Understanding Our Selection Criteria Standard

The program screens for academic caliber when selecting teacher candidates

WHY THIS STANDARD?

To ensure that our children receive a world-class education, their teachers need to be world-class. Sixty years of research and the experience of nations whose students outperform our own have proven that we can only achieve this goal by raising the bar of admission to teacher preparation programs.

WHAT IS THE FOCUS OF THE STANDARD?

The standard evaluates admissions requirements that help ensure that new elementary, secondary, and special education teachers come from the top half of the college-going population. It signals that prospective teachers pursuing certification as undergraduates should have average or above average SAT or ACT scores, and also considers programs' GPA requirements for admission. Those pursuing certification at the graduate level should have at least a 3.0 GPA and either submit standardized test scores (e.g., the GRE or MAT) or undergo an audition. The "strong design" indicator addresses whether institutions maintain selectivity and diversity.

Standard applies to: Elementary, Secondary, and Special Education programs.

Standard and Indicators

Standard 1: Selection Criteria

The program screens for academic caliber when selecting teacher candidates.

Standard applies to: Elementary, Secondary, and Special Education programs.

This standard has been modified since 2014 to give greater weight to standardized test scores, reflecting new accreditation standards for teacher preparation programs. For more information, see here.

Indicators that the program meets the standard:

1.1 The undergraduate program is sufficiently selective, as demonstrated by meeting at least one of the following three criteria:

1.1a It is housed in an institution of higher education that is sufficiently selective (as indicated by a mean combined SAT mathematics and verbal score of 1120 or above, or a mean ACT composite score of 24 or above), ensuring that applicants are likely to be in the top half of the college-going population.

OR

1.1b Although no SAT/ACT information is available on the institution in which it is housed, the institution's Barron's ratings provides assurance that applicants are likely to be in the top half of the college-going population.

OR

1.1c It utilizes for admission a standardized test of academic proficiency that allows comparison of applicants to the general college-going population, and establishes a cut-score at or above the national mean to allow selection of applicants in the top half of that population.

Minimum GPAs required for admission to the program and average GPAs of candidates at the time of admission to the program also will be considered in the evaluation of this standard.

1.2 A graduate program must satisfy one of the following:

1.2a The graduate program requires for admission an undergraduate GPA of 3.0 or higher (overall or in upper division coursework).

OR

1.2b The graduate program certifies through a registrar (or comparable institutional leader) that the average GPA for the most recent incoming class of program candidates is 3.3 or higher, based solely on overall or upper division coursework at the undergraduate level.

AND, in addition, a graduate program must also satisfy one of the following:

1.2c The graduate program requires that candidates submit scores on one of the standardized tests of academic proficiency used commonly in higher education for graduate admissions (e.g., the GRE).

OR

1.2d The graduate program utilizes for admission an audition process that includes, but need not be limited to, tasks that assess the applicant's (1) classroom presence, (2) problem-solving and interpersonal skills, and (3) capacity to persevere in the pursuit of improved student outcomes.

Indicators that the program has strong design:

1.3 An undergraduate program will receive a "strong design" designation if the program meets the selectivity standard based on indicator 1.1 above AND, in combination with all other undergraduate teacher preparation programs at its institution, the racial diversity of the program is the same as or greater than the racial diversity of either the institution itself or of the state's teachers.

1.4 A graduate program will receive a "strong design" designation if it meets the selectivity standard based on indicator 1.2 above AND, in combination with all other graduate teacher preparation programs at its institution, the racial diversity of the program is greater than the racial diversity of the state's teachers.

Rationale

Standard 1: Selection Criteria

The program selects teacher candidates of strong academic caliber.

Standard applies to: Elementary, Secondary, and Special Education programs.

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RATIONALE

Research base for this standard

"Strong research"[1] indicates that higher teacher selectivity as measured by factors such as SAT scores and, to lesser degrees, average GPA prior to program admission and an institution of higher education's (IHE) general competitiveness is correlated with increased student achievement.[2] Although most strong research supports applying greater selectivity when admitting teacher candidates, two studies found no relationship between individual teachers' college entrance exam

1 NCTQ has created "research inventories" that describe research conducted within the last decade or so that has general relevance to aspects of teacher preparation also addressed by one or more of its standards (with the exceptions of the Outcomes, Evidence of Effectiveness, and Rigor standards). These inventories categorize research along two dimensions: design methodology and use of student performance data. Research that satisfies our standards on both is designated as "strong research" and will be identified as such. That research is cited here if it is directly relevant to the standard; strong research is distinguished from other research that is not included in the inventory or is not designated as "strong" in the inventory. Refer to the introduction to the research inventories for more discussion of our approach to categorizing research. If a research inventory has been developed to describe research that generally relates to the same aspect of teacher prep as addressed by a standard, the inventory can be found in the back of this standard book.

