Sustaining a GK-12 Program

The Vanderbilt Scientist in the Classroom Partnership

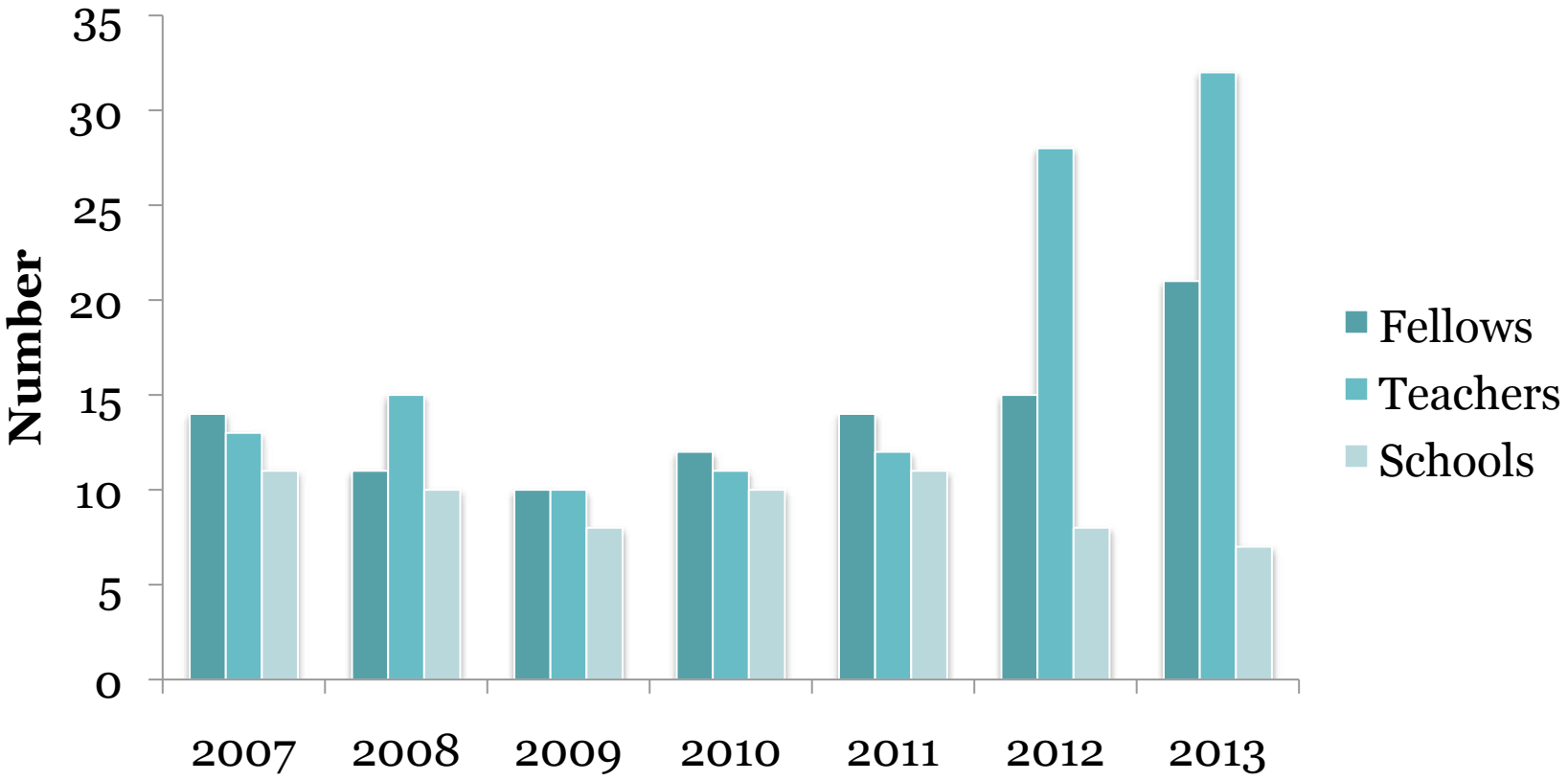
The Vanderbilt GK-12/SCP Program

- The Vanderbilt Scientist in the Classroom Partnership (SCP) began as an NSF-funded GK-12 program in 2000
- After seven years of NSF support, the program transitioned to the SCP in 2007
- Now in its 13th year, the GK12/SCP program has supported 121 Fellows working with 120 teachers in 5 high schools, 27 middle schools, and one elementary school.
- Fellows are recruited from all STEM disciplines at the M.S., Ph.D., and postdoctoral levels

