

To: State Board of Education

From: John Keller, Chief Technology Officer
Risa A. Regnier, Director Educator Licensing

Date: August 24, 2020

Re: Final approval of 24 Praxis licensure test cut scores

Background

In October 2018, the IDOE released an RFP for a new licensure test vendor and program as required by the 2018 General Assembly. In July 2019, in accordance with the results of the RFP and action by the 2019 General Assembly, Educational Testing Service (ETS)--with its nationally available Praxis test program--was adopted by the SBOE to provide educator licensure tests as of September 1, 2021.

Since its adoption in July 2019, ETS and IDOE began working to establish test cut scores for the existing Praxis tests Indiana will use, and the development of several new Praxis tests that will be used in Indiana and made available to other ETS client states. Many Praxis tests use a multi-state cut score that has been confirmed by educators in each state where the tests are in use; ETS invited Indiana educators to participate in a panel review of the multi-state cut scores with the goal of either recommending the multi-state cut score for use in Indiana or to recommend a modified cut score for use in Indiana. These score setting studies are continuing into fall and winter 2021.

As of early July 2020, Indiana educators had completed score studies for 24 Praxis tests. **For 18 of the tests, the panels' Recommended Study Value (RSV or cut score) for Indiana was the same as the multi-state cut score (Median Adopted Score or MAS). See Table 2 in the supporting document. For six of the tests, the panels' recommended RSV for Indiana (IN RSV) is different than the multi-state MAS. See Table 3 in the supporting document.** This information, which includes an explanation of the score setting process, a summary of each test (see Table 1 in the supporting document), the MAS and IN RSV for each test, and the data for +/- one and two SEMs from the MAS and IN RSV, was posted for public comment for 30 days) and is included with this memo. The document also includes the names of the Indiana educators who participated on the score studies. See Appendix A.

- No public comment was submitted for 19 of the tests.
- One public comment was submitted for each of five tests supporting the panels' recommendations to adopt the multi-state score (MAS) as Indiana's cut score (RSV):

- Principles of Teaching and Learning 7-12 #5624,
 - English Language Arts #5038,
 - Teaching English to Speakers of Other Languages #5362,
 - Principles of Teaching and Learning K-6 #5622.
- One public comment was submitted for Special Education: Core Knowledge Mild to Moderate Applications #5543 recommending adoption of the multi-state score (MAS) of 158 instead of the Indiana recommended score (IN RSV) of 155.

Action Needed

Under 511 IAC 15-7-2 the board must vote final approval of cut scores for the licensure tests after 30 days of public comment.

DOE Recommendation

Final approval of the panel-recommended cut scores (RSV and IN RSV) for each of the 24 Praxis tests identified in the attached document.

Overview of the Indiana Score-Setting Workshops

In 2018 the Indiana Department of Education (IDOE) issued a Request for Proposal (RFP) seeking proposals for a new licensure test program to be effective in 2021. In 2019 the Indiana General Assembly specified that the Indiana State Board of Education would adopt a test program available nationally. In July 2019, the board adopted the Praxis test program from Educational Testing Service (ETS) to be the future licensure test program. IDOE has been working with ETS to be ready to implement current and newly developed tests from its Praxis Series® to support Indiana’s licensure test requirements. These tests will be available in September 2021 to candidates preparing to be Indiana teachers. ETS has designed a process for use in establishing cut scores for newly developed Praxis tests and for reviewing multi-state cut scores for current tests for use in Indiana. A summary of the score-setting process, a description of the tests, and the proposed cut scores is included and posted for public comment.

The experts who form each score-setting panel include educators who have expertise in the content area as well as educators who have experience with new teachers in the content area or with candidates preparing to be teachers in the content area. The panels were typically made up of classroom teachers and college/university faculty from education preparation programs (EPPs). Other relevant educators, such as specialists, may also be included on the panel. All panelists are approved by the IDOE prior to being invited to serve on the score-setting panel. See Appendix A for a list of score-setting participants.

Distance-based score-setting workshops were held for 24 *Praxis Series*® tests from February 27 through July 1, 2020. Additional score-setting workshops for the remaining 18 tests will be held from July 20 to the end of September. Table 1 lists the test titles and dates on which the score-setting workshops were held. The table also includes links to the *Praxis*® *Study Companion* documents, which provide detailed information about each test.