2 For research supporting greater selectivity for teacher preparation programs, see Boyd, D., Lankford, H., Loeb, S., Rockoff, J., & Wyckoff, J. (2008). The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools. *Journal of Policy Analysis and Management, 27*(4), 793–818. Steele, J. L., Pepper, M. J., Springer, M., & Lockwood, J. R. (2015). The distribution and mobility of effective teachers: Evidence from a large, urban school district. *Economics of Education Review, 48*, 86-101. Lincove, J. A., Osborne, C., Mills, N., & Bellows, L. (2015). Teacher preparation for profit or prestige: Analysis of a diverse market for teacher preparation. *Journal of Teacher Education, 66*(5), 415-434. Henry, G. T. Bastian, K. C. & Smith, A. A. (2012). Scholarships to recruit the "Best and Brightest" into teaching: Who is recruited, where do they teach, how effective are they, and how long do they stay? *Educational Researcher, 41*(3), 83-92.

scores (e.g., SAT, ACT) and student achievement, although neither examined the impact of selectivity measures established by the program;[3] another found no correlation between university selectivity and teacher effectiveness.[4]

Additional research[5] spanning six decades[6] supports higher academic admissions standards for entry into teacher training programs, including studies showing: 1) a relationship between teacher "verbal ability" (frequently measured by SAT, ACT, or other vocabulary tests) and student achievement;[7] and 2) a similarly strong correlation between the selectivity of the teacher's college and student achievement.[8] Education programs often use licensing tests (e.g., Praxis I) as admissions criteria for teachers, so the tests provide another useful measure of both teachers' expected teaching ability and education programs' selectivity.[9] Furthermore, a recent but limited study in Mississippi found that middle school students whose teachers earned

3 Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics, 95*, 798-812. Henry, G. T., Campbell, S. L., Thompson, C. L., Patriarca, L. A., Luterbach, K. J., Lys, D. B., & Covington, V. M. (2013). The predictive validity of measures of teacher candidate programs and performance: Towards an evidence-based approach to teacher preparation. *Journal of Teacher Education, 64*(5) 439-453. Note: While these studies offer some insight into the relationship between teacher performance on college entrance assessments and student outcomes, they run contrary to the conclusions of most strong research in the field. Furthermore, these studies examine outcomes at the teacher level, not the program level, and therefore do not provide direct evidence as to the impact of an institution's selectivity.

4 Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics of Education Review, 30*(3), 449-465. This study examined selectivity based on *U.S. News and World Report*'s rankings and found no statistically significant correlation with teacher effectiveness, with the exception of a negative correlation with elementary math instruction. This study only examined selectivity at the university level, which may bear no relationship to the qualifications of teacher candidates themselves.

5 "Additional research" is research that is not designated as "strong" because it is not as recent and/or does not meet the highest standards for design methodology and/or use of student performance data.

6 Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). How and why do teacher credentials matter for student achievement? (Working Paper No. 12828). Cambridge, MA: National Bureau of Economic Research. Clotfelter, Ladd, and Vigdor found college selectivity to have a positive impact on student achievement in North Carolina. For more research supporting greater selectivity for teacher preparation programs, see Gitomer, D. (2007). Teacher quality in a changing policy landscape: Improvements in the teacher pool. Princeton, NJ: Educational Testing Service; Retrieved February 6, 2013, from http://www.ets.org/Media/Education_Topics/pdf/T; Goldhaber, D., Perry, D., & Anthony, E., (2004). NBPTS certification: Who applies and what factors are associated with success? Seattle, WA: Center for Reinventing Public Education; Whitehurst, G. J. (2002). Scientifically based research on teacher quality: Research on teacher preparation and professional development. (Paper presented at the 2002 White House Conference on Preparing Tomorrow's Teachers); Kain, J., & Singleton, K. (1996, May-June). Equality of education revisited. *New England Economic Review*, (May), 87-114.; Ferguson, R., & Ladd, H. (1996). How and why money matters: An analysis of Alabama schools. In H. Ladd (Ed.), Holding schools accountable. Washington, DC: Brookings Institution; Greenwald, R., et al. (1996). The effect of school resources on student achievement. *Review of Educational Research, 66*(3), 361-396; Ferguson, R. (1991). Paying for public education: New evidence on how and why money matters. Harvard Journal on Legislation, 28, 465-498; Strauss, R., & Sawyer, E. (1986). Some new evidence on teacher and student competencies. *Economics of Education Review, 5*(1), 41-48; McLaughlin, M., & Marsh, D. (1978). Staff development and school change. *Teachers College Record, 80*(1), 69-94; Summers, A., & Wolfe, B. (1977). Do schools make a difference? *American Economic Review, 67*(4), 639-652; Hanushek, E. (1971). Teacher characteristics and gains in student achievement: Estimation using micro-data. *American Economic Review, 61*(2), 280-288. Master, B., Loeb, S., & Wyckoff, J. (2014). Learning that lasts: Unpacking variation in teachers' effects on students' long-term knowledge (working paper). National Center for Analysis of Longitudinal Data in Education Research.

