

2023 EPI Methodology Report Manual

This document describes how each component in the 2023 Educator Preparation Institution (EPI) performance score is calculated. For indicators relying on survey data, question wording and state aggregate results are presented in the supplementary *Candidate Suite Surveys Summary* (CSSS) documentation.

General rule: Efficacy for all survey questions is calculated from summing the number of respondents selecting “to a moderate extent” or “to a great extent” and dividing by the total number of respondents. All respondents, even if they selected “not applicable/observable” are included in the denominator (except for questions 35 through 41 of the Teacher Candidate Survey in the CSSS, which are specific to program elements). Efficacies are reported as percentages with all percentages left “as is” (i.e., not rounded).

Candidate Selection and Completion

Indicator: Teaching Promise

Data Source: Teacher Candidate, Candidate Supervisor, and Cooperating Teacher Survey Results

Points: 5

Calculation: Each survey asked the following question, “Overall, to what extent do you believe you (this candidate) are (is) ready to enter the teaching profession”. The efficacy percentage for this question for each group was calculated. These three percentage values were then summed and divided by 3 to create an average efficacy for each EPI.

Percentage Efficacy	Points
90% – 100%	5
85% – 89%	4
80% – 84%	3
75% – 79%	2
70% – 74%	1
Below 70%	0

Knowledge and Skills for Teaching

Indicator: Mastery of Teaching Subjects I

Data Source: MTTC 3 Year Cumulative Reports

Points: 20

Calculation: The contractor-produced EPI three-year cumulative report serves as the basis for this calculation. Each eligible candidate’s best attempt is included. The report shows a pass rate percentage for each EPI which is used in the calculation.

Percentage Efficacy	Points
90% – 100%	20
85% – 89%	17
80% – 84%	14
75% – 79%	11
70% – 74%	8
Below 70%	0

Indicator: Mastery of Teaching Subjects II

Data Source: MTTC Subject Groups Scores

Points: 5

Calculation: Each MTTC test subject was placed into one of 9 groups (English/Language Arts, Mathematics, Science, Special Education, Social Studies, World Languages, Career Focused, Arts & Health, Grade Level). More details on the classifications for each subject for 2019-22 are at the end of the [document](#) (see pages 7 – 8). Results for subjects in process of elimination (e.g., dance, communication arts) are excluded from the calculation. Each year MDE will determine which tests are current for this calculation. There is the potential for an individual EPI teaching out a discipline that is not going away statewide to also have those results excluded from these calculations.

To determine the threshold for satisfactory performance, the standard error of measure (SEM) for the state average for each subject group was calculated. The largest statewide standard error for the data was 3.8%, from the Career Focused group. Typically, a 95% confidence interval around a score is calculated by multiplying the standard error by 1.96. This calculation produced an error band of 7.5%. While the error band was considerably smaller for most subject groups, the 7.5% was used for all groups for consistency. Using the error band resulted in flagging each subject group score more than 7.5 percentage points below the state average for each EPI.

Not all EPIs offer each subject group, the fewest subject groups offered is 1, and a handful of institutions offer all 9. The calculation had to account for this difference in institutional offerings. The point calculation is based on the number of subject groups offered, and those flagged and not flagged for each EPI.

The percent recorded is the number of subject groups offered by the EPI for which the score did not fall more than 1.96 SEM below the state average, divided by the number of subject groups offered by the EPI. For example, if the EPI was more than 1.96 SEM below the state average for 2 subject groups, and the EPI offered 6 subject groups, the calculation would be 4/6 or 67%.

Percentage of subject groups NOT below 1.96 SEM	Points
90% – 100%	5
80% – 89%	4
70% – 79%	3
60% – 69%	2
50% – 59%	1
Below 70%	0

Indicator: Candidate Teaching Skill

Data Source: Candidate Supervisor and Cooperating Teacher Survey Results

Points: 15

Calculation: Efficacy was calculated using questions 1 through 26 on the Candidate Supervisor and Cooperating Teacher Surveys (see CSSS). Efficacy for each group was calculated separately. These two percentages were then averaged (summed and divided by 2) to obtain the percentage for each EPI.

Percentage Efficacy	Points
90% – 100%	15
85% – 89%	13
80% – 84%	11
75% – 79%	9
70% – 74%	7
Below 70%	0

Indicator: Candidate Rating of Program

Data Source: Teacher Candidate Survey Results

Points: 10

Calculation: This calculation is based on the Teacher Candidate Survey results, pooling questions 1 through 41 (except Q26) and calculating total efficacy (see CSSS).

