

FY 2021 HSI STEM and Articulation Program Pre- Application Webinar

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Agenda

- ✓ Welcome
- ✓ Program Purpose
- ✓ FY 2021 Competition At A Glance
- ✓ Eligibility
- ✓ Priorities
- ✓ Selection Criteria
- ✓ Understanding Indirect Cost
- ✓ Allowable Activities
- ✓ Performance Measures
- ✓ The Logic Model and Evidence of Promise
- ✓ Questions from the Field
- ✓ Planning Your Grant Application
- ✓ Application Submission and Review



Program Purpose

- ▶ Title III, Part F (CFDA 84.031C)
- ▶ The Hispanic-Serving Institutions STEM and Articulation Program supports eligible Hispanic-Serving institutions in developing and carrying out activities to increase the number of Hispanic and low-income students attaining degrees in the fields of science, technology, engineering, and math (STEM); and to develop model transfer and articulation agreements between two-year HSIs and four-year institutions in such fields.



FY 2021 Competition At A Glance

- Application available: **April 30, 2021**
- Application deadline: **June 14, 2021**
- Estimated available funds: **\$94,100,000**
- Estimated range of awards: **\$700,000 – \$1,000,000 (per year)**
- Estimated average size of awards: **\$775,000 (per year)**
- Estimated number of awards: **96**
- Priorities
 - 1 Absolute Priority
 - 2 Competitive Preference Priorities
 - 1 Invitational Priority
- Unrestricted indirect cost rate allowed
- Do not exceed maximum award amount



Eligibility

- ▶ The institution must have been designated an “eligible institution,” for 2021 during the Title III and Title V eligibility process published in the Federal Register on March 3, 2021.
- ▶ To be an HSI, an Institution of Higher Education (IHE) must:
 - ▶ Have an enrollment of needy students as defined in section 502(b) of the HEA
 - ▶ Have low average education and general expenditures per FTE undergraduate student
 - ▶ Has an enrollment of undergraduate full-time equivalent students that is at least 25 percent Hispanic students

Absolute Priority

- ▶ **Absolute Priority (Required)**

Projects designed to increase the number of Hispanic and other low-income students attaining degrees in the fields of science, technology, engineering, or mathematics; and to develop model transfer and articulation agreements between 2-year Hispanic-Serving institutions and 4-year institutions in such fields.



Competitive Preference Priorities

- ▶ Competitive Preference Priority 1 – Fostering Flexible and Affordable Paths to Obtaining Knowledge and Skills (up to five (5) points)- Projects that are designed to address the following priority areas: Improving collaboration between education providers and students; and providing work-based learning experiences.
- ▶ Competitive Preference Priority 2 – Academic Achievement and Retention Strategies (up to five (5) points) - Projects designed to develop or enhance tutoring, counseling, and student service programs designed to improve academic success, including innovative and customized instruction courses (which may include remedial education and English language instruction) designed to help retain students and move the students rapidly into core courses and through program completion.



Invitational Priority

Invitational Priority (Optional)

- ▶ Invitational Priority – Providing Student Supports for Addressing the Impact of COVID-19 on Students' Mental Health and Academic Outcomes - Projects that will provide integrated student support services (also known as wrap-around services) for HSI STEM students to address mental health and academic support due to the COVID-19 Pandemic.



Selection Criteria

Selection Criteria	Maximum Points
Quality of the Project Design	30
Quality of Project Services	30
Significance	20
Quality of the Management Plan	10
Quality of the Project Evaluation	20
Total Maximum Score for Selection Criteria	110
Competitive Preference Priorities	10
Total Possible Score Per Application	120

Selection Criteria

A. Quality of the Project Design (maximum 30 points)

1. The extent to which the design of the proposed project is appropriate to, and will successfully address, the needs of the target population or other identified needs. (up to 15 points)
2. The extent to which the proposed project represents an exceptional approach to the priority established for the competition. (up to 5 points)
3. The extent to which the proposed project demonstrates a rationale. (up to 5 points)
4. The extent to which the proposed project is supported by promising evidence. (up to 5 points)



Questions to Consider- Project Design

- ▶ What are the issues the proposal is attempting to address?
- ▶ How do the issues, needs, and proposed activities relate to the purpose of the program and the targeted population?
- ▶ How will the applicant address the needs?
- ▶ How will the applicant address the priorities?
- ▶ How would the project be presented using a Logic Model?