7 Numerous research studies have established the strong relationship between teachers' vocabulary (a proxy for being broadly educated) and student achievement. For example, see Whitehurst, G. J. (2002); Ehrenberg, R., & Brewer, D. (1995). Did teachers' verbal ability and race matter in the 1960s? Coleman Revisited. *Economics of Education Review, 14*, 1-21; Levin, H. M. (1970). A cost-effectiveness analysis of teacher selection. *Journal of Human Resources, 5*(1), 24-33. Aloe and Becker (2009), however, found that the evidence on teacher verbal ability is dated. Aloe, A. M., & Becker, B. J. (2009). Teacher verbal ability and school outcomes: Where is the evidence? *Educational Researcher, 38*(8), 612-624.

8 Ehrenberg, R., & Brewer, D. (1994). Do school and teacher characteristics matter? Evidence from high school and beyond. *Economics of Education Review, 13*(1), 1-17; Wayne, A., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research, 71*(1), 89-122; Winkler, D. (1975). Educational achievement and school peer composition. *Journal of Human Resources, 10*, 189-204.

9 Clotfelter, C., Ladd, H., & Vigdor, J. (2007). A study of elementary teachers in North Carolina also found that teachers with test scores one standard deviation above the mean on the Elementary Education Test as well as a test of content were associated with increased student achievement of 0.011 to 0.015 standard deviations.

higher ACT scores had higher levels of proficiency in math, reading, and writing on the state test.[10] Moreover, a recent study found that ELA teachers who attended more competitive IHEs produced longer-lasting learning benefits (as measured by the persistence of teachers' value-added effects on students) than teachers from less competitive IHEs.[11]

Other support for this standard

In countries whose students outperform our own, studies show a clear pattern wherein teacher preparation programs recruit and admit the most academically capable young adults into the profession. McKinsey's 2007 study of high-performing educational systems indicates that other countries set a high bar, with the least selective among their high-performing institutions still selecting teacher candidates from only the top third of students.[12] By contrast, as the *Teacher Prep Review* shows, most U.S. teacher preparation programs are not ensuring that candidates are drawn from the top half of the college-going population. Given the decline in academic performance and diversity of aspiring teachers, as documented by ACT's annual report, "The Condition of Future Educators," prep programs must make a deliberate effort to attract and prepare the best candidates.[13]

This standard also receives support from school district superintendents and members of the Association of American Educators (AAE).[14]

10 Mississippi Life Tracks. (2013, February). Teacher quality & student performance: A report on the impact of teachers' ACT scores on student proficiency on standardized tests. Retrieved from https://lifetracks.ms.gov/RequestAnalysis/ResearchStudies.aspx. Note: This study does not use randomized assignment of students to teachers, nor does it control for students' prior proficiency levels or use any other measures of student growth while in a teacher's class. Consequently, while these data may indicate that there is a causal relationship between teachers' ACT scores and student proficiency, an equally plausible explanation is that students with higher levels of proficiency are assigned to teachers with higher ACT scores.

