

## Supplement to Using Summer Research to Attract Pre-College Underrepresented Students to STEM Fields

Table 1. St. Cloud pre-college programs and participants' demographic profiles.

	Math- Science- Computer Camps	Scientific Discovery Program	Advanced Program in Technology and Science	All Programs
Inception	1987	1991	2000	
Years of Operation (Between inception and 2010)	24	18	10	
Grade Levels Served	2nd to 8th	9 <sup>th</sup> , 10th	10th - 12th	
Demographic Profiles				
Total Number of Participants	2,798	374	113	3,110
Gender	(in %)	(in %)	(in %)	(in %)
Female	58	61	53	58
Male	42	39	47	42
Ethnicity	(in %)	(in %)	(in %)	(in %)
African/African American	47	46	52	46
American Indian	5	2	1	4
Asian/Asian American/Pacific Islander	11	16	15	11
Latino	5	5	8	5
Multiple Heritage	14	5	6	13
White	18	24	18	20
Other/Not Reported/Unknown	1	1		1
Participant Income Levels	(in %)	(in %)	(in %)	(in %)
Low	56	26	32	54
Medium	26	25	36	14
High	9	17	29	19
Not Reported	10	32	3	13
Geographic Information	(N)	(N)	(N)	(N)
Cities and Towns	210	113	51	264
States Represented	21	22	10	30
Countries	1	3	3	5
Percent Minnesota Residents	98%	93%	83%	96%
Participation Rate	(in %)	(in %)	(in %)	(in %)
Once	72	100	84	72
Two or more times	28	Not Applicable	16	28
From		To		
# from Other Pipeline Programs	MSCC	SDP	APTS	
MSCC		104	33	
SDP			54	
APTS				
From		To		
% from Other Pipeline Programs	MSCC	SDP	APTS	
MSCC		28%	29%	
SDP			47%	
APTS				

**Table 2. College enrollment of pipeline participants by control and level of institution.**

All Students (N = 884)	Control (% of Students Attending Public, Private Institutions, or Both Types)			
Level (% of Students Attending 2-Year, 4-Year Institutions, or Both)	Public Only	Private Only	Both	Total Level
2-Year Only or Less*	29%	1%	1%	30%
4-year Only	27%	12%	10%	48%
Combination of 2-Year and 4-Year	12%		10%	22%
Total Type of Control	67%	13%	20%	100%
*Two students enrolled in one-year programs. One of them also attended a two-year institution.				

**Table 3. Undergraduate enrollment by race/ethnicity and institution type (in percentages).**

	Pipeline Sample				Minnesota*		National**	
Racial/Ethnic Group	N=	Only 2-Year or Less	2-Year and 4-Year	Only 4-Year	2-Year or Less	4-Year	2-Year or Less	4-Year
American Indian	16	69	12	19	60	40	50	50
Asian	101	28	25	47	47	53	46	54
Black	416	31	20	49	69	31	46	54
Latino	27	33	22	44	53	47	51	49
White	218	25	23	51	44	56	40	60
Multiple Heritage	104	36	22	42	Not Available		Not Available	
* Source: (Minnesota Office of Higher Education 2009, data for fall 2007 )								
**Source: (National Science Foundation 2009). Data from Tables B-3 and B-4 used to calculate the mean percentage of total enrollment between 2-year and 4-year institutions between 1998 and 2006.								

Table 4. Fields of study of pre-college pipeline participants with earned academic credentials\*.

	N=	Percent
<b>Non-STEM</b>		
Arts, Humanities, Communications	42	20
Business	29	14
Education	11	5
Vocational-Technical	2	1
<b>STEM and Related</b>		
Computer Science, Engineering, Technology, Mathematics	12	6
Life or Physical Sciences	29	14
Psychology, Social or Behavioral Sciences	64	30
Health, Medicine, Nursing	21	10
	210	100
*If a person holds more than one credential and one is in a STEM or health-related field, the person is counted in that category. For example, a person holding a B.S. in chemistry and a master's in education is counted in the Life-Physical Sciences category. Otherwise, the field of the highest degree is used to classify participants.		