This would allow for executive functioning skills to be taught across early childhood settings, further increasing the reach of the project.
Selection Criteria - Quality of Project Evaluation

1. The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:

(i) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

(ii) The extent to which the methods of evaluation will provide timely guidance for quality assurance.

(iii) The extent to which the methods of evaluation will, if well implemented, produce evidence about the project’s effectiveness that would meet the What Works Clearinghouse standards with or without reservations as described in the What Works Clearinghouse Handbook (as defined in 34 CFR 77.1(c)).

Note: We encourage applicants to review the WWC Procedures and Standards Handbook for technical assistance on evaluation: https://ies.ed.gov/ncee/wwc/Handbooks.

Strengths:
The project evaluation plan thoughtfully and thoroughly describes the evaluation activities, including the measures of executive functioning to be used and analytic techniques. Qualitative and quantitative data collection procedures were described, as well as the information aimed to be gained from these procedures. One innovative component of the evaluation plan includes the case study investigating the modifications that children and/or families use when engaging with the project content. This investigation could provide a great detail of knowledge to the research community as a whole, and is an impressive addition to the evaluation plan procedures.

Appendix D, which outlines the research plan, describes the use of iterative feedback throughout the length of the project, that could allow for improvements and changes to be made based on these finding. Though it was not clear in the narrative of the application the milestones for the different outcomes of the project (i.e., clearly defined goals and objectives for each milestone), the description of the evaluation activities provide guidance on how these activities could improve the products throughout the project timeline.

The evaluation plan states that they will use a randomized control trial to determine the impact of the proposed products, which could align with What Works Clearinghouse standards with or without reservations. A power analysis was done to determine the required sample size necessary to detect an effect, and the procedures outlined for the studies prior to the RCT demonstrate high-quality evaluation procedures (i.e., clearly defined timelines and methods; example p. 19-20). Additional information is necessary to determine the level of What Works Clearinghouse standard it would meet, though.

Weaknesses:
The sampling procedures, specifically the units of randomization and corresponding units of analysis, were difficult to determine in the proposal. The unit of randomization, and corresponding unit of analysis, would provide important information regarding the impact that could be determined from the proposed research. Further description here would aid in understanding of the project processes, as this information (i.e., individual- or cluster-level assignment) is necessary to evaluate the alignment of the research to What Works Clearinghouse standards.