11 Master, B., Loeb, S., & Wyckoff, J. (2014).

12 Barber, M., & Mourshed, M. (2007, September). How the world's best-performing school systems come out on top. McKinsey & Co., 16. For a discussion of teacher preparation program admissions policies in other countries, see McKenzie, P., Santiago, P., Sliwka, P., & Hiroyuki, H. (2005). Teachers matter: Attracting, developing and retaining effective teachers. Organisation for Economic Co-operation and Development. Similarly, a comparison across 23 countries found that teachers' cognitive skills were "an important determinant of international differences in student performance." Hanushek, E. A., Piopiunik, M., & Wiederhold, S. (2014). *The value of smarter teachers: International evidence on teacher cognitive skills and student performance* (No. w20727). National Bureau of Economic Research.

13 ACT. (2015). The Condition of Future Educators 2015. Retrieved from http://www.act.org/content/dam/act/unsecured/documents/Future-Educators-2015.pdf.

14 In 2016, 77 percent of respondents to the AAE membership survey "agreed with a recent NCTQ report that ranks schools of education and recommends requiring rigorous teacher prep program admission tests, an admission GPA of 3.0 or higher, and the passage of subject-matter tests as a condition of admission into teacher programs." Association of American Educators. (2016). AAE National Membership Survey: Professional Educators Embrace Solutions. Retrieved from http://www.aaeteachers.org/images/pdfs/2016.survey.pdf.

Methodology

How NCTQ scores the Selection Criteria Standard

Standards and Indicators

DATA USED TO SCORE THIS STANDARD

Evaluation of elementary, secondary, and special education preparation programs on Standard 1: Selection Criteria uses the following sources of data:

- Undergraduate and graduate catalogs
- Relevant institution of higher education (IHE) websites
- State regulations
- Integrated Postsecondary Education Data System (IPEDS) data on mean university SAT/ACT scores and proportion of students who submitted scores for each test.
- Mean of SAT/ACT scores self-reported to the College Board[15]
- Data on the average GPA of the most recent cohort of entering teacher candidates, provided and certified by the registrar (or comparable institutional leader)
- Data on selectivity provided by Barron's *Profiles of American Colleges* (in the absence of data on SAT/ACT scores)
- State Title II report and 2011-12 National Center for Education Statistics (NCES) School and Staffing Survey (for evaluation of "strong design" indicators only)

WHO ANALYZES THE DATA

A general analyst evaluates each program using a detailed scoring protocol from which this scoring methodology is abstracted. Twenty percent of programs are randomly selected for analysis by a second general analyst. For information on the process by which scoring discrepancies are resolved, see the "scoring processes" section of the General Methodology.

SCOPE OF ANALYSIS

Evaluation of **undergraduate and graduate** programs on this standard looks for evidence that teacher candidates are likely to be in the upper half of the college population.

Undergraduate programs are deemed to be selecting from the upper half of the college population if they are housed in sufficiently selective IHEs (Indicator 1.1a and 1.1b).[16] The threshold scores set for "sufficient selectivity" of the IHE to ensure that education school candidates are likely to be in the upper half are: 1) a campus mean combined SAT mathematics and verbal score of 1120 or above, or 2) a campus mean ACT composite score of 24 or above.[17]

15 Used if more than 50 percent of the student body report such scores and no other source of SAT/ACT data is available.

16 Because the absence of any data on the IHE's selectivity or the lack of a designation of the IHE by Barron as "most competitive" or above is presumed to indicate that it is not sufficiently selective, it is possible to evaluate all undergraduate programs in the sample on this standard.

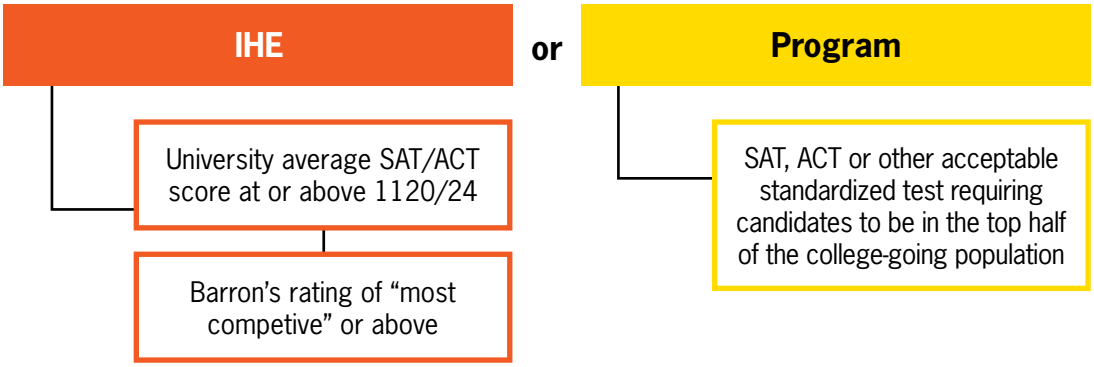
17 These thresholds approximately correspond to the 70-75th percentiles. Although there is wide variation among IHEs on score ranges, the majority of students at IHEs whose student bodies have mean scores at this level will have scores above the 50th percentile.

