

Facilitator's Guide

Busting Myths about the Teaching Profession
15-minute version

Updated 7/15/22



Pre-Presentation Checklist

Presentation Outcomes

- The audience will have positive attitudes towards teaching as a profession.
- The audience will engage in ideas about teaching as a profession after the presentation (e.g., by reflecting, sharing, and engaging in conversation).
- The audience will feel better prepared to make an informed choice about their career options, including teaching.

What should a presentation look like?

- 5-30 minutes in class; 15-30 minutes in other venues (club meetings, information session, ice cream social; see [Reach Students](#) on our website).
- Key message of Get The Facts Out is emphasized: *Teachers in the U.S. rate their lives better than all other occupation groups, trailing only physicians.*
- Accurate information about teaching as a profession is provided, including life satisfaction, salary, retirement, and student loan forgiveness.
- Comparison to industry and college faculty is provided.
- Information on teacher salaries and retirement have been updated with local data.

Before you begin

- Update the slides with 1. your logo and contact info; 2. local teacher salary data, and; 3. retirement data.

What should you do as a presenter?

- Create a safe and fun space for students to engage, from the start.
- Share the positive aspects of teaching as a profession that are supported by data.
- Avoid voicing misperceptions about teaching as a profession.
- If students express misperceptions about teaching as a profession, provide fact-based corrections.
- Avoid providing airtime for anecdotal aspects of teaching as a profession (which are often negative and not supported by data).

After the workshop

- If not already done, [register your activity](#) in order to receive credit.
- Fill out the [self-assessment worksheet](#) to document and plan for next time.


Replace Logo




Replace Picture



Busting Myths about the Teaching Profession

Get the Facts Out 
Repairing the reputation of the teaching profession

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. NSF DUE #1821710 & 1821462. 

Average length of this Get the Facts Out presentation: 30 min (15 minute also available at <https://getthefactsout.org/presentation-students>)

PLACE YOUR OWN TEACHER PREPARATION PATHWAY LOGO AND A PICTURE OF YOUR PROGRAM'S STUDENTS. Please don't remove the GFO logo, NSF disclaimer and NSF logo. The GFO Logo can be made smaller if you'd like.
<https://getthefactsout.org/resource-usage-and-copyright-permissions/>

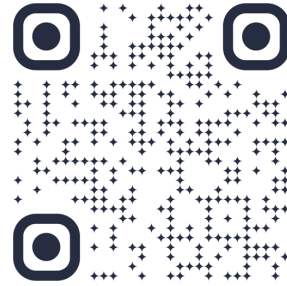
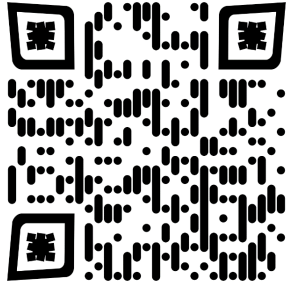
Welcome students; introduce speakers

Suggested modifications:

- Place your own teacher preparation pathway logo and a picture of your program's students. (you are welcome to keep these students if you prefer)
- List the names of your presenter(s)

Please complete the pre-quiz

surveymonkey.com/r/GFOStudent



Sign in: tinyurl.com/yyumqo9o



Updated 1/20/22

NOTE TO PRESENTERS: This link includes the pre-quiz and post-quiz that are very helpful in framing the presentation. I always joke that, “we’re starting by giving you a quiz. This will help you get some idea of the facts I’ll be sharing with you today and after the presentation, you should have the answers to these questions” The quiz only takes a couple of minutes so provide instructions for a cue. If you’re on Zoom, ask them to put “done” in the chat. It’s a bit harder in person, but ask them to look at you or raise their hand. I’ve had best luck with look at me.

I’m finding much stronger results when using the pre/post quiz. When thinking about how the brain works, this helps your audience focus on the ideas you’ll be discussing and it sparks their curiosity. Also it engages them and helps them cleanse their brain of whatever possessed it when they walked in the door. Finally, it helps you see how things went afterwards. Our evaluator will send you your results within a week or two after your presentation.

The second link is a sign in sheet that collects names and emails. It’s the only email collection we have in this presentation.

Our Mission

Inspire young minds. Teach science, math, or CS!



