

Six Steps to a Master Teacher Fellowship



Step 1: Define It

The Master Teacher Fellowship is counter-cultural. While most education reform focuses on improving poor teachers or improving poor test scores, the Master Teacher Fellowship aims to change the landscape of mathematics and science education by focusing on excellence. The Fellowship brings together outstanding, experienced teachers into a professional community, working together to share knowledge, advance teaching skills, and define excellence itself.

Here are some key messages:

- A Master Teacher Fellowship elevates the teaching profession by supporting and rewarding excellence in the classroom.
- The Fellowship encourages excellent teachers to stay education by providing them with a high quality professional community that serves as a source of renewal and enrichment as well as a stipend to acknowledge their professional accomplishments (pay that is merited vs. merit pay).
- Retaining the best teachers impacts the entire STEM learning community of the schools and keeps educational outcomes high for everyone.
- What the Master Teachers *do* is come together for ongoing, high-level, STEM-based professional development (PD), much of it teacher-led, above and beyond any local or state requirements.

What the Master Teacher Fellowship is *not*:

- The Fellowship is *not* a second job or pay per hour program. What matters is engagement in a professional community of like-minded educators, sharing best practices. Counting hours devalues a sense of professionalism and is misleading; the hours spent developing a PD session, preparing to lead a PD session, bringing the work back to the school's department and to the teacher's classroom, and the renewed sense of energy that keeps the Master Teacher in the classroom, are actually the hours that count.
- The Fellowship is not a program to repair teachers. Master Teachers are experienced, expert professionals. The Fellowship provides high quality professional enrichment that renews teachers' energy and passion for their subject. It affords opportunities to collaborate with the best, and to learn from the best. The teachers improve, like all accomplished professionals, but improving teachers is not the *purpose* of the program.

Step 2: Fund It

Costs will include the following categories:

- Stipends
- Program costs (honoraria for finalist interviewers, honoraria for outside experts leading PD, food/beverages for teachers for PD time, recruitment materials, travel expenses for ED to visit sites)
- Administrative costs (personnel, space, application, Website)

The amounts may vary:

- Stipends have to be meaningful, not token. This generally means \$10,000-15,000 annually, but making them meaningful may vary from location to location.

- Program costs also vary, but experience shows that budgeting \$3,000-4,000 per teacher is usually about right. A substantial portion of this is used for the selection process. The PD is less expensive because *much* of it is done by the teachers themselves!
- Administrative costs are mainly fixed, although clearly escalate for very large programs. The major part of administrative costs will usually be personnel. This might range from \$150,000 for a small program with donated space to \$1,000,000 for a large program.

The sources may vary as well. People often think of private or private-public partnerships to pay for education reform. That may work for pilot programs, but experience shows it is not a good source of long-term funding for the Master Teacher Fellowship. The best and most reliable funding is public. This is not a short-term “fix” to improve teachers; it is a basic part of the educational infrastructure, meant to career paths and change perceptions about teachers. It should be funded accordingly. Remember that the Fellowship is a multi-year program that requires multi-year commitments!

Step 3: Staff It

At a minimum, the staff should include two people who are mainly focused on the program itself.

- *Executive Director*: Ideally, the ED will possess meaningful experience in the classroom, administrative skills, and connections to the STEM/STEM education community. The ED will oversee the outreach and admissions process, and structure and develop the professional development program for the Master Teachers.
- *Administrative assistant*: A full time administrative assistant is the key to successfully launching a state or city-wide program. The administrative assistant should have excellent organization and writing skills, and will be responsible for all communication with applicants and logistics for events.
- *Additional personnel*: The ED will need to cultivate outside experts in mathematics, science, and education to serve on committees for finalist interviews and to provide professional development for Master Teachers. These outside experts should receive honoraria for their time. Larger programs will add permanent staff who work directly to develop programming.

Step 4: Select the Teachers

A Master Teacher Fellowship is a prestigious honor. To maintain that prestige and to ensure a high quality cohort, recipients of the Fellowship must undergo a rigorous selection process that may begin with a nomination from, rather an appointment by, a principal or superintendent or other district leader. The application and interview process assesses excellence across three domains:

- knowledge of content
- knowledge of pedagogy
- knowledge of students

Experience suggests the following ingredients for the selection process:

1) *Eligibility*: teachers who have completed four or more years of teaching by the start of the Fellowship, and who teach a minimum 60% course load in mathematics or science in a public or charter school (daily teaching period for elementary teachers).

