Graduate Teaching Fellows in K–12 Education (GK–12) Program
Secondary Mathematics Teacher Survey

Instructions: *The following questions are designed to help us better understand your experiences with the Graduate Teaching Fellows in K–12 Education (GK–12) Program at the [name of University], also known as the [project name]. Only group results will be reported from this questionnaire, and all responses will be kept confidential, so please be candid. Do not be concerned if the GK-12 program was only one of a number of influences on your secondary mathematics teaching.*

Teacher Characteristics and Background

1. Please describe your *current* teaching assignment.
(Please darken all that apply)

- O Mathematics
- O Science
- O Technology
- O Other (specify): _____
- O Not currently teaching grades K–12; skip to question 3

2. What grades do you currently teach? (Please darken all that apply)

O K O 1 O 2 O 3 O 4 O 5 O 6 O 7 O 8 O 9 O 10 O 11 O 12

3. Including this school year, how many years have you:

Number of Years	1	2	3	4	5	6–10	11–15	16–20	21–25	26–30	31–35	36–40
Taught at the K–12 level?	O	O	O	O	O	O	O	O	O	O	O	O
Taught mathematics in any grade 6–12?	O	O	O	O	O	O	O	O	O	O	O	O

4. a. Do you have each of the following degrees?

Bachelor's	O Yes	O No
Master's	O Yes	O No
Doctorate	O Yes	O No

b. Please indicate the subject(s) for each of your degrees. (Please darken all that apply)

	Bachelor's	Master's	Doctorate
Mathematics	O	O	O
Computer Science	O	O	O
Mathematics Education	O	O	O
Science/Science Education	O	O	O
Elementary Education	O	O	O
Other Education (e.g., History Education, Special Education)	O	O	O
Other (please specify)_____	O	O	O

5. Have you participated in any of the following prior to working as a K-12 teacher:

Taught mathematics, science, computer science, technology or engineering at the undergraduate or graduate level	O Yes	O No
Worked in a mathematics, science, computer science, technology, or engineering profession other than teaching (e.g., as a researcher)	O Yes	O No

6. Are you male or female?

O Male
O Female

7. Are you Hispanic/Latino?

O Yes
O No

8. What is your race? (*Select one or more races to indicate what you consider yourself to be.)*

O American Indian or Alaskan Native
O Asian
O Black or African-American
O Native Hawaiian or Other Pacific Islander
O White

Teacher GK–12 Experience

The questions in this section are about your experiences with the GK–12 program.

9. How many years were you (or have you been) involved in the GK–12 program?

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ >5 Years

10. Which of the following describe your reasons for participating in the GK–12 program? (Please darken all that apply.)

- ○ I saw it as an opportunity to deepen my mathematics content knowledge
- ○ I saw it as a way to learn more about mathematics/science research
- ○ I saw it as an opportunity to work toward certification in the subject(s) that I teach
- ○ I saw the benefits gained by other GK–12 teachers
- ○ I saw it as a way to help my own K–12 students
- ○ I wanted to help the Fellows develop their communication/teaching skills
- ○ I was asked by my administrator to be involved

11. Teachers may have had any number of opportunities to deepen their knowledge and skills as a part of their involvement in the GK–12 program. For each area listed below, please indicate if you participated in one or more learning opportunities through:

(a) GK-12 summer workshops/courses;
(b) GK-12 sessions during the academic year; and
(c) other interactions with GK–12 Fellows and/or faculty.

(Please darken all that apply in each row.)

Area of learning	GK–12 summer workshops/ courses	GK–12 sessions during academic year	Other interactions with GK–12 Fellows/ faculty
a. Mathematics content	○	○	○
b. Mathematics/science research	○	○	○
c. Mathematics instructional strategies	○	○	○
d. National/State mathematics standards	○	○	○
e. Student thinking and learning about mathematics	○	○	○
f. Encouraging participation of underrepresented groups in mathematics	○	○	○
g. Technology use	○	○	○
h. Assessment	○	○	○
i. Other: _____	○	○	○

Check here ☐ if you did not participate in any of the above GK–12 professional development activities.

12. As a teacher, how frequently did you interact with the following as part of the GK–12 program?

	Never	Rarely (e.g., few times a year)	Sometimes (e.g., one or two times per month)	Often (e.g., one or two times per week)	Daily or almost daily
a. GK-12 Fellow(s) assigned to you	O	O	O	O	O
b. Other GK–12 Fellows	O	O	O	O	O
c. Other teachers involved with GK–12	O	O	O	O	O
d. GK–12 college/university faculty	O	O	O	O	O
e. GK–12 administrative staff	O	O	O	O	O

13. Did you attend any professional conferences as a part of your GK–12 involvement beyond those offered by the GK–12 program itself?