Selection Criteria

B. Quality of Project Services (maximum of 30 points)

1. The quality and sufficiency of strategies for ensuring equal access and treatment for eligible project participants who are members of groups that have traditionally been underrepresented based on race, national origin, gender, age, or disability. (up to 10 points)
2. The extent to which services to be provided by the proposed project reflect up-to-date knowledge from research and effective practice. (up to 10 points)
3. The likely impact of the services to be provided by the proposed project on the intended recipients of those services. (up to 10 points)



Questions to Consider – Project Services

- ▶ Is the institution considering new and proven service models that will ensure that the goals of the proposed services/project are achieved?
- ▶ What gains are expected as a result of the proposed services/project ?
- ▶ What are the services and what's the intended outcome/impact?



Selection Criteria

C. Significance (maximum 20 points)

1. The potential contribution of the proposed project to increase knowledge or understanding of educational problems, issues, or effective strategies. (up to 5 points)
2. The likelihood that the proposed project will result in system change or improvement. (up to 15 points)



Questions to Consider - Significance

- ▶ What are the potential contributions to the field?
- ▶ If the project is successful, what improvements or systemic changes are expected?



Selection Criteria

- D. Quality of the Management Plan (up to 10 points)
1. 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. (up to 5 points)
 2. The extent to which the time commitments of the project director and principal investigator and other key personnel are appropriate and adequate to meet the objectives of the proposed project. (up to 5 points)



Questions to Consider – Management Plan

- ▶ How will the proposed project be managed and who will manage the various components?
- ▶ How will you ensure that the project is on schedule to meet the identified goals and objectives of the project?
- ▶ Have sufficient staff and time been committed to ensure that the identified goals and objectives are met?



Selection Criteria

E. Quality of the Project Evaluation (maximum 20 points)

1. The extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (up to 5 points)
2. The extent to which the methods of evaluation are thorough, feasible, and appropriate to the goals, objectives, and outcomes of the proposed project. (up to 5 points)
3. 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 Evidence Standards with reservations. (up to 10 points)



Questions to Consider – Project Evaluation

- ▶ What data collection tools will be used to determine whether the project is successful?
- ▶ What metrics will be used to measure progress?
- ▶ Are long- and short-term objectives clear and measurable?
- ▶ How will the evaluation be used to inform continuous improvement?



Understanding Indirect Cost

Indirect Cost

Applicable Indirect Cost Rate Type

- ▶ Unrestricted indirect cost rate
 - ▶ NIA initially stated a restricted indirect cost rate

Cognizant Agencies for Indirect Cost Institutions of Higher Education

- ▶ Department of Health and Human Services (DHHS)

(<https://rates.psc.gov/>)

or

- ▶ Office of Naval Research (ONR)

(<https://www.onr.navy.mil/en/work-with-us/manage-your-award/manage-grant-award>)

Regulation

- ▶ Uniform Guidance
 - ▶ 2 CFR 200 Subpart E

Departmental Regulations

- ▶ Education Department General Administrative Regulations
 - ▶ 34CFR 75.560 - 75.580
 - ▶ 34 CFR 76.560 - 76.580

Guidance

- ▶ Uniform Guidance Frequently Asked Questions updated

(https://www.cfo.gov/assets/files/2CRFFrequentlyAskedQuestions_2021050321.pdf)

Allowable Activities (20 U.S. Code § 1101b)

- ▶ Purchase, rental, or lease of scientific/laboratory equipment for educational, instructional, and research purposes;
- ▶ Construction, maintenance, renovation and improvement of instructional facilities;
- ▶ Support of faculty exchanges, faculty development, and faculty fellowships;
- ▶ Curriculum development and academic instruction;
- ▶ Purchase of library books, periodicals, and other educational materials;
- ▶ Tutoring, counseling, and student services designed to improve academic success;
- ▶ Articulation agreements and student support programs designed to facilitate the transfer from two-year to four-year institutions;
- ▶ Funds management.

