Revised BPC Pilot PI Survey (September 1, 2022)

This survey asks you about your experiences in completing a broadening participation plan (BPC) as part of your recent CISE grant. Westat, an independent research organization, has been contracted by NSF to conduct an evaluation of the CISE BPC Pilot. This survey is a key component of the evaluation and is designed to gather information directly from PIs about their experiences with developing and implementing their BPC plans You are being asked to complete this survey because you have been the PI on a CISE project that required a BPC plan. Specifically, this survey asks about your experiences as the PI on award # [insert award number].

If your award is part of a collaborative project, please note that the PI from each institution included in the collaborative project is being asked to complete the survey. However, your responses on the survey should focus on the BPC activities that you and/or your institution have carried out.

Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-XXXX. This survey is designed to be completed in about 30 minutes and addresses the following topics:

- Your prior experience with efforts to broaden participation in computing
- The development of your BPC plan
- The current status of your BPC activities
- Outcomes that occurred as a result of your BPC work

The Westat team will summarize the results from the survey in a report that will be provided to NSF. While your responses on the survey will be identifiable to Westat, the focus of the reporting will be on overall results. Westat will not report any individual survey responses to NSF nor will it release any information about individuals completing the survey to anyone outside their organization.

Your participation in this survey is voluntary but we hope that you will share your thoughts with us by answering every question carefully and accurately. If you decide you no longer want to participate, you may exit the survey at any time.

If you have any questions about your participation in the survey or the survey process, please contact [insert Westat name and contact info here].

We understand that you have many obligations, and on behalf of NSF, we appreciate your willingness to share your feedback.

By clicking on the "Begin Survey" button below, you are providing your consent to participate in this survey.

A: Prior Experience and Interest with BPC

The first set of questions asks about your prior experience with efforts to broaden participation in computing.

- 1. What was your level of interest in participating in BPC efforts prior to preparing your BPC plan for [INSERT NAME OF PROJECT]? (select <u>one</u>)
 - □ Not at all interested
 - □ Somewhat interested
 - □ Very interested
- 2. What was your level of BPC expertise prior to preparing your BPC plan? (select one)
 - □ None
 - □ Beginner (e.g., BPC was new to me, and I was early in my learning process)
 - □ Competent (*e.g.*, *I* was a strong contributor to BPC efforts)
 - Expert (e.g., I was able to serve as a subject-matter expert on BPC)

3. Had you participated in any broadening participation in computing efforts prior to preparing your BPC plan? (select one)

- □ Yes
- I No

B: Development of BPC Plan

The next set of questions asks about the development of your BPC plan.

4. What resources did you use when preparing your BPC plan for [INSERT NAME OF PROJECT]? (check <u>all</u> that apply)

- Diversity office at the PI's and/or Co-PI's home institution/department
- Research or grant office at the PI's and/or Co-PI's home institution/department
- □ BPC experts at the PI's and/or Co-PI's home institution
- □ Other colleagues at the PI's and/or Co-PI's home institution
- □ BPCnet website
- BPCnet consultants (About BPCnet | BPCnet Resource Portal
- □ Other BPC experts or consultants
- □ NSF program officer
- □ Materials on the NSF website
- □ Materials on another website (specify)_____
- Other (specify)
- □ None

Ask Q5 for each item checked

5. How useful was *this* resource in developing your overall BPC plan? (check <u>one</u>)

- \Box Not at all useful
- □ Somewhat useful
- □ Very useful
- □ I do not remember

6. Did your department have a BPC Departmental Plan at the time you prepared your BPC plan? (check one)

- ☐ Yes (ask Q7)
 ☐ No (proceed to Q8)
- \square Don't know (proceed to Q8)

7. To what extent do you agree with the following statements about your BPC Departmental Plan?

Select <u>one</u> response per item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
My project's BPC plan leveraged key elements of my department's Departmental Plan					
I have been able to use key elements of my department's Departmental Plan in my own BPC work					
My BPC efforts are stronger because of my department's Departmental Plan					

8. To what extent do you agree with the following statements about the level of guidance offered to PIs in preparing a BPC plan?

Select <u>one</u> response per item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
There was sufficient information about what to include in the BPC plan					
There was sufficient guidance on how BPC is different from broader impacts					
There were sufficient examples of what constitutes an acceptable BPC plan					
There were sufficient examples of strategies that reflect literature on best BPC practices					

C: Current Status of your BPC Work

This next set of questions asks about the current status of implementing your BPC plan for [INSERT NAME OF PROJECT]

9. Which of the following underrepresented populations has your project engaged? (check <u>all</u> that apply)

- □ Women
- □ Blacks and African Americans
- Hispanics and Latinos
- □ American Indians
- □ Alaska Natives
- □ Native Hawaiians
- □ Other Pacific Islanders
- □ Persons with disabilities
- □ Other (specify): _____

- **10.** How many of the following participant types has your project *directly* engaged during activities associated with your BPC plan? (provide a number for each participant type, enter 0 if none)
 - *Direct* refers to participants targeted by BPC strategies (If possible, please provide an unduplicated count (i.e., only count educators and students once—even if they participated in multiple activities).