“Before we get into the details, here is the mission of our work in a nutshell: We want to take Mines students who have a passion for STEM subjects along with an interest in teaching and provide a pathway that poises them to make an impact on education and eventually STEM itself. We understand that this won’t be of interest to all Mines students, nor should it be because our society needs other STEM professionals in addition to STEM educators. But any Mines students who do decide to pursue a career in teaching are bound to have a significant impact. “

Suggested modification: Replace picture with one of your teachers doing demos or some other exciting thing. We have found pictures of smiling teachers (teaching) and students is important. Students react poorly to fake looking stock photos.

The statement “Inspire young Minds. Teach science or math!” has tested positively across the nation in our focus groups. “Blow Minds! Teach Science or Math.” Tested extremely well everywhere but the East coast where it is considered a reference to drug use.

Rate your life

On **which step of the ladder** would you say you personally feel you stand at this time?

Best possible
life (10)



Worst possible
life (0)

1/20/22

Ask students to silently rate their lives. After 20 seconds or so, ask them to talk to their neighbor about what they think might be things that people think about when rating their lives. Please don't share your rating, that's too personal, but talk about what you think others might consider when choosing the step they currently stand on. Give less than a minute (this could go on for a lot longer but within 30 seconds or a minute, a lot of good ideas surface)

Rate your life

On which step do you think you will stand about **five years from now**?

Best possible life (10)

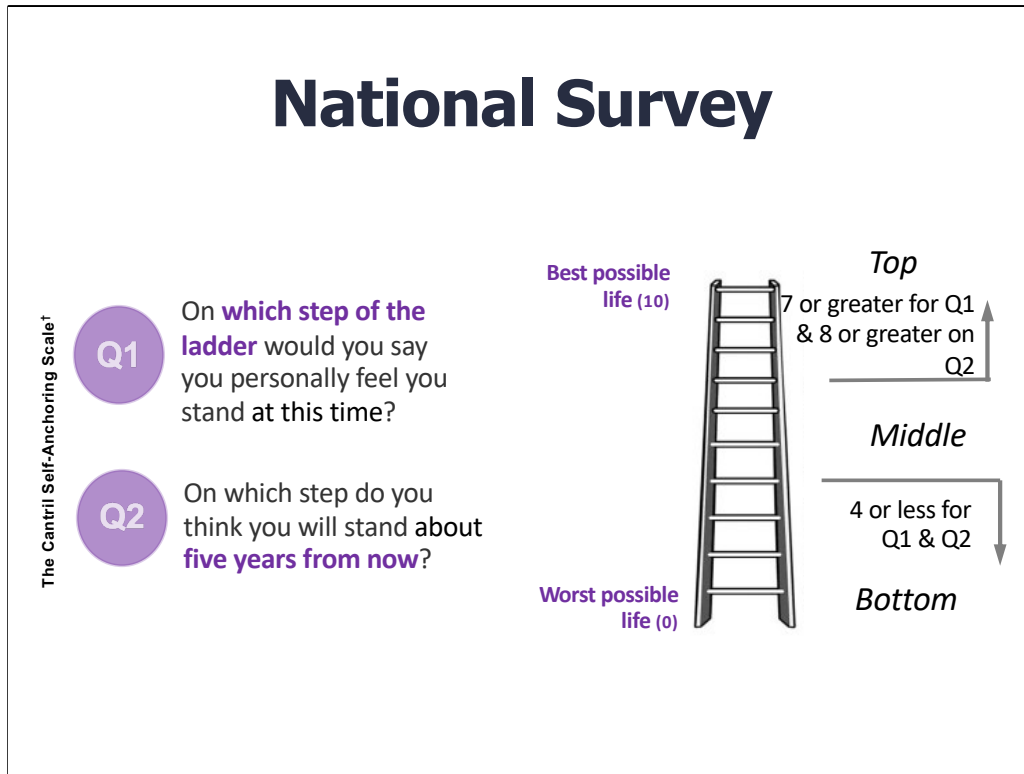


Worst possible life (0)

1/20/22

Now where do you think you'll stand in 5 years from now? Provide 15 seconds for this.