Summary of the Score-Setting Process

Score-setting meetings have been designed as a distance-based process so that educators across the state and with expertise in various content areas can participate in all of the necessary workshops scheduled from February through September. The workshops are scheduled for 2 hours, though they have typically lasted approximately 1.5 hours. Designed to be short meetings, out of consideration for Indiana’s educators, the length of the meetings varied based on the discussions in which the educators engaged.

There were three groups score-setting workshops, each held for two tests. These ‘combination’ workshops A, B, or C are indicated as in Table 1 (in the date column). To better manage the time of educators with content knowledge for two assessments, both assessments were discussed in the same meeting. Separate recommended passing scores were obtained from the panelists during the workshop.

Prior to the distance-based meeting, panelists were provided with the test specifications and asked to review an interactive practice test so that they would be familiar with the content tested on the Praxis test. During the distance-based meeting, panelists were provided with test development and standard-

setting overviews for the test. Once the overviews were concluded, panelists engaged in discussions about the content measured on the test before viewing standard-setting and national pass rate data. Panelists then made two rounds of independent judgments, with discussions between the rounds.

Table 1. Indiana Score-Setting Schedule with Links to Study Companions

Test Code	Praxis Test Title	Score-setting Date
5624	Principles of Learning & Teaching: Grades 7-12	2/25/2020
5621	Principles of Learning & Teaching: Early Childhood	^A 2/27/2020
5622	Principles of Learning & Teaching: Grades K-6	^A 2/27/2020
5652	Computer Science	4/20/2020
5101	Business Education: Content Knowledge	4/21/2020
5038	English Language Arts: Content Knowledge	^B 4/22/2020
5047	Middle School English Language Arts	^B 4/22/2020
5122	Family & Consumer Sciences	4/27/2020
5701	Agriculture	4/28/2020
5561	Marketing Education	4/29/2020
5543	Special Education: Core Knowledge & Mild to Moderate Applications	^C 5/18/2020
5545	Special Education: Core Knowledge & Severe to Profound Applications	^C 5/18/2020
5551	Health Education	5/19/2020
5091	Physical Education: Content Knowledge	5/20/2020
5358	Gifted Education	5/26/2020
5051	Technology Education	5/27/2020
5272	Special Education: Education of Deaf & Hard of Hearing Students	5/28/2020
5195	Spanish: World Language	6/22/2020
5174	French: World Language	6/23/2020
5183	German: World Language	6/24/2020
5362	English to Speakers of Other Languages	6/25/2020
5601	Latin	6/29/2020
5665	Chinese (Mandarin): World Language	6/30/2020
5282	Special Education: Teaching Students with Visual Impairments	7/1/2020

Notes. The superscripts A, B, and C denote the three score-setting workshops where two tests were discussed by the same panel.

Pre-Meeting Information and Tasks

Prior to the scheduled meeting, panelists were sent an email that included the test specifications (i.e., the Test at a Glance document) specific to the test that the panel would be discussing. Panelists were asked to review the document so that they would be familiar with the structure of the test and the

content measured on the test. Additionally, the email included instructions for how to access an interactive practice test. Interactive practice tests are designed in tandem with Praxis tests and are intended to represent the operational assessment so that candidates can properly prepare.

The email also included the meeting date and time as well as information for connecting to the meeting. The meeting time was determined based on panelists' availability. Panelists were additionally sent connection information when they were registered for the Zoom meeting. With that notification, they could click on a link and add it to their calendars.

Score-Setting Meeting Process

The distance-based meeting began with a description of the purpose of the meeting and introductions. Panelists were then presented with an overview of the Praxis design and development process. An overview of the standard-setting process followed and panelists were asked if there were any questions, though they were also encouraged to speak up at any moment during the overviews. Panelists were then provided with a short poll on which they indicated their understanding of the test development and standard setting overviews.

Panelists engaged in a group discussion about the knowledge and skills measured on the test and how that related to beginning educators. Then, test-specific data was presented to the panel. Panelists learned what passing scores were adopted by the states that use the test (see <https://www.ets.org/praxis/institutions/scores/passing/>). They also viewed pass rate data at the median adopted score, as well as the scores that represent 1 and 2 standard errors above and below the median adopted score (MAS).

After discussing this data and reflecting on the content discussion, panelists made their first round of judgments, recommending a score for Indiana to adopt. Once the judgments were completed, the panelists viewed the recommendations and the median value. They discussed the rationales behind their judgments and then made their final round of judgments. The median recommendation was again used as the panel recommendation to the state. After which they provided the recommended passing scores and asked to indicate if they were comfortable with the results.