Allowable Activities (20 U.S. Code § 1101b)

- ▶ Joint use of facilities, such as laboratories and libraries;
- ▶ Creating or improving facilities for Internet or other distance education technologies;
- ▶ Establishing or enhancing a program of teacher education;
- ▶ Establishing community outreach programs that will encourage elementary and secondary students to pursue postsecondary education;
- ▶ Expanding the number of Hispanic and other underrepresented graduate and professional students that can be served by the institution through expanded courses and resources;

Sample Activities

Academic Quality

- Improvement of basic skills courses
- Faculty development
- Curriculum Development

Student Services

- Counseling (career, peer, personal)
- Tutoring/mentoring
- Establishing learning communities
- Improvement of student facilities

Student Outcomes

- Improving student retention and graduation rates
- Increasing academic achievement

Fiscal Stability

- Establishing or improving a development office
- Strengthening Alumni relationships
- Building an endowment

Institutional Management

- Construction and renovation
- Improving the infrastructure for Internet access

ENDOWMENT FUND

- ▶ Is an investment instrument established by the applicant institution
- ▶ Generates institutional income
- ▶ Supports ongoing operations or other specified purposes with interest income generated by invested capital
- ▶ Is funded by donations, which are tax deductible for donors
- ▶ Does not include real estate
- ▶ You may assign **as much as 20%** of that year's grant funds to the Endowment Fund
- ▶ Endowments must match (cost-share) federal funds dollar-for-dollar
- ▶ You must invest both grant and matching funds for 20 years
- ▶ Up to ½ of the interest may be spent for 20 years
- ▶ Those interest funds may be used for scholarships

Performance Measures

The performance indicators for the HSI STEM and Articulation program are:

1. The percentage change, over the five-year grant period, of the number of Hispanic and low-income full-time STEM field degree-seeking undergraduate students enrolled.
2. The number and percent of Hispanic and low-income first-time, full-time STEM field degree-seeking undergraduate students who were in their first year of postsecondary enrollment in the previous year and are enrolled in the current year who remain in a STEM field degree/credential program.
3. The number and percent of Hispanic and low-income first-time, full-time degree-seeking undergraduate students enrolled at four-year HSIs graduating within six years of enrollment with a STEM field degree.



Performance Measures

4. The number and percentage of Hispanic and low-income first-time, full-time degree-seeking undergraduate students enrolled at two-year HSIs graduating within three years of enrollment with a STEM field degree/credential.
5. The number and percentage of Hispanic and low-income students transferring successfully to a four-year institution from a two-year institution and retained in a STEM field major.
6. The number of Hispanic and low-income students participating in grant-funded student support programs or services.



Performance Measures

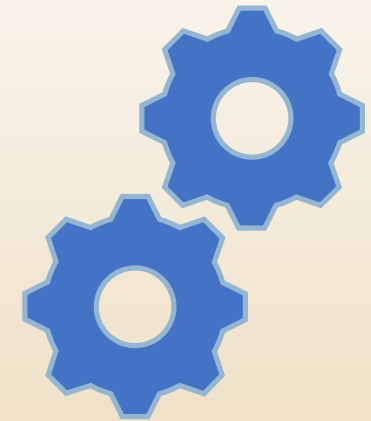
7. The number of Hispanic and low-income students who participated in grant-supported services or programs in good academic standing.
8. The percent of Hispanic and low-income students who participated in grant supported services of programs in good academic standing.
9. The number of Hispanic and low-income STEM field major transfer students on track to complete a STEM field degree within three years from their transfer date.
10. The number of Hispanic and low-income students who participated in grant-supported services or programs and completed a degree or credential.



