

**The High Demand Teacher Initiative (HDTI)**  
**to Provide for the Creation of Teachers**  
**In High Demand STEM, CTE, and STW Fields.**

**Overview:**

There is a critical need for highly qualified teachers, particularly for secondary education, in the fields of STEM (Science, Technology, Engineering, and Math), Computer Science, and (STW) Skilled Technical Workforce development. The inability to recruit and retain these highly qualified teachers severely diminish the ability to advance the national agenda and will impede the progress of other legislative acts.

The purpose of the grant is to offset the cost of entry into the teaching profession by highly qualified persons that seek to enter the field of teaching. Upon completing the conditions of employment, the grant is not like a loan and will not need to be repaid. The barriers that qualified candidates currently encounter when considering teaching in these fields are excessively burdensome.

The grant would offset the tuition cost for initial certification for qualified STEM field degree holders that seek to enter the teaching field. The participants in the grant program, institutional and individual, must meet a set of qualifying criteria.

This Act would provide 10,000 new teachers / year at a federal budget cost of \$ 200,000,000 / year.

The most appropriate administrator of the grant will likely be the U.S. Department of Education

**Definitions:**

STEM	Science, Technology, Engineering, and Math
CTE	Career and Technology Education
STW	Skilled Technical Workforce
IHE	Institutions of Higher Education
Non-IHE	not an Institution of Higher Education
Concurrent Candidate	A candidate that teaches as a full-time employee of a school or technical college, while simultaneously while undergoing the teacher training and induction process
Non-Concurrent Candidate	A candidate that undergoes the teacher training and induction process, prior to teaching as a full-time employee of a school or technical college.

**Proposal for Enactment:**

Either through:

- 1) A standalone Bill
- 2) An Amendment to S.1260 – Endless Frontier Act, 117<sup>th</sup> Congress (2020-2021)

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## Part A – Initial Certification and Induction of Teacher

### **IHE based programs:**

**Candidates** must have earned hold a four-year, baccalaureate, or higher degree from an accredited degree granting institution, with a major in one of the following fields.

- Chemistry
- Computer Science
- Biochemistry
- Biotechnology
- Biology
- Physics
- Engineering
- Engineering Science
- Engineering Technology
- Engineering Science
- Environmental Science
- Mathematics
- Material Science

Or substantively equivalent programs, including degrees that are interdisciplinary degrees comprised of the same coursework used to fulfill any of the degrees listed above.

**Institutions** receiving the grant on behalf of an individual, must conduct teacher preparation programs that grants degrees at the master's level in Education.

The IHE program described here is an alternative program for those who already hold a bachelor's degree in a specific content area and are seeking to entering the teaching field.

Depending on the state, candidates that receive a master's degree from an IHE will generally have a substantially higher salary rate.

### **Non-IHE based programs:**

**Candidates** must be sponsored by a local school district or educational authority, having received an offer for full time employment in a CTE or STW field of STEM, Health Science, Information Technology, Advanced Manufacturing, or Energy Career Cluster as defined by the National Career Clusters Framework.

**Institutions** receiving the grant on behalf of an individual, must conduct teacher preparation programs for candidates that do not hold relevant or qualifying baccalaureate degrees.

The non-IHE program described here is an alternative program for those who hold relevant career experience but do not possess an in-field bachelor's degree and are seeking to entering the teaching field.

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## **Part A – Initial Certification and Induction of Teacher (continued)**

### **Program Execution and Financial Operations:**

Candidates will apply to an institution of their choice. Candidates will choose between a IHE program or non-IHE program, depending on their qualifications and needs.

### **Concurrent Candidacy:**

Concurrent Candidacy is when the candidate chooses to start teaching full time and pursue the degree simultaneously. The candidate will have two calendar years to complete the degree. If the candidate is teaching full time while enrolled in the degree program, there is no financial obligation on the part of the candidate if they choose to leave the teaching program. The grant for the degree would be considered as part of the employee compensation.

### **Non-Concurrent Candidacy:**

Non-Concurrent Candidacy is when the candidate chooses to earn the degree, then start teaching after degree completion. There is a possibility that this type of candidate would still be in the classroom teaching, not full time, and uncompensated. If the candidate completes the degree but does not fulfill a minimum of two years of full-time teaching, then candidate is in default and must repay the grant as though it were a loan.

### **Maximum Grant Amount:**

The maximum lifetime grant monies paid on behalf of an individual is \$ 20,000. The funds are for normal tuition, fees, and books, as would be encountered by a non-residential student.

When this grant is combined with other grants or scholarships, the amount provided by this grant must be reduced such that this grant will not cause the candidate to receive more than the maximum grant amounts listed in the section. If the candidate is already receiving more than the maximum eligible amount, then the eligibility for the recipient to receive this grant is terminated for the semester.

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## **Part B – Continuing Career Development Support for Teachers**

Part B provides for a benefit for qualifying existing teachers, to pursue graduate studies, in qualifying Masters' and Ph.D. programs.

The purpose of the benefit is to provide an incentive for teachers to stay within teaching and to increase their technical capability. If at some later time the teacher exited the teaching field, there is a societal benefit because of the high qualification of the new entrant into the non-teaching workforce.

### **The following conditions must be met to qualify for the grant:**

Currently teaching full-time in a public school or technical college.

Meets the qualifying candidate provision under Part-A, IHE based programs, above.

### **Maximum Grant Amount:**

Masters' candidate, the maximum lifetime grant benefit: \$ 25,000.

Doctoral candidate, the maximum lifetime grant benefit: \$ 35,000.

The funds are for normal tuition, fees, and books, as would be encountered by a non-residential student.

When this grant is combined with other grants or scholarships, the amount provided by this grant must be reduced such that this grant will not cause the candidate to receive more than the maximum grant amounts listed in the section. If the candidate is already receiving more than the maximum eligible amount, then the eligibility for the recipient to receive this grant is terminated for the semester.

## **Part C – HDTI Federal Appropriations:**

The goal is to produce 10,000 new teachers a year for the STEM, CTE, and STW teaching fields, anticipating that most of the production will go to secondary schools, middle and high schools, college and career academies, technical high schools, and technical colleges.

The federal budget authorization would be \$ 200,000,000 / year plus a TBD amount for administration and management.

Institutions that receive the grants would be required to conduct a nominal amount of marketing and promotion of their institution's participation and program availability.

The intent of the grant is to remove the financial burden of admission into teaching for candidates in selected high demand fields. Subsequently, the flow of funds is directly from the grantor, straight to the students account as administered by the institution's bursar.

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