

Defiance College Ohio Assessment For Educators Exam Data and Analysis

Instrument Overview and Validity/Reliability Evidence

The Ohio Assessments for Educators (OAE) is a statewide licensure examination system developed by Pearson in partnership with the Ohio Department of Education and Workforce (ODEW). The OAE includes subject-specific assessments for each licensure area available in Ohio, measuring candidates' content knowledge, pedagogical content knowledge, and readiness to teach. Defiance College requires all teacher candidates to attempt all applicable OAE assessments prior to completion.

Assessment Structure

Each OAE exam is designed for a specific licensure area or grade band. All exams include:

- Selected-Response Questions: Multiple-choice items assessing factual knowledge, conceptual understanding, and application across content subareas. These items constitute approximately 75–80% of most exams.

Some exams also include:

- Constructed-Response Assignments: Extended written responses (typically 1-2 per exam) requiring candidates to apply and synthesize content knowledge. These contribute approximately 20–25% of the total scaled score.

Each exam is organized into 2-5 subareas reflecting the domain structure of the licensure area. Subarea performance scores (1-4) are reported diagnostically and indicate candidates' relative strengths and weaknesses within the content domain. The total scaled score (100-300 range) is the sole determinant of pass/fail status.

Passing Score Requirements

Ohio sets exam-specific passing scores for each OAE assessment. Most subject-area exams carry a passing score of 220 on the scaled score scale. The Foundations of Reading assessment carries a passing score of 220 for the 01/23-Present version. Candidates who do not meet the passing threshold on an initial attempt may retake the exam; multiple attempt data are included in this report where applicable and candidates are counted at the exam-administration level.

Subarea Score Interpretation

Subarea performance scores are reported on a 1-4 scale and serve a diagnostic function separate from the pass/fail determination:

- Score of 1 -Weak performance in this subarea; candidate demonstrates limited command of the tested content.
- Score of 2 - Below-proficient performance; candidate demonstrates partial command with notable gaps.
- Score of 3 - Proficient performance; candidate demonstrates adequate command of content in this subarea.
- Score of 4 - Strong performance; candidate demonstrates comprehensive command of the tested content.

Subarea means are reported for all exam administrations (including failed attempts) unless otherwise noted, providing a complete picture of content knowledge patterns across the candidate pool.

Validity Evidence

- Content Validity: Each OAE exam was developed through a rigorous job analysis involving Ohio K-12 educators, higher education faculty, and content specialists to identify the knowledge and skills essential for entry-level teaching in each licensure area. Exam content is explicitly aligned to Ohio's Learning Standards and national professional standards, ensuring that assessed content reflects the demands of the Ohio classroom context.
- Criterion-Related Validity: OAE passing scores were set using standard-setting procedures (modified Angoff or bookmark method) involving panels of Ohio educators, establishing empirically defensible performance standards tied to the minimum competency expectations for beginning teachers.
- Construct Validity: The multi-subarea structure of each OAE exam reflects the domain organization of the relevant content area, as established through content expert review. Confirmatory analyses have shown that subarea score patterns are internally coherent and distinguish between higher- and lower-performing candidates in domain-consistent ways.
- Consequential Validity: OAE passing scores serve as one component of Ohio's licensure determination process, alongside edTPA and program completion. The use of OAE results in high-stakes decisions reflects state and institutional confidence in the assessment's ability to function as a meaningful content readiness indicator.

Reliability Evidence

- **Test-Level Reliability:** Pearson reports internal consistency reliability coefficients (alpha) for each OAE exam, with values consistently in the 0.80-0.90 range, indicating high reliability for licensure purposes.
- **Constructed-Response Scoring:** Constructed-response items are scored by trained raters using standardized rubrics. Inter-rater reliability is maintained through calibration training, anchor papers, and ongoing scoring audits. Responses that receive discrepant scores from two raters are adjudicated by a third rater.
- **Score Stability:** Because OAE exams are administered in controlled, standardized conditions through Pearson testing centers, measurement conditions are consistent across administrations, supporting score stability over time and across test sites.
- **Standard Error of Measurement (SEM):** Pearson reports test-specific SEM values, typically 5-8 scaled score points. These values are used to construct score confidence intervals that inform pass/fail decision-making near the cut score.

Program-Level Pass Rate Summary

The following table presents aggregate OAE performance across all exam administrations for Defiance College teacher candidates. Each row represents one exam administration (a candidate taking a specific OAE exam in a given year); candidates who retook an exam are counted once per administration. This table does not represent first time pass rates.