The Logic Model and Evidence of Promise

Components of a Program Logic Model

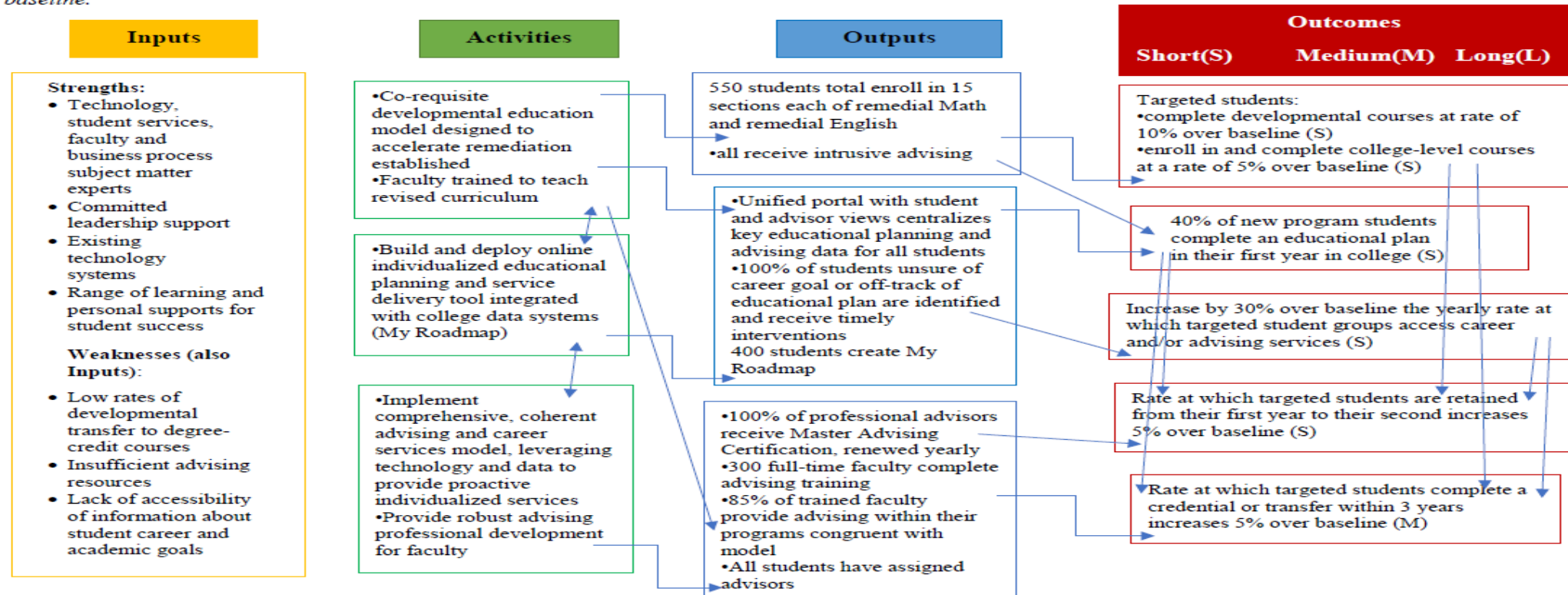
- ▶ **Resources:** materials to implement the program
- ▶ **Activities:** steps for program implementation
- ▶ **Outputs:** products of the program
- ▶ **Impacts on Outcomes:** changes in program participants' knowledge, beliefs, or behavior



Sample Logic Model

Logic Model

Overall Outcome/Goal: To increase developmental education completion by 40%; student persistence by 5%; graduation by 5% and transfer rates by 5% over the baseline.



Impacts:

- Increased enrollments and tuition revenue
- Sustainable IT infrastructure
- Institutionalized Faculty Advising
- More efficient use of advising resources
- Improved access and success for low-income and underrepresented students
- Transformed delivery of developmental education

Regional Educational Laboratory (REL) Resources on Logic Models

- ▶ *Logic Models: A Tool for Effective Program Planning, Collaboration, and Monitoring*
<https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=409>
- ▶ *Logic Models: A Tool for Designing and Monitoring Program Evaluations*
<https://ies.ed.gov/ncee/edlabs/projects/project.asp?ProjectID=404>
- ▶ *Logic Models for Program Design, Implementation, and Evaluation: Workshop Toolkit*
<https://ies.ed.gov/ncee/edlabs/projects/project.asp?ProjectID=401>
- ▶ *Education Logic Model* application for creating logic models:
<https://ies.ed.gov/ncee/edlabs/regions/pacific/elm.asp>

Evidence Levels in EDGAR

(Title 34 of Code of Federal Regulations, Part 77)

- ▶ **Evidence** goes beyond **theory** by having an **empirical basis** that a program works
- ▶ **EDGAR** distinguishes three levels of evidence:
 - ▶ *Evidence of Promise*
 - ▶ *Moderate Evidence of Effectiveness*
 - ▶ *Strong Evidence of Effectiveness*



What is Promising Evidence?