National Survey



1/20/22

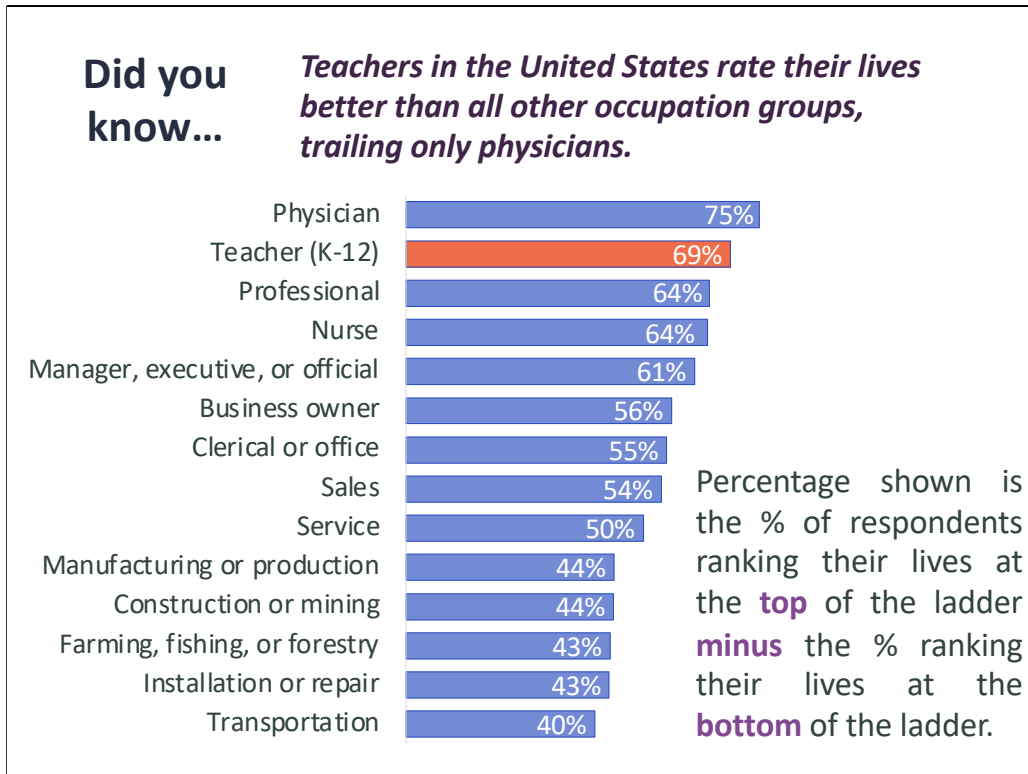
“Lots of survey groups use this type of question to see how people are doing in different parts of the country or the world, or they’ll look at different age groups. When they do this, they combine the results from the two questions weighting the first question the most. The most important thing is to see how people feel now but the 2nd question does provide some indication of their perceived future opportunity and that’s important too.”

“In this case Gallup wanted to divide the responses by job/occupation and they asked this question of 172,000 U.S. workers.”

“They broke the ladder into three parts. Note that top is a smaller area than the bottom. They look at the fraction who rated themselves at the top and then subtract off those who rate themselves at the bottom to sort of normalize the number. They ignore anyone who was in the middle.”

QUESTION: After explaining the ladder sections, bring up the question about where teachers stand. Often students are thinking about individuals and provide a step. It helps to have mentioned the Gallup survey as I described above. Then ask again “where do you think teachers are in general compared to other professions? Do they rate their lives higher, the same, or lower than people in other occupations?” I’ve seen a huge range of responses from students. Faculty and teachers tend to say higher.

Reference: <https://news.gallup.com/poll/122453/understanding-gallup-uses-cantril-scale.aspx>



7/15/22

When they analyzed the results by job/occupation group, they find that teachers rate their lives better than all groups, trailing only physicians.”

College faculty, Engineers, and scientists are in the “Professional” category or “Manager, executive, or official” categories.

Note: It may seem like the wording of the title statement could be shortened a bit but our testing finds uniformly positive responses to the above wording and we did not have as strong of responses when we modified the wording.

References:

<https://news.gallup.com/poll/161324/physicians-lead-wellbeing-transportation-workers-lag.aspx>
https://www.amacad.org/sites/default/files/publication/downloads/2021_Humanities-Indicators_Workforce.pdf

Question

Why do you think teachers rate their lives so highly compared to other professionals?

Updated 1/20/22

People will suggest things like they can make an impact, their students, etc... Less often but fairly regularly you'll hear schedules (either summer or school day) and financial related items from people who are better informed (teaching relative).