In some cases, a program could meet the Selection Criteria Standard based on its institution's average SAT score but not its average ACT score (or vice versa). When the averages on each test differ enough that they would result in a different score, IPEDS data is used to determine the proportion of students at the institution who submitted scores for each test. If one test is far more prevalent than the other, the average score for that test is used to determine the score on the Selection Criteria Standard.

If **undergraduate programs** are housed in IHEs with lower selectivity in general admissions, then analysts evaluate whether the program itself requires tests of academic proficiency normed to the college population (Indicator 1.1c) and admits only those students performing above average.[18] Although tests such as the SAT and ACT commonly taken for college admission may be used for this purpose, these tests are not the only ones available.[19] Analysts investigate the intended audience for and the adequacy of every test used for admission purposes encountered in the scoring process and look for threshold scores set at the national mean.

If an **undergraduate program** does not meet this standard based on the institution's selectivity or the program's minimum test scores for entry, it can nearly meet the standard if the minimum GPA required for entry is 3.3 or higher or if the average GPA for all students admitted into the program is 3.5 or higher.

How undergraduate programs can satisfy the Selection Criteria Standard



Graduate programs are deemed to be selecting from the upper half of the college population if, in addition to requiring a 3.0 minimum GPA (Indicator 1.2a) or maintaining a 3.3 average GPA across entering teacher candidates (Indicator 1.2b), they either:

- Require applicants to provide a score from the Graduate Record Examination (GRE) or another standardized test commonly used for admission to graduate programs (as opposed to tests of teacher candidate basic skills or content mastery) (Indicator 1.2c) or
- Require applicants to audition (Indicator 1.2d).

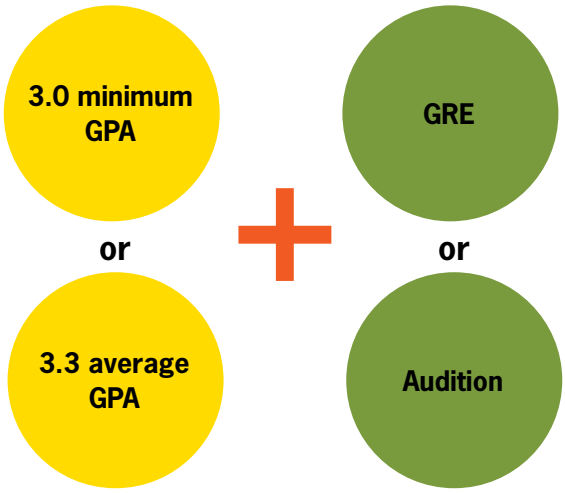
Common misconceptions about how analysts evaluate the Selection Criteria Standard:

- *The standard considers the average test scores or GPAs of teacher candidates after they have begun teacher preparation.* This standard evaluates pre-admission standards, not averages based on teacher candidates' performance after they have been accepted.
- *The standard evaluates exit requirements.* Evaluation for this standard only considers preparation program admission requirements.
- *Teacher licensure exams, such as the Praxis I or Praxis II tests, are considered acceptable admission tests.* Assessments — such as the Praxis I or Praxis II — that are designed solely for teacher candidates are not considered acceptable admission tests.

18 Two categories of tests do not satisfy the indicator. Placement tests such as the COMPASS or ACCUPLACER are not relevant to evaluating overall academic aptitude and are not considered when evaluating Indicator 1.1c. Additionally, tests normed to the teacher candidate population, such as Praxis I tests, do not satisfy the indicator.

19 We note that any test required for preparation program admission need not be taken until a prospective teacher candidate has had the opportunity to remediate deficiencies during the first two years of college coursework.

How graduate programs can satisfy the Selection Criteria Standard



Because the absence of any data on the admissions standards of the graduate program is presumed to indicate that it is not sufficiently selective, it was possible to evaluate all graduate programs in the sample on this standard.