GK12/SCP Partners

Partner Institution	Description	Years
Vanderbilt University	Private, Research I University	2000-present
Meharry Medical College	Private, Historically Black Medical College	2000-present
Tennessee State University	Public, Minority-serving university	2004-present
Fisk University	Private, HBCU	2007-present
Metropolitan Nashville Public Schools	Urban public K-12 school district	2000-present

SCP Participants: 2007-present



Vanderbilt Center for Science Outreach
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Transitioning from GK-12 to SCP: Programmatic Changes

		GK-12 2000-2007	SCP 2007-present
Program Components	In-classroom co-teaching	2 days per week	1 day per week
	Summer workshop	4 weeks	2 weeks
	Fellow seminar	Bimonthly	Monthly
Participants	Scientists	Graduate students	Graduate students and postdocs
	Teachers	Grades 5-12	Grades K-12
Stipends	Scientists	$25,000-30,000	$5,000-7,500
	Teachers	$3,000-4,000	$1,000-1,500
Funding		NSF	School district plus universities

Transition from GK-12 to SCP: A Supplemental Stipend Model

- This supplemental stipend model emerged from an idea originally suggested early in the GK–12 program by a group of PIs interested in sustaining their in-classroom programs
- We have proposed that funding agencies could establish a Teaching Experience for Fellows (TEF) program based on the supplemental stipend model (cost: $10,000 Fellow-Teacher Team)

Keys to Sustainability

"Finding ways to nurture and sustain partnership activities beyond the initial grant period is one of the greatest challenges and obstacles to the success of partnerships."

Moreno CBE Life Sci Educ (2005)

- Integrating program activities into the academic fabric of both the university and the K-12 school district
- Building the infrastructure necessary to support the activities and secure funding to continue
- Developing the trust and lasting relationships necessary to sustain the program through a myriad of administrative changes in the universities and the school district
- Implementing a program with benefits for all partners