Teacher Well-being

- Work-life balance
- Student and colleague relationships
- Financial stability



7/15/22

For the past several years we have been working to understand why teachers rate their lives so highly. We've mined data from lots of different sources and collected some of our own. What we've found is that teachers have

- better work-life balance than other jobs you can get with the same degree,
 - We see this in three areas
 - Flexible summers to recharge and spend time with friends and family or pursue other interests
 - Negotiated 3 and 4 day weekends and holiday breaks because teachers work hard and these regular extended breaks give them a chance to recharge. This also allows their schedule to align with their kids (if they have children)
 - Students go home between 2:30 – 3:15 (depending on the school) allowing for some time to accomplish things during business hours.
- as you noted relationships with students and their colleagues, and
- financial stability.

Today we'll unpack all of this and look at data on each of these areas.

Day-to-Day Satisfaction

Students: relationships and Learning

Work schedule

Teaching is challenging/scientific

Colleagues

Learning new content

Autonomy of the Classroom

- What provides you with day-to-day satisfaction?
- A listing of 60 total items were compiled by STEM teachers.
- These 60 items fell into six categories.

5/31/22

100% of teachers agreed with each one of these. List them and say them all.

Second: Point out that the student category included a list of over 30 different ways students made the job satisfying

“We asked a room full of science and math teachers to tell us, “What provides you with day-to-day satisfaction?” They were asked to silently write things down. Then we swapped the responses between tables and asked each table to only keep those that resonated with everyone at the table. When we looked at the 60 responses that rose to the top, they seemed to fall into six different themes.

1. Over half talked about their students both relationships with students and watching them learn: the light bulb moment or seeing them grow over the semester or years.
2. Next was their day-to-day work schedule: They can take care of other life things during business hours from 3:30 – 5 which other jobs typically can't; their work schedule aligns with their kids including holidays and breaks.
3. Teaching is challenging/scientific: 'Teaching is a science; teachers constantly use their STEM skills as teachers!'
4. Colleagues: - Strong relationships between fellow teachers, “other committed teachers make amazing coworkers and friends”
5. Learning content: Always learning new and emerging areas of my content (eg. physics), “Teaching provides the drive/reason to explore new and challenging areas of my content.”
6. Autonomy of the classroom: Teachers get to decide what happens in their room. There's a lot of responsibility but it's nice to be able to make all of the decisions (within basic guidelines) in my room.

Starting salaries

Which is closest to the typical starting salary for K-12 teachers in your area?

- A. \$32,000
- B. \$45,000
- C. \$52,000
- D. \$65,000
- E. \$72,000

1/20/22

I ask this but do not share the results because we'll get there in two more slides.

Ans: C, D or E depending on the district

[Don't tell them the answer until the slide with teacher salaries]

NEW! You can request GFO to find data for your area: <https://tinyurl.com/data-request>

Mid-career salaries

After 15 years of teaching and earning a master's degree, which is closest to the typical K-12 teacher salary in your area?

- A. \$45,000
- B. \$60,000
- C. \$75,000
- D. \$90,000
- E. \$110,000

1/20/22

I ask this but do not share the results because we'll get there in two more slides.

Ans: C, D or E depending on the district

[Don't tell them the answer until the slide with teacher salaries]

NEW! You can request GFO to find data for your area: <https://tinyurl.com/data-request>

Teacher Salaries

School year contract



	BA yr 1
Westminster Public Schools (21-22)	\$55,038- \$60,857
Boulder County Public Schools (21-22)	\$51,649
Denver Public Schools (+\$2K math, \$6K student loans, +other) (21-22)	\$47,291- \$55,676
St. Vrain Valley Schools (21-22)	\$45,250- \$47,925

186-day contract -> \$50,000 = \$33.60/hr

+ Extra Pay

Use local teacher salary data

1/20/22

2021/2022 salary schedules

“Here are starting salaries for some districts in our area. You can see that starting salaries range from \$45K - \$60K. Teachers have a school year contract that is typically 186 days. That means a starting teachers hourly wage is about \$33 per hour. Teachers also get paid for any extra work they do outside of teaching classes. I’ll show you more on that in a minute.”

RECOMMEDATION: Please use local teacher salary data. We have found that when you don’t, it’s met with much skepticism and does not help the audience see why teachers rate their lives highly all across the country. You can look on the Teacher Salary Data section of the GFO website for your area: <https://getthefactsout.org/teacher-salary-data/> If you do not see your area, please fill out a request so that GFO can find data for your area: <https://tinyurl.com/data-request>

Did you Know...

