**APPENDIX B**

**CROSSWALK BETWEEN EVALUATION QUESTIONS AND**

**SITE VISIT PROTOCOL QUESTIONS**

| **Evaluation Questions** | **PI /co-PIs** | **Staff**  | **Faculty** | **Students**  | **Administrators** | **Partners** |
| --- | --- | --- | --- | --- | --- | --- |
| 1) How is the CPATH program (a) infusing computational thinking into a wide range of disciplines serving undergraduate education and (b) reaching a wide range of students to prepare them for STEM careers? |
| 1. What are the curricular and pedagogical models that have been created and developed through this program?
 | 4 | 4 | 4 | 1,2 | 4 | 3 |
| 1. How, and to what extent, are the individual CPATH projects being implemented as planned?
 | 8 | 8 | 8 |  | 6 |  |
| 1. How has the CPATH program supported the formal identification and specification of the core elements and competencies of computational thinking?
 | 5 | 5 | 5 | 6 |  | 5 |
| 1. What are the factors that have supported successful implementation of strategies?
 | 10 | 11 | 10 |  | 8 |  |
| 1. What do institutional leaders understand about the goals of the CPATH program and project(s)?
 | 9,10 | 9 | 10 |  | 4,8 |  |
| 1. Who is benefitting from the projects? Students? Faculty? Departments?
 | 7 | 7 | 7 | 3,7 | 5 | 4 |
| 1. How successful has the program been in targeting and engaging traditionally underrepresented groups (i.e., minorities, females, disabled and non-traditional computer majors) in classes or programs that promote computational thinking?
 | 7 | 7 | 7 | 5 | 5,11 |  |
| 2) What is the evidence that university and community college departments and faculty are integrating computational thinking into their courses? |
| 1. What have been the program’s successes and highlights across projects in integrating best practices in computational thinking into courses across disciplines? What patterns do these indicate?
 | 6,10 | 6 | 6 | 4,5,7 | 8 | 6 |
| 1. What have been the program’s barriers and challenges across projects to infusing computational thinking across disciplines? What patterns do these indicate?
 | 6, 8 | 8 |  6,8 |  | 6 | 7 |
| 1. What do institutional documents (course catalogues, outlines of departmental majors, etc.) reveal about how IHEs are adapting to change by integrating computational thinking across the disciplines?
 |  |  |  |  | 12 |  |
| 1. To what extent do faculty within university and community college departments produce educational scholarship to support grassroots efforts to promote computational thinking in and across the undergraduate curriculum?
 | 12 |  | 11 |  | 10 |  |
| 1. What are the different social and resource supports within departments available to faculty bolstering their curricular reform efforts around computational thinking?
 | 9 |  | 9 |  | 7 |  |
| 3) What is the evidence that the program is supporting the development of promising models of institutional change? |
| 1. How is the program supporting increases in student enrollment and course taking in computing over time?
 | 12 | 7 | 11 | 5,8 | 10 |  |
| 1. How is the program catalyzing institutional change through faculty and administrative leadership governance in IHEs?
 | 11,13 | 10 | 12 |  | 11 |  |
| 1. To what extent has the program influenced faculty culture and the rewards/incentive structure of IHEs?
 | 9,11,13 | 10 | 9,12 |  | 7,11 |  |
| 1. What are some examples of promising models developed for infusing computational thinking across disciplines and institutions?
 | 4,14 | 4 | 13 |  | 4,12 | 3,8 |
| 1. How have grantee institutions leveraged grant resources to support and sustain their reform models over time?
 | 11 | 12 |  |  | 9 |  |
| 1. How are promising models sustained and replicated in new institutional settings?
 | 14 |  | 13 |  | 12,16 | 15 |
| 4) What is the evidence that the program is developing communities of practitioners (among the different program stakeholders) that regularly share best practices across communities? |
| 1. How is the program supporting community building to share best practices in computational thinking?
 | 15 |  | 14 |  | 13 | 9 |
| 1. How has the program promoted the continued growth of the community of practitioners outside of the formal CPATH grantees?
 | 15 | 13 | 14 |  | 13 | 14 |
| 1. How have the program’s grantees contributed to a common understanding of computing competencies among the different stakeholder groups?
 | 15 |  | 14 |  | 13 | 10 |
| 1. How is the program supporting the inclusion of different stakeholders in these learning communities around computational thinking and education?
 | 15 |  | 14 |  | 13 |  |
| 1. What role has the program played in promoting shared learning about computational thinking among industry and professional/disciplinary associations?
 |  |  |  |  |  |  10 |
| 1. To what extent is the program creating strong links and synergy among the grantees involved in collaborative activities?
 | 20 |  |  |  |  | 11 |
| 5) How has the CPATH program promoted sustainable multi-sector partnerships that represent a broad range of stakeholders (i.e. industry, higher education, K12)? |
| 1. To what extent have the program’s grantees created opportunities to develop multi-sector partnerships around computational thinking?
 | 17 |  14 | 15 |  | 14 | 12 |
| 1. How has the program supported pre-existing relationships between different sectors and promoted further buy-in to develop strong alliances around computational thinking?
 | 18 |  15 | 16 |  | 15 |  13 |
| 1. How has the program shaped the goals and theories of change of the different partnerships supporting computing education?
 | 18 |  15 | 16 |  | 15 | 13 |
| 1. What has the program done to define the roles, processes, and outcomes generated by the partnerships it supports?
 | 19 |  16 | 17 |  |  | 14 |
| 1. What has the program done to sustain multi-sector partnerships that hold promise for infusing computational thinking throughout the field?
 | 20 |  |  |  | 16 | 15 |