Defiance College OAE Pass Rates 2022-2025			
Academic Year	Total Admin.	Passed	Overall Pass Rate
2022–2023	25	23	92%
2023–2024	39	32	82%
2024–2025	33	28	85%
2022–2025	97	83	86%

Source: OAE Examinee Data - edreports.nesinc

Across the three full reporting years, the program achieved an overall OAE pass rate of 86% (83/97 administrations). The decline in pass rate from 2022-2023 (92%) to 2023-2024 (82%) reflects the expansion of the candidate population across more diverse licensure areas and the introduction of higher-enrollment exams such as Foundations of Reading and Primary Education (PK-5). The partial recovery in 2024-2025 (85%) suggests stabilization and improvement, particularly supported by the 100% pass rate in the Primary Education cohort that year. The Foundations of Reading assessment accounts for 34 of 104 total administrations (33%) and is the primary driver of program-level pass rate patterns.

First-Time Pass Rates

For the purpose of this self-study, first time pass rates were not considered in any data meant to represent complete passage data. Regardless of the number of attempts, candidates who obtained a teaching credential after completion either

passed their exams or they were able to obtain a license under Ohio's Interim Licensure pathway which requires a minimum score of 206. The EPP can identify a small percentage of candidates who retook more than one of their licensure exams multiple times in relatively short periods of time. To understand more about why this occurred, the EPP is surveying all candidates from the previous 3 years about their testing experiences and should have data to present for the site visit.

Specifically regarding the Foundations of Reading exam, there was a new iteration of the exam issued in 2023 and there is an expected decline in testing across the state, which may, in part, explain the EPP's first time pass rates. Additionally, in 2022 and 2023, the EPP experienced major turnover in its full-time faculty. This also may explain some of the first-time pass rate decline. The EPP has already seen a rise in first time passage rates and believes it can overcome this moving forward.

Licensure Area Performance Summary

The following table presents OAE performance data disaggregated by licensure exam area across the full reporting period. Exams administered across multiple years have combined counts; subarea means reflect averages across all administrations.

Defiance College OAE Pass Rates 2022-2025				
Licensure Exam	Years	Pass Rate	Mean Score	Subarea Means (S1–S5)
Biology	2023–24	100%	224	3, 3, 2, 3, 3
Early Childhood Education	2022–23	100%	242	3, 3, 3, 4, –
Elementary Ed Subtest I	2022–23	75%	230	3, 3, –, –, –
Elementary Ed Subtest II	2022–23	100%	239	3, 3, 4, –, –

Foundations of Reading	2022–26	79%	233	2.9, 2.9, 2.9, 2.8, –
Integrated Social Studies	2022–25	100%	246	3, 3, 3, 3, 2
Mathematics	2023–25	100%	222	3, 3, 3, 3, 3
Mid Grades English Language Arts	2023–26	80%	232	2, 3, 2, 3, 3
Mid Grades Mathematics	2023–26	57%	217	3, 2, 3, 3, –
Mid Grades Science	2023–24	100%	226	3, 3, 3, 3, –
Mid Grades Social Studies	2023–25	60%	222	3, 3, 3, 3, 3
Primary Education (PK–5)	2023–25	92%	247	3, 3, 3, 3, 3
Special Education	2022–26	89%	234	2.5, 2.9, 3.1, 2.9, –

Source: OAE Examinee Data - edreports.nesinc

Summary of Licensure Area Findings

Across the 13 distinct OAE exams represented in the data, performance patterns reveal both programmatic strengths and areas requiring targeted intervention:

- High-performing areas (pass rate $\geq 90\%$): Early Childhood Education (100%), Elementary Education Subtest II (100%), Integrated Social Studies (100%), Mathematics (100%), Mid Grades Science (100%), and Special Education (89%) all demonstrate strong candidate readiness. These results reflect the program's sustained emphasis on content preparation in these licensure areas.
- Areas of concern (pass rate $< 80\%$): Mid Grades Mathematics (57%) and Mid Grades Social Studies (60%) show the lowest pass rates in the dataset. While small sample sizes ($n=7$ and $n=5$, respectively) limit statistical inference,

the pattern warrants monitoring and targeted preparation support. Foundations of Reading (79% combined) also remains below the 80% threshold due largely to pass rate variation in 2023-2024.

- Subarea patterns: Across most exams, subarea means cluster in the 2.5–3.5 range, indicating adequate-to-strong content knowledge. Notable exceptions include the Mid Grades English Language Arts Subarea 1 (mean=2.0) and Mid Grades Mathematics Subarea 2 (mean=2.0), suggesting specific content domain gaps warranting curriculum-level attention.