At year 15, the middle 50% of mid-career teacher salaries ranges between **\$64,000** and **\$100,000**, nationally

...range shown is IQR: 25th – 75th percentile



1/20/22

GFO has collected data across the U.S. from over 400 districts and analysis of this data finds the above. We also dug into NCES (National Center for Educational Statistics) data and found that their data for the 20-21 school year shows a middle 50% range of \$62K - \$103K.

Teacher Salaries

School year contract



Use local teacher salary data

	BA yr 1	MA yr 15
Westminster Public Schools (21-22)	\$55,038- \$60,857	\$72,280- \$105,589
Boulder County Public Schools (21-22)	\$51,649	\$109,020 - \$114,881
Denver Public Schools (+\$2K math, \$6K student loans, +other) (21-22)	\$47,291- \$55,676	\$77,709 - \$88,945
St. Vrain Valley Schools (21-22)	\$45,250- \$47,925	\$73,305 - \$83,825

186-day contract -> \$50,000 = \$33.60/hr

+ Extra Pay

Updated 1/20/22
2021/2022 salary schedules

“Here are salaries at Mid-Career for our area. You can see some very sizeable increases have built over the years. This is a combination longevity and loyalty reward. Part is due to experience but also to reward those who stay with the district. “. We show teachers with an MA or MS in this table because over half of teachers earn a masters’ degree before they are 30. Most people don’t know that there are programs all over the country designed for practicing teachers to earn their MA while teaching full time. Many districts provide an increase for additional education which you can see on this table.

“The range shown here is for someone who just earned their MA right at Year 15, that’s the lower number, and the higher number is for someone who has taken quite a few more courses 15 -20 over the years since they earned their masters.”

Denver notes: DPS pays+ \$2K math + \$2K Title I school. I did not include it but there’s also \$880 - \$5500 for leadership role and \$3K for high priority schools. Also there’s \$1000/year student loans paid for up to 6 years.

Administrator Salaries



St. Vrain Valley Schools

	Calendar*	Minimum	Maximum
Asst. Principal - High	215 Days	\$92,697	\$128,009
Director – Innovation Programs	248 Days	\$103,325	\$142,687
Principal - High	225 Days	\$113,954	\$157,365
Asst Superintendent – Innovation Center	248 Days	\$145,851	\$201,400
Deputy Superintendent	248 Days	\$175,819	\$242,798