Promising evidence means there is evidence of the effectiveness of a key project component in improving a relevant outcome, based on a relevant finding from one of the following:

- a) a practice guide prepared by the WWC reporting a “strong evidence base” or “moderate evidence base” for the corresponding practice recommendation;
- b) an intervention report prepared by the WWC reporting a “positive effect” or “potentially positive effect” on a relevant outcome with no reporting of a “negative effect” or “potentially negative effect” on a relevant outcome; or
- c) a single study reviewed and reported by the WWC or assessed by ED, as appropriate, and that meets the two criteria for a single study in the EDGAR definition of promising evidence.

What level of evidence does an intervention meet?

► Edgar and Evidence: How has ED streamlined and improved the requirements?, 2018. Retrieved from <https://www2.ed.gov/about/offices/list/oese/oss/technicalassistance/edgarrevisionsfactsheet101617.pdf>, May 19, 2021.

LEVEL OF EVIDENCE FROM A SINGLE STUDY

Requirements	Strong	Moderate	Promising	Demonstrates a Rationale
Outcomes	At least one statistically significant <u>and</u> positive effect on a relevant outcome; no statistically significant and negative effects on a relevant outcome	At least one statistically significant <u>and</u> positive effect on a relevant outcome; no statistically significant and negative effects on a relevant outcome	At least one statistically significant <u>and</u> positive effect on a relevant outcome	Not Applicable
Study Design	Experimental study	Experimental study or quasi-experimental design study	Experimental study, quasi-experimental design study, or correlational study with statistical controls for selection bias	Logic model informed by research or evaluation findings
WWC Evidence Rating	Meets WWC without reservations	Meets WWC with or without reservations	Not Applicable	Not Applicable
Sample Size	A large sample (n = 350+) and a multi-site sample	A large sample (n = 350+) and a multi-site sample	Not Applicable	Not Applicable

So, what?

- ▶ To be supported by **promising evidence**, there must be at least one well-designed and well-implemented correlational study with statistical control for selection bias on the intervention. The Department considers a correlational study to be “well-designed and well-implemented” if it uses sampling and/or analytic methods to reduce or account for differences between the intervention group and a comparison group.
- ▶ A statistically significant and positive effect on the outcome.
- ▶ What is a correlational study?
 - ▶ An investigation of relationships between two or more variables.

Example 1. Does Supplemental Instruction (SI) increase the ABC rate in Intro to Chemistry?

Example 2. Do First-Year Experience courses increase first to second year student persistence?

Example 3. Does the Residential Learning Community for Biology students result in increased completion of introductory science coursework?

Summary: A Study Providing *Evidence of Promise*...

(NOT DEFINED BY THE WWC, but in Title 34 of Code of Federal Regulations, Part 77)


Investigates the **effect** of the **intervention** (or a key component) on a **relevant outcome**

Uses a **treatment group** and a **comparison group** to associate **differences** in outcomes with the intervention, while including **statistical controls for selection bias**

Shows a **statistically significant** or **substantively important** effect on a key outcome



Resources for Finding Relevant Studies

- Several resources to find studies are available at the **National Center for Education Evaluation and Regional Assistance** website (<http://ies.ed.gov/ncee/>):
 - The [*Education Resources Information Center*](#) (ERIC) contains a searchable digital database of studies
- ERIC
Institute of Education Sciences
- Other studies (and librarian assistance) are available through the [*National Library of Education*](#) (NLE)
- The **What Works Clearinghouse** has a [*Reviewed Studies Database*](#) listing studies reviewed by the WWC, describing the WWC rating of the study and the reason for the review (including links to any relevant [*WWC publications*](#) describing that review in greater detail)
- Regional Educational Library (Examples of Logic Models) - [*Education Logic Model - REL Pacific*](#)

Questions from the Field

May an applicant request less than the average award size?

- ▶ Yes. An applicant may request less than the average award size but cannot exceed \$1M.

Can an institution be the lead in more than one application?

- ▶ No. An institution may only receive one award, as the lead applicant.

If the lead applicant institution is an HSI, can they articulate with a non-HSI?

- ▶ Yes.

Questions from the Field

Could you clarify the eligible majors included as "STEM" in the HSI STEM, Title III Part F program?

- ▶ For the HSI STEM and Articulation (HSI STEM) program, "STEM" is an acronym for the following academic disciplines: Science, Technology, Engineering, and Mathematics. The HSI STEM program recognizes that there are integrated disciplines of STEM. Therefore, it is the responsibility of the applicant institution to clarify in the application how the proposed courses, majors, programs, etc. align with an academic discipline of STEM, as well as the HSI STEM program and priorities.