Participant type	Approximate number reached directly
K-12 students (ask Q11a and Q13a if 1 or more)	
Undergraduate students working towards an Associate's degree (ask Q11b and Q13b if 1 or more)	
Undergraduate students working towards a Bachelor's degree (ask Q11b and Q13b if 1 or more)	
Graduate students working towards a Master's degree (ask Q11b and Q13b if 1 or more)	
Graduate students working towards a PhD (ask Q11b and Q13b if 1 or more)	
Postdoctoral fellows or researchers (ask Q11b and Q13b if 1 or more)	
K-12 teachers (ask Q11c and Q13c if 1 or more)	
K-12 administrators <i>(ask Q11c and Q13c if 1 or more)</i>	
Other K-12 professional staff (ask Q11c and Q13c if 1 or more)	
Postsecondary faculty (ask Q11d and Q13c if 1 or more)	
Postsecondary administrators (ask Q11d and Q13c if 1 or more)	
Other postsecondary professional staff (ask Q11d and Q13c if 1 or more)	
Other (specify):	

11a. (*Only ask if Q10 is 1 or more for K-12 students*) Please indicate whether your project has done or plans to do each of the following BPC activities aimed at *K-12 students*:

Conduct or participate in a/an (select <u>one</u> response per activity)	Activity not applicable to this project	Activity was planned, but did not happen	Activity is planned, but has not begun yet	Activity underway	Activity completed
Class or course (e.g., semester or yearlong)					
One-time instructional activity (e.g., <i>lecture, seminar, webinar, workshop</i>)					
Research experience					
Mentoring program					
Summer program/summer camp					
Internship program					
College fair/information session					
Conference/meeting					
Competition/award event (e.g., hackathon)					
Supporting attendance at conferences, events, etc.					
Other (specify)					

11b. (Only ask if Q10 is 1 or more for any of the categories associated with postsecondary students) Please indicate whether your project has done or plans to do each of the following BPC activities aimed at undergraduate students, graduate students, and/or postdoctoral fellows or researchers:

Conduct or participate in a/an (select <u>one</u> response per activity)	Activity not applicable to this project	Activity was planned, but did not happen	Activity is planned, but has not begun yet	Activity underway	Activity completed
Class or course (e.g., semester or yearlong)					
One-time instructional activity (e.g., <i>lecture</i> , <i>seminar</i> , <i>webinar</i> , <i>workshop</i>)					
Research experience					
Mentoring program					
Summer program/summer camp					
Internship program					
Conference/meeting					
Competition/award event (e.g., hackathon)					
Supporting attendance at conferences, events, etc.					
Job fair					
Other (specify)					

11c. (Only ask if Q10 is 1 or more for any of the categories associated with K-12 teachers) Please indicate whether your project has done or plans to do each of the following BPC activities aimed at K-12 teachers, administrators, and/or other professional staff:

Conduct or participate in a/an (select <u>one</u> response per activity)	Activity not applicable to this project	Activity was planned, but did not happen	Activity is planned, but has not begun yet	Activity underway	Activity completed
Class or course					
One-time instructional activity (e.g., <i>lecture</i> , <i>seminar</i> , <i>webinar</i> , <i>workshop</i>)					
Research experience					
Mentoring program					
Summer program					
Conference/meeting					
Supporting attendance at conferences, events, etc.					
Other (specify)					

11d. (Only ask if Q10 is 1 or more for any of the categories associated with postsecondary faculty) Please indicate whether your project has done or plans to do each of the following BPC activities aimed at post-secondary faculty, administrators, and/or other professional staff:

Conduct or participate in a/an (select <u>one</u> <i>response</i> per activity)	Activity not applicable to this project	Activity was planned, but did not happen	Activity is planned, but has not begun yet	Activity underway	Activity completed
Class or course					
One-time instructional activity (e.g., lecture, seminar, webinar, workshop)					
Research experience					
Mentoring program					
Summer program					
Conference/meeting					
Supporting attendance at conferences, events, etc.					
Other (specify)					

12. Have you encountered any of the following challenges in implementing your BPC plan?

Select <u>one</u> response per item	Not a challenge	Minor challenge	Moderate challenge	Major challenge
Lack of time to conduct BPC activities				
Lack of resources to conduct BPC activities				
Lack of BPC support from my Co-PIs				
Lack of BPC support from my home institution				
Difficulty recruiting participants from underrepresented groups				
Difficulty measuring the outcomes of our BPC activities				
Inability to conduct in-person activities due to COVID				
Inability to perform other BPC-related activities due to COVID				