* Classroom Teacher Calendar: 186 days

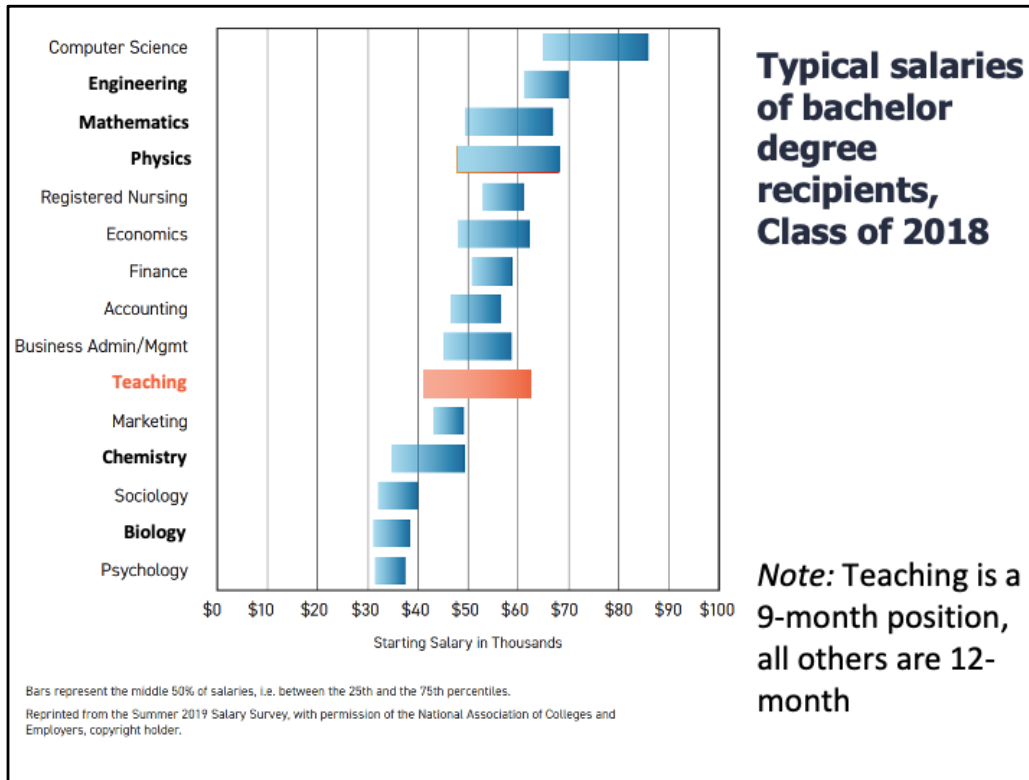
Use local salary data

Updated 1/20/22 - 2021/2022 salary schedules

“If you would like to help lots of teachers, and therefor hundreds of students per year, by supporting the building and all the teachers’ work in the building, consider becoming an administrator or direct a STEM innovation center.

After several years of teaching experience, you can move into administration if you like. These contracts are a bit longer 225 Days is 45 / 52 weeks per year. Plus you still have leave (annual, sick, bereavement, etc..) during the 45 weeks. “

Side point: It’s good to have people with a range of backgrounds in administration and it’s less common to have STEM since there are fewer STEM teachers, they are in high demand, and those that are there often don’t have a formal STEM background.



Updated 7-14-20

Starting salary for a BS new teacher shows 25th – 75th percentile from our GFO data mining project of 120 districts near 50 universities working with GFO. Range also includes adding in two extra curricular responsibilities only on the higher end.

Suggested modification: Replace with a local district that your graduates are most likely to be employed. The orange text and bar is added on top of the picture via typical power point tools.

Did you know...

*Most teaching jobs have **better retirement benefits** than other jobs you can get with the same degree.*

Teachers in the U.S. retire at **age 59** compared to age 63 for all occupations.



This Did you know has tested positively across the nation in our user-testing focus groups.

“Teachers in the US retire on average at age 59 a full 4 years sooner than the average American. That’s because teachers have state sponsored pension plans and these have been negotiated over the years as part of the teachers benefits / pay package”

Retirement Benefits

Colorado schools offer PERA retirement benefits



- Begin teaching at 22 years old, full retirement benefits at 57
 - pension = 87.5% of highest earned income (e.g. earned \$100,000 before pension will be \$87,500)
- Other jobs: Yearly Savings required (Annuity Value) of \$21,600

Use local retirement details

Updated 1/20/22

Suggested modifications: Update to match retirement plans for public school teachers in your state. See <https://bit.ly/2Z1cF9j> for data on every state.

If you become a public school teacher, your retirement plan will most likely be a pension plan managed by your state. If you work for a private company (big or small), your retirement plan will most likely be a 401K retirement account. The difference is that a pension is a *defined benefit plan* which means the benefit you receive after retirement is known when you first start teaching and doesn't depend on the stock market, for example. A 401K retirement account is considered a *defined contribution plan*, which means that your employer will contribute a certain amount each paycheck (3% on average) to your 401K retirement account. However, the amount of the payout when you retire is an educated guess based on the amount you save and the performance of your savings.

After retirement, teachers receive a set amount, with regular cost of living raises, for the remainder of their lives, no matter how long they live. With a 401K a person must estimate their life expectancy and set up a payout based on that expectancy. The amount of their retirement benefit varies depending on the success of their investments over time.

Each state's pension plan is slightly different. **In 35 states a retired teacher has their pension plus social security; in the other 15 states a retired teacher has their pension but no social security. In the states without social security, the pension payments are typically higher.** For example, in Colorado a teacher is vested after five years of teaching and will be eligible to retire after 25 years of teaching. Which means a person who begins their teaching career immediately after earning their college degree at age 22 will be eligible to retire at age 57. In Colorado their pension will be 87.5% of their highest earned income. A retiree can increase this amount to more than 87.5% by working longer than 25 years.

Another way to compare a public school teacher's *defined benefit plan* to a private company employee's *defined contribution plan* is to calculate how much money a person working for a private company would have to save each month to have a retirement benefit equal to the Public School teacher's pension. Using the average rate of return for the stock market over the past 30 years, we can calculate that a person would need to save \$21,600 per month for 25 years if they aim to retire at 57 with a pension equal to a typical Colorado school teacher. If the retiree lives longer than the average life expectancy, then they'll need to have saved more than \$21,600 per month to have their retirement last through their lifetime.