Percentage Efficacy	Points
90% – 100%	10
85% – 89%	8
80% – 84%	6
75% – 79%	4
70% – 74%	2
Below 70%	0

Performance as Classroom Teachers

Indicator: Impact on P-12 Learning

Data Source: Educator Effectiveness Ratings

Points: 15

Calculation: The calculation for this component comes from the annual data pull regarding educational effectiveness ratings. Eligible teachers for this calculation are those who were (1) initial certification received within the last five years, (2) have no more than 3 years of teaching, and (3) have an effectiveness rating in the most recent academic year.

Within this population, the number of effective and highly effective ratings are summed for the most recent year, and this total is divided by the total number of eligible ratings during this time frame. Each individual is only counted once in the annual rating. The data for this calculation is a part of the data provided to EPIs in February each year.

Specific rules for gathering this data:

- At this time, only effectiveness ratings reported in the Registry of Educational Personnel (REP) are used, and only end-of-year labels are used. Non-public schools report on a different timeline and does not delineate the assignment of the individuals reported, making ratings a year behind the REP evaluations and not directly comparable.
- Deduplication of records (reduction of multiple records for an individual to a single record) was conducted, with only the teacher's lowest effectiveness rating included in the analysis.
- Teachers with missing effectiveness labels (due to school uploading error) were excluded from the analysis.

Percentage Efficacy	Points
90% – 100%	15
85% – 89%	13
80% – 84%	11
75% – 79%	9
70% – 74%	7
Below 70%	0

Category: Performance as Classroom Teachers

Indicator: Impact on P-12 Learning

Data Source: Administrator Survey

Points: 5

Calculation: Total efficacy was calculated across the 22 questions of the Administrator Survey. Unlike the other indicators, “n/a” responses are not included in the denominator of this calculation.

Percentage Efficacy	Points
90% – 100%	5
85% – 89%	4
80% – 84%	3
75% – 79%	2
70% – 74%	1
Below 70%	0

Robust Clinical Experiences

Indicator: Candidate Placement Opportunities

Data Source: Diversity of Placement Sites during Student Teaching

Points: 4

Calculation: Each PK-12 school within the state has been determined to be diverse (or not) based on the reporting of the following student demographics at the school: race/ethnicity, economic status, English language learner status, and disability status. If the school was reported at or above the state average for any group in the most recent academic year reporting, it is considered diverse for the purposes of this calculation.

Each student teaching placement was recorded, and the diversity status (yes/no) noted. The percentage of diverse student teaching placements is the total diverse placements divided by the total number of placements for each EPI. Students who were placed in the same school building for both a primary and secondary assignment were only included once in the calculation.

Note, the data used for this calculation are based on the placement locations reported in the Candidate Suite Surveys. These placements were cross-referenced with data available on <https://www.mischooldata.org/> to obtain diversity information. In some cases, usually involving candidates placed in an early child center, district diversity data rather than school diversity data was used if a school-specific match was unavailable. Diversity data was only available for Michigan public schools; however, EPIs were offered an opportunity to provide diversity data for private and out-of-state schools, if available. Candidates where no diversity data was available were excluded from the analysis. Each institution was provided with their results for reference.

To determine point attribution, the statewide average diversity rate was used as the target. The statewide placement rate in diverse setting at the time of this calculation was 72.7%. A 95% confidence interval was then calculated around the state average, which was +/- 1.9%. All institutions within 1.9% of the state average (70.9% and above) are awarded full points. Those below the 70.9% threshold were assigned points according to the table below.

Percentage Diversity	Points
70.9% - 100%	4
60.9% - 70.8%	3
50.9% - 60.8%	2
40.9% - 50.8%	1
Below 40.8%	0

Indicator: Candidate Rating of Placement Opportunities

Data Source: Teacher Candidate Survey Results

Points: 4

Calculation: Questions 42 and 43 on the Teacher Candidate Survey (see CSSS) ask students about their opportunities to be placed with and work with diverse student populations. Overall efficacy for these two questions was calculated for each EPI.

Points: Points are assigned from the efficacy calculation based on the table below.

Percentage Efficacy	Points
90% – 100%	4
85% – 89%	3
80% – 84%	2
75% – 79%	1
70% – 74%	1
Below 70%	0

Indicator: Survey Participation

Data Source: Combined Teacher Candidate, Candidate Supervisor, and Cooperating Teacher Survey Response Rates

Points: 6

Calculation and points: Response rate targets exist for all surveys. Respondents needed to complete the entire survey for the attempt to count as an official response. For the Teacher Candidate and Candidate Supervisor surveys, this target is 80%. For the Cooperating teacher survey, this target is 60%. For each survey in which the EPI met or exceeded the response rate, they were awarded 2 points. If the EPI's response rate was within 20% of the target (60%-79% for TC and CS, 40%-59% for CT), they were awarded 1 point for that survey. Any response rate below this value was awarded no points. For each survey, the EPI received 2, 1, or 0 points, for a total of 6 possible points.