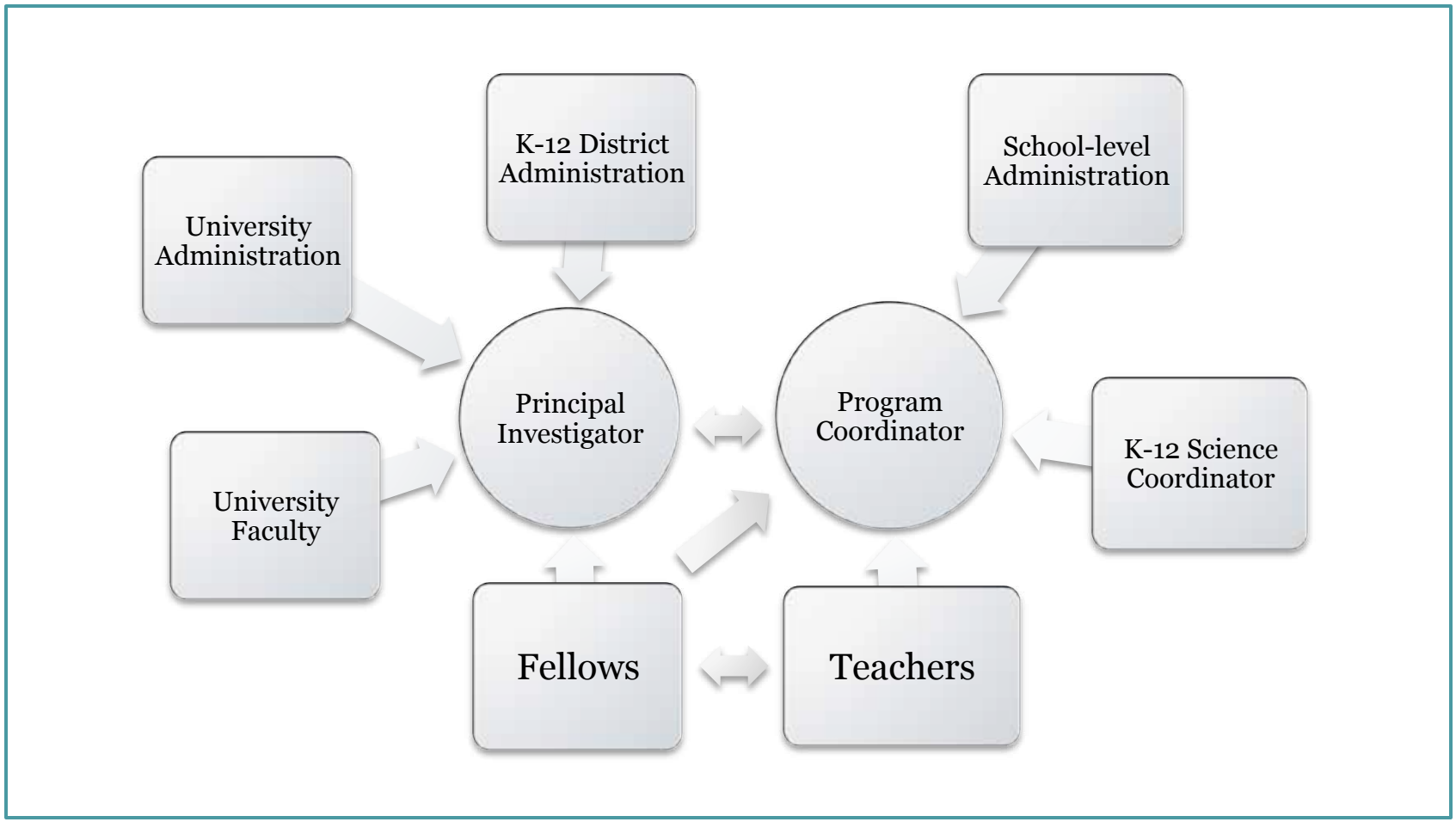
Build a Strong Fellow-Teacher Co-Teaching Model

- Teachers gain content knowledge and enhanced confidence in teaching science from Fellows
- Fellows gain teaching, mentoring and communication skills from partner Teachers

Maintain Continuity of Key Program Staff

- Program Director/Principal Investigator
  - Both Vanderbilt and Meharry PIs have remained the same since 2000
- Program Coordinator
  - Two MNPS teachers have served as program coordinators during the 13 year GK-12/SCP program

Build Strong Relationships and Trust



Carefully Select Teachers and Scientists that Result in Effective Classroom Teaching Teams

- Observe Teachers in the classroom to identify teaching styles and strong classroom management skills
- Recruit Fellows with a desire to gain teaching experience, and have a passion for increasing STEM literacy, excitement, and interest in children

Align the Program with the Goals of the Partner K-12 District

- Assure that teachers and school administrators view this as a positive for their classroom and not an "add-on"
- Align the program activities with the curriculum and standards for each grade level
- Adapt the model to changing district goals
- Work with district-level administrators to integrate the program into their STEM reform initiatives

Design a Program that Provides Benefits to All Partners

- Are there graduate training programs at the university that will integrate a GK-12-like model?
- Could this be an innovative teacher certification model for Ph.D. scientists?
- Are there areas of the district STEM curriculum that would benefit from partnerships with scientists?
- Can this be a new and innovative approach to "on-the-job" professional development for STEM teachers?

Ensure That all Partners Are Committed to Continuing the Program

- Universities must recognize the value of the program in providing training relevant to their future STEM careers
- K-12 districts must recognize the value of the program for their teachers and students

Develop a Feasible Sustainability Plan During the Planning and Implementation Phases

- Consider different options for continuing the program beyond the grant funding that is supported by all partners
- Discuss this plan with partners to ensure that it is within the mission of all institutions
- Consider models that have been used by other programs – e.g. service learning or teacher education programs at the university
- Build a "portfolio" of funding that involves funding from a variety of sources