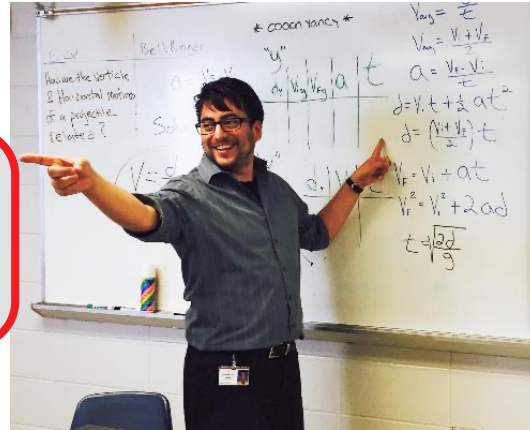
Did you know...

There are *student loan forgiveness programs* and *scholarships* for math and science teachers.

Use local loan forgiveness details

Federal loan forgiveness
\$17,500

Colorado loan forgiveness of **\$5,000 per year** for up to **5 years**



Updated 7/15/22

This statement has tested positively across the nation in our user-testing focus groups. It regularly rates the highest out of all the statements we tested.

There are Federal loan forgiveness programs and grants for math and science teachers.

FEDERAL: Direct or FFEL loans are available to all college students based on need and independent of their majors. If a person decides to teach an individual may receive \$17,500 in loan forgiveness on these types of loans after working as a highly qualified math/science teacher for 5 consecutive years in a low-income school. Unfortunately, college-level teaching does not qualify.

STATE: There are state loan forgiveness and scholarship programs for K-12 teachers. You can find information about these programs here: <https://getthefactsout.org/state-loan-forgiveness/> In Colorado for example, a person who works in either a rural district or a high needs area can apply for \$5,000 per year every year for up to 5 years.

TEACH grants are federally funded grants for anyone eligible for federal loans who are also enrolled in a participating teacher prep program. It's free money if you teach for four years within 8 years of teaching program completion. Must teach in a low-income school. If obligation is not met, it becomes a DIRECT loan. If you are getting loans for school and have any interest in teaching, there is no downside.

Perkins loans were disbursed through the academic year 17/18. Therefore this forgiveness program only impacts those who currently have Perkins' loans.

There were also available to students of any major. If a Perkins awardee becomes a teacher, a percentage of their loan is forgiven for each year they teach, with total forgiveness after 5 years. Interest is also deferred while teaching.

Want to know more about Federal Student Aid? <https://studentaid.ed.gov/sa/>

Did you know...

*You can get a **job almost anywhere in the U.S. or abroad** as a science or math teacher.*



This Did you know has tested positively across the nation in our user-testing focus groups.

Math and science teachers are in high demand and there are open positions in every area of our nation. The reason for this is that there are middle schools and high schools in every neighborhood in every town in every state. But there are only a handful of colleges and universities that prepare teachers. These universities are just not graduating enough science and math teachers to fill the positions in all of these schools! This is good for you because that means you can decide the area of the country or even out of the country that you'd like to live and find a teaching job within commuting distance. You can't do that as an engineer. There aren't enough jobs in this state for all of the graduates here at Mines. People take jobs all over the U.S. College faculty positions are even rarer and there's a large surplus of PhDs hoping to find a faculty position in that handful of colleges that we mentioned that are not producing enough teachers 😊

There is also high demand for math and science teachers to teach abroad in English speaking schools. Students often think this is referring to teaching English but it is actually referring to math and science teaching jobs.

<https://www2.ed.gov/about/offices/list/ous/international/usnei/international/edlite-overseas-primsec.html>

Summary of Teacher Benefits

- *Teachers in the United States rate their lives better than all other occupation groups, trailing only physicians.*
- Starting pay ~\$50K (9-month, base salary)
- At year 15, the middle 50% of teachers earn \$64K - \$100K (9-month salary)
- Retire at age 59 on average with a pension.
- There are **student loan forgiveness** programs for math and science teachers.
- You can get a **job almost anywhere** in the **U.S. or abroad** as a science or math teacher.