Indicator: Program Partnership Strength

Data Source: Candidate Supervisor and Cooperating Teacher Survey Results

Points: 6

Calculation: Efficacy for questions 44 through 50 (Candidate Supervisor and Cooperating Teacher surveys only) assess the strength of the relationship between the EPI and the P-12 partner. Efficacy for these questions was calculated for each group. The average of the two efficacies is used to determine points.

Percentage Efficacy	Points
90% – 100%	6
85% – 89%	5
80% – 84%	4
75% – 79%	3
70% – 74%	2
Below 70%	0

Scoring dimensions under development:

Category: Candidate Selection and Completion

Indicator: Candidate/Completer Diversity

Data Source: Reporting by providers (mechanism to be determined)

Points: 5

Calculation: TBD

Category: Knowledge and Skills for Teaching

Indicator: Candidate Teaching Skill II

Data Source: Statewide Clinical Observation Tool (to be developed)

Points: TBD

Calculation: TBD

2019-22 MTTC Subject Area Classification

Test	Subject Area	Notes
002 English	ELA	
003 Journalism	NOT	Phased out.
004 Speech	ELA	
005 Reading	ELA	
007 Economics	SS	
008 Geography	SS	
009 History	SS	
010 Political Science	SS	
011 Psychology	SS	
012 Sociology	NOT	Phased out.
017 Biology	SCI	
018 Chemistry	SCI	
019 Physics	SCI	
020 Earth/Space Sci.	SCI	
022 Mathematics (Sec)	MTH	
023 French	WL	
024 German	WL	
026 Latin	WL	
027 Russian	NOT	Phased out.
028 Spanish	WL	
029 Italian	WL	
036 Marketing Education	CRR	Phasing out.
037 Agricultural Ed.	CRR	
040 Family/Consumer Sci.	CRR	
043 Health	ARTPE	Phasing out.
044 Physical Education	ARTPE	Phasing out.
046 Dance	NOT	Phased out.
048 Library Media	NOT	Is solely an additional endorsement
050 Computer Science	NOT	Phased out.
051 School Counselor	NOT	Is solely an additional endorsement
053 Fine Arts	NOT	Phased out.
056 Cognitive Impairment	SPED	
057 Speech/Lang. Impaired	SPED	
058 Phys/Other Impairment	SPED	
059 Emotional Impairment	SPED	
061 Visually Impaired	SPED	
062 Deaf and Hard of Hearing	SPED	Test code will change in spring 2023.
063 Learning Disabilities	SPED	Phased out.
064 Autism Spectrum Dis.	SPED	
075 Bilingual Education	WL	
084 Social Studies (Sec)	SS	
085 Middle Level	GL	

086 ESL	WL	
087 Industrial Tech.	CRR	
089 Mathematics (Elem)	MTH	
090 Language Arts (Elem)	ELA	
091 Communication (Sec)	NOT	Phased out.
092 Reading Specialist	NOT	
093 Integrated Sci (Elem)	SCI	
094 Integrated Sci (Sec)	SCI	
095 Visual Arts Ed.	ARTPE	
097 Physical Science	SCI	
098 Business Mgt Mrkt Tech	CRR	
099 Music Education	ARTPE	
100 Japanese	WL	
101 Chinese (Mandarin)	WL	
102 Arabic (Modern Std)	WL	
103 Elementary Education	GL	
105 Social Studies (Elem)	SS	
106 Early Child Ed (Gen & SPED)	GL	
112 Health Ed	ARTPE	
113 Phys Ed	ARTPE	
114 Learning Disabilities	SPED	
115 Cognitive Impairment	SPED	
116 Emotional Impairment	SPED	
117 Lower Elementary (PK-3) Ed	GL	
118 Lower Elementary (PK-3) Ed	GL	
119 Lower Elementary (PK-3) Ed	GL	
120 Lower Elementary (PK-3) Ed	GL	

ELA=English Language Arts

SS=Social Studies

SCI=Science

MTH=Math

SPED=Special Education

WL=World Languages

GL=Grade Level

CRR=Career/Tech

ARTPE=Arts, Physical Ed, Health

NOT=Not to be included – either a post initial certification endorsement, or is being phased out