HOW A PROGRAM EARNS A "STRONG DESIGN" RATING

Undergraduate programs are eligible for strong design designation if they satisfy at least one sub-indicator in 1.1 and the IHE's undergraduate teacher preparation programs as a whole are relatively more racially diverse than the university as a whole or more diverse than the state's teacher corps (as determined by Title II reports, IPEDs data, and the 2011-12 NCES Schools and Staffing Survey). **Graduate programs** are eligible for strong design designation if they satisfy Indicator 1.2 and the IHE's graduate teacher preparation programs as a whole are relatively more racially diverse than the state's teacher corps (as determined by the state's Title II report and the 2011-12 NCES Schools and Staffing Survey).

EXAMPLES OF WHAT SATISFIES OR DOES NOT SATISFY THE STANDARD'S INDICATORS

Undergraduate Admission: IHE Selectivity Considerations (Indicator 1.1a and 1.1b)[20]

Selectivity of IHE	
✓ fully satisfies the indicators	X does not satisfy the indicators
The program is housed in a university whose student body has a mean combined math and verbal SAT score or ACT composite score well above the national mean. Examples: ■ The average SAT score of incoming freshmen at a university is 1120. ■ The average ACT of incoming freshmen is 24. ■ *The university's selectivity is designated by Barron's as "most competitive" or above.*	The program is housed in a university whose student body has a mean combined math and verbal SAT score or ACT composite score that is below the national average. Examples: ■ The average SAT of incoming freshmen at a university is below 1006. ■ The average ACT of incoming freshmen at a university is below 21. ■ The university has open admissions.

20 While these indicators cannot be partly satisfied, programs housed in IHEs whose mean SAT or ACT scores are between the 50th percentile and the threshold set to satisfy the indicator are rated as partly meeting the standard.

Undergraduate Admission: Program Selectivity Considerations (Indicator 1.1c)

Selectivity of program	
✓ fully satisfies the indicator	X does not satisfy the indicator
The program requires for admission a score on a standardized test normed to the general population that places the candidate in the upper half of the college population. Example: ■ A university in Texas does not satisfy the IHE-related selectivity standard for Indicator 1.1a or 1.1b. However, applicants to any of its teacher preparation programs must take the THEA and achieve a score sufficient to ensure that the applicant is in the upper half of the college population.	The program does not require for admission a score on any standardized test or does not require a standardized test normed to the general population that places the candidate in the upper half of the college population. Example: ■ A university in Kentucky does not satisfy the IHE-relevant selectivity standard for Indicator 1.1a or 1.1b. Applicants to any of its teacher preparation programs must take the Praxis I, a test of basic skills that is normed only to the population of teacher candidates.

Graduate Admission: GPA and Test or Audition (Indicators 1.2a-1.2d)

✓ fully satisfies the indicators	X does not satisfy the indicators
The program explicitly requires a 3.0 GPA for initial admission to the teacher preparation program or school of education or demonstrates that the average GPA of all entering teacher candidates is 3.3 or above, and requires either the GRE (or similar test) or a successful audition. Examples: ■ A GPA of 3.0 or above is required for admission to all graduate teacher preparation programs. Submission of scores on the Graduate Record Exam (GRE) is required for all applicants to the MAT program in Elementary Education ■ A GPA of 3.0 or above is required for admission to all graduate teacher preparation programs. The applicant must also submit a self-designed lesson plan and schedule a time to deliver that lesson to a panel of education professors and classroom teachers. ■ Prospective teacher candidates should submit a 15-minute tape of themselves teaching a mini-lesson. In addition, a GPA of 3.0 or above is required for admission to all graduate teacher preparation programs. ■ Although the program only requires a 2.75 GPA for admission, the average GPA across all entering teacher candidates is 3.32. Additionally, the program requires all teacher candidates to submit GRE scores for admission.	The program does not explicitly require the combination of 1) a 3.0 GPA for initial admission to the teacher preparation program and the GRE (or similar test), or 2) a 3.0 GPA and a successful audition, or the program has no minimum GPA requirement and the average GPA of entering teacher candidates is below 3.3. Examples: ■ Applicants must have a GPA of 2.75 or above in all undergraduate coursework. ■ Prospective teacher candidates should submit Praxis scores, GRE scores, or a personal essay describing the applicant's interest in teaching to be considered for admission. ■ The applicant should submit a taped mini-lesson, a log of volunteer experiences in school or standardized test scores. ■ The program has no minimum GPA requirement and the average GPA of incoming teacher candidates is 2.9.