Update with local salary data

Update with local loan info

Summarize the benefits.

Suggested modifications: Update the starting and mid career salaries with data from this current academic year from school districts in your area where students are most likely to get a job (usually this means the nearby big districts)

Update the Retirement info with stats from your state or replace with “*Most teaching jobs have **better retirement benefits** than other jobs you can get with the same degree.*”

Did you know...

Behind every advance in medicine or technology is a teacher who left a lasting impression.

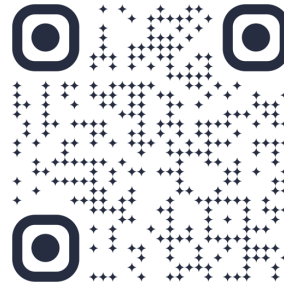


This Did you know has tested positively across the nation in our user-testing focus groups.

The photo is a math teacher at Christel House Academy (South) in Indiana, Vaughn Laptiste, a strong advocate for teaching as a profession.

Please complete the post-quiz

surveymonkey.com/r/GFOStudent



Updated 2/24/20

This link takes students to the same place that the link at the beginning of the presentation. If they left their browser window open, the survey is already in the right place and they can just pick up where they left off.

Become a Teacher!

Teach@Mines offers:

- Courses
- Advising
- Teaching Minor (18 credit hours)
- BS Engineering w/ STEM Teaching Focus Area
- Licensure with any BS or Licensure with an MS in STEM Education

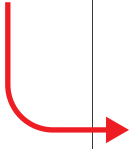


**Insert
slides for
your
Teacher
Program**

Place slides here about your program and local opportunities.

We recommend ending the presentation with clear next steps for those who are interested.

**Insert
slides for
your
Teacher
Program**

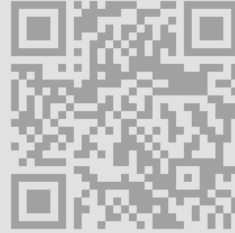


Teach@Mines



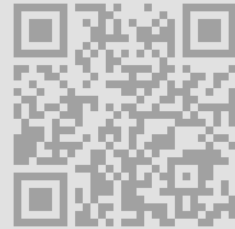
Website

- mines.edu/teacherprep/



Advising

- mines.edu/teacherprep/advising/



Replace w/
pics from
your
Teacher
Program



Suggested modification: Replace with pictures from your students.

**Please register
your presentation**

Register your presentation

Become a GFO Champion!

This will allow us to:

1. Give you credit for the presentation
2. Place you on our GFO map!

Thank you so much!

**Register your
activity
(Click Here)**

Also don't forget to submit a presentation reflection

Presentation Reflection

The presentation reflection form, linked at right, allows you to reflect on your presentation and plan improvements for next time.

We ask that you click the 'Submit' button at the bottom of the sheet, or email it to info@getthefactsout.org. The information on the sheet won't be used to evaluate individual presentations, but to collect data so that GFO can better support presentations organizers and presenters.

Thank you so much!

Reflection PDF
(Click Here)

Presenter Names: _____
Presentation Title: _____
Number of attendees: _____ Date: _____
Workshop Setting: (City and state, institution, Conference Event, etc) _____
Workshop Audience: (Discipline, faculty or non; local or national; etc) _____
Materials Used: (Slides, brochures, posters, etc) _____

Objective	Rating	Comments or evidence
Registered the workshop at the GFO website.	Yes <input type="radio"/> No <input type="radio"/>	
The workshop was an appropriate length (50 min for local, 60-90 for national).	Yes <input type="radio"/> No <input type="radio"/>	
The key message of Get the Facts Out was emphasized: Teachers rate their lives better than all other professions.	Yes <input type="radio"/> Somewhat <input type="radio"/> No <input type="radio"/>	
Time was provided for active processing of data about teaching as a profession before and during discussion.	Yes <input type="radio"/> Somewhat <input type="radio"/> No <input type="radio"/>	
Time was provided for peer discussion.	Yes <input type="radio"/> Somewhat <input type="radio"/> No <input type="radio"/>	
Participants were provided with an opportunity to review locally relevant data about teaching as a profession: <ul style="list-style-type: none">Local audiences: Information on teacher salaries and retirement were updated with local data.National audiences: Time was provided for the audience to identify local data.	Yes <input type="radio"/> Somewhat <input type="radio"/> No <input type="radio"/>	