O No

O Yes, please refer to the list below and check all that apply for any conferences you attended as a part of your GK–12 involvement.

O I presented/co-presented (e.g., a talk or a poster session at the conference) on

_____

(please specify the foci of your presentation; e.g., inquiry-based instruction, standards-based instruction, specific mathematics lesson)

O I attended, but did not make any presentations

O I obtained financial support from the GK–12 program for attending the conference

Perceived Impact from Participation in the GK–12 Graduate Fellow Program

Questions 14-18 are based on your overall experience with the GK–12 program.

14. Did you obtain any advanced degrees **after becoming involved** in the GK–12 program?

O No

O Yes. Indicate the extent to which your involvement in the GK–12 Graduate Fellow program influenced your decision to pursue an advanced degree.

O Greatly influenced my decision

O Somewhat influenced my decision

O Not a factor in my decision

15. To what extent has your participation in the GK–12 Graduate Fellow program increased your **knowledge** of each of the following:

Knowledge of	Not at all	Somewhat	To a great extent
a. the mathematics content you teach	O	O	O
b. mathematics content more advanced than what you teach	O	O	O
c. current mathematics research findings	O	O	O
d. what mathematics researchers do	O	O	O
e. student misconceptions in mathematics	O	O	O
f. hands on/manipulative activities for mathematics instruction	O	O	O
g. mathematics-related technology/software for mathematics instruction	O	O	O
h. assessment strategies in mathematics	O	O	O

16. To what extent has your participation in the GK–12 Graduate Fellow program increased your:

	Not at all	Somewhat	To a great extent
a. Access to mathematics resources (e.g., mathematics software and technology, curricula, and materials)	O	O	O
b. Confidence to use mathematics resources (e.g., mathematics software and technology, curricula, and materials)	O	O	O
c. Confidence in using hands on/manipulative activities for mathematics instruction	O	O	O
d. Confidence in monitoring student learning during instruction in a mathematics unit	O	O	O
e. Confidence to teach mathematics	O	O	O
f. Preparedness to use your student instructional materials	O	O	O
g. Engagement with informal mathematics activities (e.g., doing mathematics puzzles, reading mathematics related resources)	O	O	O

17. Please indicate the extent of your agreement with each of the following statements regarding the influence of the GK–12 program on your mathematics instruction. As a result of GK–12:

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
a. I teach a broader variety of mathematics concepts.	O	O	O	O
b. I teach mathematics concepts in more depth.	O	O	O	O
c. I put more emphasis on computational fluency.	O	O	O	O
d. I am more likely to use hands on/manipulative activities for mathematics instruction.	O	O	O	O
e. I am more likely to have students work on mathematics problems where there is more than one way to solve the problem.	O	O	O	O
f. I am more likely to incorporate findings from current mathematics/science research into my lessons.	O	O	O	O
g. I am more likely to use direct instruction.	O	O	O	O
h. I am more likely to engage students in a dialogue about mathematics concepts and problem-solving processes.	O	O	O	O
i. I am more likely to use technology such as mathematics software and specialized calculators.	O	O	O	O

18. In this question, first please indicate which of the following activities you have participated in during the years since your initial involvement with the GK–12 program, darkening all that apply. Then for each activity you checked in the 1st column, rate the extent to which your involvement in this activity was influenced by your participation in the GK–12 program.

	I have participated in this activity *since* my involvement with the GK–12 program *began*	Extent of GK-12 Program **Influence** on Your Decision to Participate		
		Not at all	Somewhat	To a great extent
a. Pursued continuing education credits in mathematics content knowledge	○	○	○	○
b. Became certified in mathematics	○	○	○	○
c. Pursued National Board certification	○	○	○	○
d. Joined one or more mathematics-related professional organizations at the local, state, and/or national level (e.g., NCTM)	○	○	○	○
e. Participated in professional development related to mathematics education	○	○	○	○
f. Provided workshops on mathematics teaching to other teachers in my school or district	○	○	○	○
g. Provided workshops on mathematics teaching to teachers outside my district at conferences	○	○	○	○
h. Wrote one or more articles/papers on topics related to mathematics teaching topics	○	○	○	○
i. Supervised one or more student teachers in mathematics	○	○	○	○
j. Participated in a formal mentoring or coaching arrangement with a new mathematics teacher	○	○	○	○
k. Served as a mathematics lead teacher or mathematics department chair	○	○	○	○
l. Served as an informal resource in mathematics to other teachers in my school or district	○	○	○	○
m. Served as a mathematics club leader	○	○	○	○
n. Served on a school or district mathematics curriculum committee	○	○	○	○
o. Served on a school or district mathematics textbook selection committee	○	○	○	○
p. Organized or been involved in one or more mathematics fairs at the school level and/or community level	○	○	○	○

Fellow's Activities in Your Mathematics Classes

19. Please indicate the number of GK–12 Fellows you have worked with since your first involvement in the GK–12 program.

    ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ >5 Fellows

20. Did your participation in the GK–12 program involve having one or more GK–12 Fellows work **directly with students** in your secondary mathematics classes (grade 6 or above)?