Research Inventory

Researching Teacher Preparation: Studies investigating the selection of teacher candidates of high academic caliber

These studies address issues most relevant to Standard 1: Selection Criteria

Total number of studies	Studies with stronger design		Studies with weaker design	
	Measures student outcomes	Does not measure student outcomes	Measures student outcomes	Does not measure student outcomes
18	10	7	0	1
	Citations: 2, 4, 5, 7, 9, 10, 12, 13, 16, 17	Citations: 1, 3, 6, 8, 14, 15, 18		Citation: 11

Note: Kukla-Acevedo, S. (2009) is cross-listed with RI 5: Early Mathematics

When reviewing teacher preparation research regarding admission qualifications and the selectivity of teacher preparation programs, we found that a substantial portion of the research focused on candidates' dispositions. The two studies below exemplify this feature of research:

- Harrison, J., Smithey, G., McAffee, H., & Weiner, C. (2006). Assessing Candidate Disposition for Admission into Teacher Education: Can Just Anyone Teach? *Action In Teacher Education, 27*(4), 72–80.
- Wasicsko, M., Wirtz, P., & Resor, C. (2009). Using Dispositions in the Teacher Admission Process. *SRATE Journal, 18*(2), 19–26.

Studies of this nature were not included in our categorization because they do not address issues of academic caliber.

Citations for articles categorized in the table are listed below.

Databases: Education Research Complete and Education Resource Information Center (peer-reviewed listings of reports on research including United States populations). Several studies with strong design that were gathered from other sources are included.

Publication dates: Jan 2000 – August 2016

See Research Inventories: Rationale and Methods for more information on the development of this inventory of research.

1. Blömeke, S., Suhl, U., Kaiser, G., & Döhrmann, M. (2012). Family background, entry selectivity and opportunities to learn: What matters in primary teacher education? An international comparison of fifteen countries. *Teaching & Teacher Education, 28*(1), 44–55.
2. Boyd, D., Lankford, H., Loeb, S., Rockoff, J., & Wyckoff, J. (2008). The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools. *Journal of Policy Analysis and Management, 27*(4), 793–818.

3. Casey, C., & Childs, R. (2011). Teacher education admission criteria as measure of preparedness for teaching. *Canadian Journal of Education, 34*(2), 3–20.
4. Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics of Education Review, 30*(3), 449–465.
5. Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2010). Teacher credentials and student achievement in high school. *Journal of Human Resources, 45*(3), 655–681.
6. Denner, P., Norman, A., & Lin, S. (2009). Fairness and consequential validity of teacher work samples. *Educational Assessment, Evaluation and Accountability, 21*(3), 235–254.
7. Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics, 95*, 798–812.
8. Henry, G. T., Bastian, K. C., & Smith, A. A. (2012). Scholarships to recruit the "Best and Brightest" into teaching: Who is recruited, where do they teach, how effective are they, and how long do they stay? *Educational Researcher, 41*(3), 83-92.
9. Henry, G. T., Campbell, S. L., Thompson, C. L., Patriarca, L. A., Luterbach, K. J., Lys, D. B., & Covington, V. M. (2013). The Predictive Validity of Measures of Teacher Candidate Programs and Performance: Towards an Evidence-Based Approach to Teacher Preparation. *Journal of Teacher Education, 64*(5) 439-453.
10. Hernandez, B., Ward, S., & Strickland, G. (2006). Predicting teacher certification success: The effect of cumulative grade point average and preprofessional academic skills test scores on testing performance. *Teacher Education and Practice, 19*(1), 41–54.
11. Kosnik, C., Brown, R., & Beck, C. (2005). The preservice admissions process: What qualities do future teachers need and how can they be identified in applicants? *New Educator, 1*(2), 101–123.
12. Kukla-Acevedo, S. (2009). Do teacher characteristics matter? New Results on the effects of teacher preparation on student achievement. *Economics of Education Review, 28*(1), 49–57.
13. Lincove, J. A., Osborne, C., Mills, N., & Bellows, L. (2015). Teacher preparation for profit or prestige: Analysis of a diverse market for teacher preparation. *Journal of Teacher Education, 66*(5), 415-434.
14. Mikitovics, A., & Crehan, K. D. (2002). Pre-professional skills test scores as college of education admission criteria. *Journal of Educational Research, 95*(4), 215.
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