Questions from the Field

If an institution was not included on the list of HSIs but has data showing that it meets HSI criteria, where and/or how is the institution to provide this data to the USDE?

- ▶ The Notice Inviting Applications has information for applicants to submit enrollment information for eligibility purposes. Please note that in order for us to consider enrollment eligibility data, the institution must have been designated an “eligible institution,” for 2021 during the Title III and Title V eligibility process published in the Federal Register on March 3, 2021.

Questions from the Field

Criterion 2 under Quality of Management Plan refers to the "project director and principal investigator." Are projects expected to include both a Principal Investigator and a Project Director?

- ▶ No.

Can we give students stipends for lab work, research?

- ▶ Yes, stipends to students conducting research is allowable, but must be aligned to the program purpose and goals as it relates to this program.

Can we hire students for tutoring?

- ▶ Yes.

Questions from the Field

If in this cycle only individual development grants are being supported, can applicants partner with other institutions?

- ▶ Yes. Institutions may partner with other institutions to support the project design and services. Costs associated with the partner institutions can be included in the budget under “Other” or “Contractual.”

Is there a cost matching requirement? If so, are in-kind contributions acceptable as part of the grantee's match?

- ▶ If a grantee institution plans to fund an endowment as part of the approved grant activities, dollar-for-dollar match is required for each federal dollar used for that purpose. No other cost matching is required.

Questions from the Field

If an HSI already has a Title III, Part F and/or Title V HSI grant, can they still apply for this grant?

➤ Yes.

We are interested in pursuing another Title III, Part F when the competition opens. Would having a no-cost extension negatively impact or disqualify us from applying for a new grant award?

➤ No.

Questions from the Field: Evidence

Where do I find studies on evidence?

- ▶ What Works Clearinghouse Handbooks (WWC Handbooks) are the standards and procedures set forth in the WWC Standards Handbook, Versions 4.0 or 4.1, and WWC Procedures Handbook, Versions 4.0 or 4.1, or in the WWC Procedures and Standards Handbook, Version 3.0 or Version 2.1 (all incorporated by reference, see [§ 77.2](#)). Study findings eligible for review under WWC standards can meet WWC standards without reservations, meet WWC standards with reservations, or not meet WWC standards. WWC practice guides and intervention reports include findings from systematic reviews of evidence as described in the WWC Handbooks documentation.

Q&A



Planning Your Grant Application

- ▶ Identify goals for your proposed project, especially how they will focus on Hispanic student academic and career success.
- ▶ Analyze every proposed activity to ensure that it is attainable, meaningful, and measurable.
- ▶ Choose metrics and evaluation methods that will produce evidence about the project's effectiveness.
- ▶ Use the identified Performance Measures to build your project assessments.



- Use analysis and evaluation to identify institutional challenges or issues.
- Focus on the most well analyzed challenges or issues that confront your institution.
- Consider addressing challenges or issues that your institution will have to resolve regardless of Title III funding.
- Dedicate adequate resources and time to develop your funding application.