2) *Paper Application*:

- Transcripts. Finalists will have a meaningful depth and breadth of content exposure at the undergraduate and graduate level in their content area. The transcripts should reflect the introductory sequence of courses, plus a range of courses above the introductory sequence (for elementary teachers, this might be reflected in subject-specific education methods courses). Additionally, undergraduate or graduate transcripts should reflect exposure to methods of teaching.
- Personal essay that addresses the reason the candidate is continuing to pursue a teaching career.
- Recommendations: supervisor, colleague, and student.

- Lesson plan (or substitute) that addresses the applicant’s knowledge for teaching their subject area, plus accompanying student work, if relevant.
- Submission of Praxis II content exam score
- Paper application is read and scored across three domains: knowledge of content, knowledge of pedagogy, knowledge of students.

3) Finalist interview:

- Applicants are asked to investigate a topic of personal interest to them in their subject area, and prepare a ten-minute lesson to teach to their colleagues, at the level of their colleagues (not a standard demo lesson). This allows interviewers to assess both content knowledge and knowledge for teaching.
- Applicants are organized into small groups of 5 or 6, according to subject area, and assigned to a screening committee (typically made up of a subject expert, and education expert, and a Master Teacher). Following the presentations, candidates engage in a discussion about the presentations. Candidates write an on-the-spot essay asking them to reflect on a specific student and the ways they used knowledge of the student’s family, community or culture to inform their instruction of that student.
- Candidates sit for an individual interview with the screening committee.
- All interview components are scored for knowledge of content, knowledge of pedagogy, and knowledge of students. Committee members make individual recommendations for each applicant.
- Final decisions are made by the ED and a selection of stake-holders.

Step 5: Get the Word Out

Most teachers have experienced poor quality PD. Many have been enticed into programs that promise exciting opportunities but turn out to be drudgery. The best candidates are the teachers who are already professionally active. Those teachers will be wary of a new program that might be one more broken promise. To be successful, you have to *convince* those candidates to apply.

- Create a website with the basic information: a description of the Fellowship, deadlines, eligibility requirements, how to access the application, a nomination form, and a contact us form.
- Conduct outreach to principals, assistant principals, and department chairs with a call for nominations.
- Make use of Twitter and Facebook to get the word out via social media.
- Take booths at all local STEM teacher conferences or events, and promote the website URL.

Step 6: Develop the Program

The Master Teacher Program should be composed of a variety of high level professional opportunities for mathematics and science teachers, some teacher-led, some led by outside experts. Mathematicians and scientists should offer programming designed to provide expert teachers with the opportunity to dive into cutting edge content.

- Plan a program of teacher-led professional meetings (a *Professional Learning Team* (PLT)—a subject specific working group to share best practices, co-facilitated by Master Teachers). This is effective even with a small cohort of teachers representing several different subject areas. Bring the Master Teachers together to brainstorm topics for PLTs.
- Develop a program of exciting mini-courses, taught by mathematicians and scientists, that give teachers opportunities to stay refreshed and at the cutting edge of their discipline, regardless of what they teach during the day. For example, these might be three two-hour weeknight sessions or one 6-hour weekend session.
- Provide opportunities for Master Teachers to gain leadership skills/training or take on roles as leaders in the Master Teacher community, in their school community, in the broader education community, to including mentoring beginning teachers. This might include workshops in mentoring or coaching skills, for example, and may bring together teachers who are already accomplished leaders with those who desire more leadership opportunities.

One part of programming is more informal but extraordinarily valuable: The interactions among teachers before, during, and after the workshops and meetings play a key role in building the professional community. It is important to hold events in places that allow those interactions to happen, to provide inducements for teachers to arrive early and stay late (snacks and beverages help), and to encourage teachers to engage one another in conversation.

Master Teachers are required to participate in the program as a condition of their Fellowship, and one must set a Program Requirement. Consider what counts and what doesn't count as participation. If the professional community is at the heart of the Fellowship, then at the minimum, Master Teachers should have to participate in a required number of Master Teacher-specific events per year, though which events those are should be at the discretion of the Master Teachers themselves according to their interests and calendars. Events that are separate from the professional community, such as attending a local or national conference, should not count. While this is essential, avoid being overly bureaucratic about administering the Program Requirement.

Carrying out these six steps takes time, effort, and money. It isn't easy. One has to convince policy-makers, funders, and the teachers themselves. But once the program is underway, the participants themselves become the best and most effective advocates. It gets easier!