    ○ Yes.

    ○ No. Skip to Question 28

*Questions 21–27 relate to your experience with a single GK–12 Fellow. In responding to these questions, please consider the GK–12 Fellow who **most recently** worked directly with students in one or more of your secondary mathematics classes. (If two or more Fellows fit this description, please answer for the one who worked most extensively with students, and if a tie-breaker is needed, choose the one whose last name appears first alphabetically.)*

21. a. What academic year(s) was this Fellow involved with your class(es)?

    ○ 2007–08 ○ 2006–07 ○ 2005–06 ○ 2004–05 ○ 2003–04 ○ 2002–03
    ○ 2001–02 ○ 2000–01 ○ 1999–2000 ○ 1998–99 ○ 1997–98 ○ Prior to 1997–98

    b. Did this Fellow work with students in any grades 6–8?

    ○ Yes
    ○ No

    c. Did this Fellow work with students in any grades 9–12?

    ○ Yes
    ○ No

22. Please indicate the activities this Fellow participated in with you/your mathematics classes: (Please darken all that apply)

- O Designed and implemented a lesson collaboratively with you
- O Co-taught lessons designed by you
- O Designed and implemented his/her own lessons
- O Gave lectures on topics in the mathematics curriculum
- O Provided findings from current mathematics research to the students
- O Led whole-class discussions
- O Managed small-group activities
- O Used computer-related technology/software with the students
- O Demonstrated the use of computer-related technology/software to you for your later use with the class
- O Acted as an assistant for non-instructional activities (e.g. grading, gathering lab supplies/manipulatives, photocopying, etc.)
- O Planned, organized, led field trips

23. In general, to what extent were students in your mathematics classes attentive and engaged when the Fellow interacted with the students?

O Not at all O Somewhat O To a great extent

24. In general, to what extent did students in your mathematics classes understand this Fellow's presentations?

O Not Applicable O Not at all O Somewhat O To a great extent

25. About how often did you discuss each of the following with this Fellow?

	Never	Rarely (e.g., few times a year)	Sometimes (e.g., one or two times per month)	Often (e.g., at least once a week)
a. Mathematics content	O	O	O	O
b. Findings from mathematics research	O	O	O	O
c. Classroom curriculum/lessons	O	O	O	O
d. Student learning	O	O	O	O
e. Instructional strategies	O	O	O	O
f. Classroom management strategies	O	O	O	O
g. Obtaining and setting up classroom resources	O	O	O	O
h. The use of computer-related technology/ software	O	O	O	O

Perceived Impact from Working with this Fellow

26. Please rate the impact of this Fellow on *your students'*:

	Major negative impact	Minor negative impact	No impact	Minor positive impact	Major positive impact
a. Knowledge of mathematics	○	○	○	○	○
b. Knowledge of current findings from mathematics research	○	○	○	○	○
c. Analytical skills	○	○	○	○	○
d. Interest in and excitement about learning mathematics at school	○	○	○	○	○
e. Interest in mathematics extracurricular activities (e.g., math club)	○	○	○	○	○
f. Interest in taking advanced mathematics/science courses	○	○	○	○	○
g. Perceptions of who can be a mathematician	○	○	○	○	○
h. Knowledge of/interest in careers related to mathematics	○	○	○	○	○
i. Engagement with informal mathematics activities (e.g., doing mathematics puzzles, reading mathematics related resources)	○	○	○	○	○

27. Think of all the ways this Fellow affected your students, including but not limited to the options in the previous item.

    a. Please provide an example of a benefit to your students of having this Fellow in the classroom (if any).

    b. Please provide an example of a drawback to your students of having this Fellow in your classroom (if any).

Overall Impression of the GK-12 Program

28. Thinking back on your GK-12 experience as a whole, what stands out as the greatest impact on you, your students, and/or your teaching?

29. Thinking back on your GK-12 experience as a whole, what was your greatest challenge and/or disappointment with the program?

30. Considering all of your experiences with GK-12 Fellows, would you choose to have another Fellow if given the opportunity in the future?

- O Yes
- O No
- O Not applicable (e.g., no plans to teach K–12 mathematics in the future)

Thank you for your time!