Planning Your Grant Application

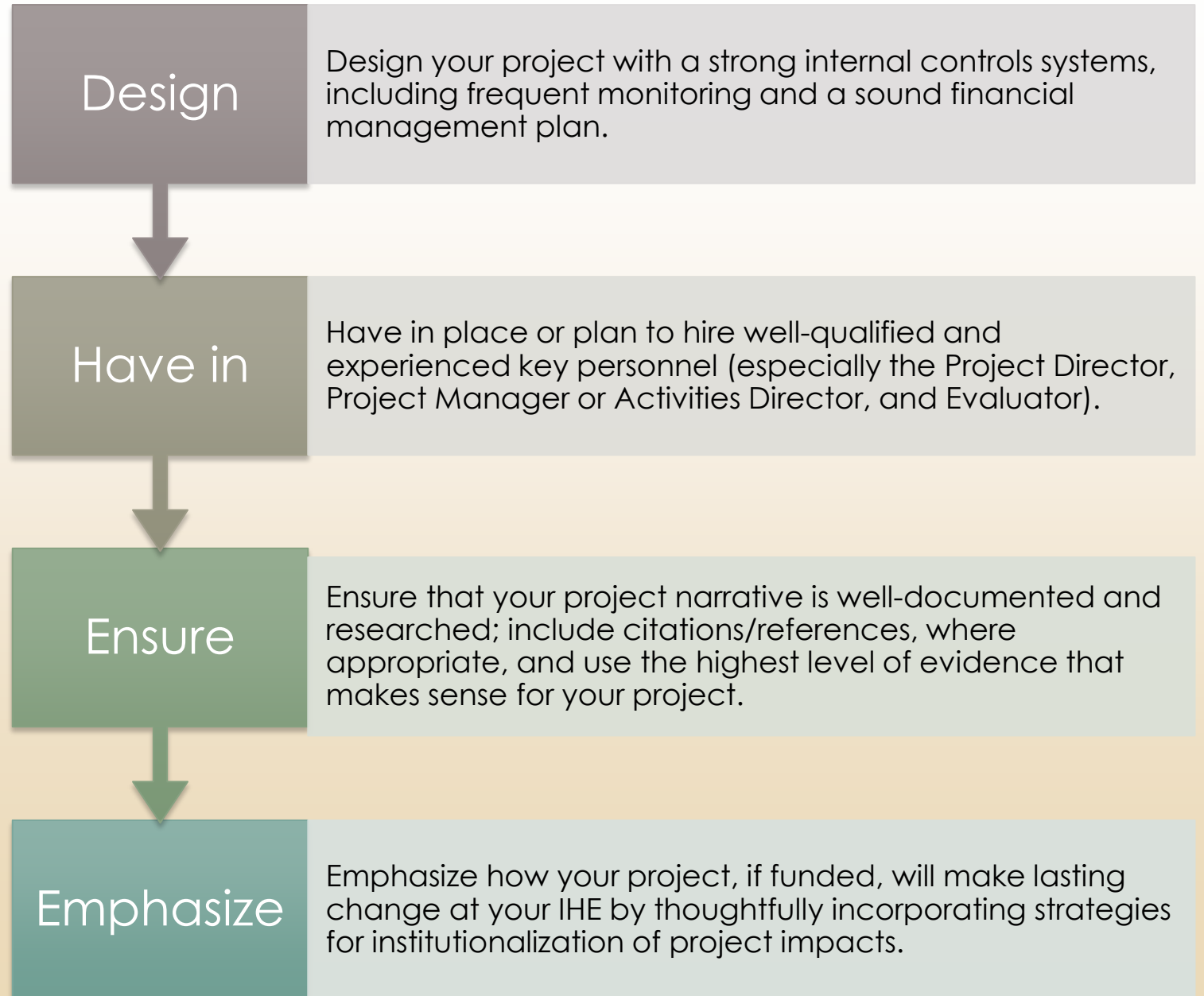


- ▶ Be realistic and straightforward about every aspect of your project design.
- ▶ Design activities and services that are manageable and directly address your identified challenges and issues.
- ▶ Know your budget and ensure that all costs are allowable (2CFR 200.403), allocable (2CFR 200.405), and reasonable (2CFR 200.404).
- ▶ Forecast and create an implementation and management plan that is realistic.

Planning Your Grant Application



Other Advice for Preparing a Strong Application



Logistical Advice

- ▶ Make sure you are properly registered in the **Grants.gov** system: <https://www.grants.gov/>, your AOR profile is current, and you are applying to the correct Grant Opportunity Number.
- ▶ Ensure that your IHE's **DUNS number** is up-to-date and active in SAM <https://www.sam.gov/SAM/>.
- ▶ Be aware that the DUNS number will be transitioning to a **Unique Entity Identifier (UEI)** in April 2022 (see here for more information: <https://www.gsa.gov/about-us/organization/federal-acquisition-service/office-of-systems-management/integrated-award-environment-iae/iae-information-kit/unique-entity-identifier-update>).
- ▶ **Submit your grant application EARLY!**

Call for Peer Reviewers

- ▶ Those interested in reading for any other programs having competitions in FY 2021 in the Office of Postsecondary Education must register or (if already registered) update their information in G5 at www.g5.gov.

Contact Information

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- ▶ Everardo Gil, Program Co-Lead

HSI STEM and Articulation Program Page: [Hispanic-Serving Institutions - Science, Technology, Engineering, or Mathematics and Articulation Programs \(ed.gov\)](#)