D: Outcomes that Occurred as a Result of Your BPC Work

This next set of questions asks about the status of the outcomes associated with the BPC plan for [INSERT NAME OF PROJECT]

13a. (Only ask if Q10 is 1 or more for K-12 students) Please indicate the extent to which your project has observed progress on the following types of BPC outcomes for K-12 students:

Select <u>one</u> response per outcome	Outcome not applicable to this project	Don't know	Observed initial progress toward this outcome	Observed modest progress toward this outcome	Observed substantial progress toward this outcome
Enhance K-12 students' awareness, perceptions, and/or understanding about computer science as a field					
Enhance K-12 students' skills regarding specific computer science concepts/topics					
Enhance K-12 students' enthusiasm, engagement, or interest about computer science					
Enhance K-12 students' sense of belonging and confidence in the computer science field					
Increase in high school students taking/completing AP CS A class					
Other K-12 students' outcomes (specify)					

13b. (Only ask if Q10 is 1 or more for any of the categories associated with postsecondary students) Please indicate the extent to which your project has observed progress on the following types of BPC outcomes for undergraduate students, graduate students, and/or postdoctoral fellows or researchers:

Select <u>one</u> response per outcome	Outcome not applicable to this project	Don't know	Observed initial progress toward this outcome	Observed modest progress toward this outcome	Observed substantial progress toward this outcome
Enhance post-secondary students' awareness, perceptions, and/or understanding about computer science as a field					
Enhance post-secondary students' skills regarding specific computer science concepts/topics					
Enhance post-secondary students' enthusiasm, engagement, or interest about computer science					
Enhance post-secondary students' sense of belonging and confidence in the computer science field					
Increase number and diversity of post- secondary students majoring in a computer science field					
Increase number and diversity of post- secondary students obtaining an associates' degree in computer science					
Increase number and diversity of post- secondary students obtaining an undergraduate degree in computer science					
Increase number and diversity of post- secondary students obtaining a masters' degree in computer science					

Select <u>one</u> response per outcome	Outcome not applicable to this project	Don't know	Observed initial progress toward this outcome	Observed modest progress toward this outcome	Observed substantial progress toward this outcome
Increase number and diversity of post- secondary students obtaining a PhD in a computer science field					
Increase number and diversity of college graduates obtaining employment in a computer science field					
Other postsecondary students' outcomes (specify)					

13c. (Only ask if Q10 is 1 or more for any of the categories associated with K-12 teachers and postsecondary faculty) Please indicate the extent to which your project has observed progress on the following types of BPC outcomes for *educators and/or other staff*:

Select <u>one</u> response per outcome	Outcome not applicable to this project	Don't know	Observed initial progress toward this outcome	Observed modest progress toward this outcome	Observed substantial progress toward this outcome
Increase K–12 teachers' and/or other staffs' knowledge or skills/instructional practice					
Enhance post-secondary faculty's and/or other staffs' knowledge or skills/instructional practice					
Influence post-secondary faculty's and/or other staffs' beliefs and/or attitudes about computer science					
Enhance faculty retention in computer science					
Increase the number of underrepresented faculty members who apply, receive interviews, and are hired					
Other educator outcomes (specify)					

E: Attitudes Regarding BPC and Participation in Future BPC Work

This final set of questions asks about your attitudes regarding BPC and your interest in participating in future efforts to broaden participation in computing.

14. To what extent do you agree with the following statements about your beliefs regarding BPC:

Select <u>one</u> response per item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I am more confident in my ability to develop and plan for BPC activities as a result of my work on this project.					
I am more confident in my ability to support BPC efforts as a result of my work on this project					
The work of this project has had a positive impact on my department's efforts to broaden participation in computing					
The work of this project has increased interest among my departmental peers to broaden participation in computing					

15. What is your current level of BPC expertise? (select one)

- □ None
- Beginner (e.g., BPC is new to me, and I am early in my learning journey)
- □ Competent (*e.g.*, *I am a strong contributor to BPC efforts*)
- □ Expert (e.g., I could serve as a subject-matter expert on BPC)
- **16.** Since beginning your BPC work on *this* project, have you participated in (or plan to participate in) other efforts to broaden participation in computing? (*check all that apply*)
 - \square I have already participated in other BPC efforts
 - \square I plan to participate in other BPC efforts going forward
 - □ I do not plan to participate in future BPC efforts

17. Do you have any recommendations for CISE's future efforts to broaden participation in computing?

Thank you for completing this survey. We are compiling responses from multiple CISE research projects and look forward to adding your input to that analysis.