If two tests were discussed during the score-setting workshop, they were presented with the overviews for the test development and standard-setting once. Then, after panelists completed their judgments for the first test, they repeated the process, beginning with the content discussion, for the second test. Once they completed their two rounds of judgments for the second test, they were again asked to indicate if they were comfortable with the results. All of the judgments and evaluations were completed using the polling capability within the Zoom platform.

Results to Date

Tables 2 and 3 show the results of the score-setting workshops that have taken place from February through July 1. The table also shows one and two standard errors of measurement (SEM) around the

MAS, as well as the SEM of the score recommended by Indiana panelists.^{1,2} The panel sizes are also shown on these tables, based on the number of panelists who completed the score recommendation judgments.

All of the scores shown on Tables 2 and 3 are on the Praxis scale, which ranges from 100 – 200. The reason we use the Praxis scale is because each form of the test will vary slightly in difficulty and having a scale score is a way to communicate the same passing score (and difficulty level) information in a consistent manner. Using the raw score would only be true for the standard setting test form and could lead to misinterpretation if applied to all current and future test forms.

Table 2 provides the results for the Praxis tests where the Indiana score-setting panelists’ recommended study value (RSV) is the same as the existing MAS. In Table 3, the RSV from the Indiana score-setting panelists is a different value from the MAS. How the RSV relates to the MAS is also described in Table 3 (e.g., if it is -0.50 standard errors below the MAS).

Table 2. Praxis Titles where the IN Score-Setting Panel Recommended the Median Adopted Score

Test Name (Code)	Panel Size	-2 SEM	-1 SEM	MAS = RSV	+1 SEM	+2 SEM
Principles of Learning & Teaching: Grades 7-12 (5624)	4	146	152	157	164	170
Principles of Learning & Teaching: Early Childhood (5621)	6	146	152	157	164	170
Principles of Learning & Teaching: Grades K-6 (5622)	6	149	154	160	167	173
Computer Science (5652)	5	135	142	149	158	165
Business Education: Content Knowledge (5101)	9	142	148	154	161	167
English Language Arts: Content Knowledge (5038)	6	155	162	167	173	180
Family & Consumer Sciences (5122)	8	140	146	153	160	166
Agriculture (5701)	6	134	141	147	155	162

(table continues on the next page)

¹ If states held individual standard-setting workshops, the SEM is based on test-taker data. If states participated in the multistate standard-setting process designed by ETS, the SEM was estimated and included in the standard-setting report.

² The SEM around the MAS is calculated based on the raw score of the standard setting form. The rounded value is then converted to the Praxis scale score. The Praxis scale score is not the same shape (e.g., linear) for every test.

<i>Table 2 (continued)</i>	Panel	-2 SEM	-1 SEM	MAS = RSV	+1 SEM	+2 SEM
Test Name (Code)	Size					
Marketing Education (5561)	9	145	151	157	163	169
Special Education: Core Knowledge & Severe to Profound (5545)	7	147	153	158	164	170
Health Education (5551)	6	145	150	155	161	166
Gifted Education (5358)	8	144	151	157	164	171
Technology Education (5051)	6	147	154	159	166	172
Special Education: Education of Deaf & Hard of Hearing Students (5272)	3	147	154	160	167	174
German: World Language (5183)	10	151	157	163	169	175
English to Speakers of other Languages (5362)	8	143	149	155	163	169
Latin (5601)	4	142	147	152	158	163
Special Education: Teaching Students with Visual Impairments (5282)	3	150	157	163	170	177
Note. All scores are listed as Praxis scale scores.						

Table 3 provides the results of the score-setting panels where the score-setting panelists decided to make a recommendation that is different from the median adopted score. During the discussions, there were a two primary reasons provided in most of the workshops. The panelists discussed the difficulty of the content measured on the tests and how well the different content subcategories are taught in preparation programs. Another concern panelists expressed was their perception of a shortage of educators in specific licensure areas. In those instances, panelists emphasized that beginning educators' skills can improve with experience.

Considerations for Setting the Passing Scores

To support the IDOE in establishing passing scores for the Praxis tests that will be adopted in September 2021, ETS designed and conducted score-setting studies. The purpose of the score-setting studies was to provide recommendations to the state based on judgments from IN educators. It is recommended that the description of the [multistate standard-setting process](#) that ETS conducts for new tests also be considered along with the standard-setting data that is included in this report.

It is important to consider that the approved score-setting process included an expected minimum panel size of six educators, however, some of the score-setting panels had fewer than that proposed number. For some panels, this was anticipated because the content areas had a small pool of educators from which to recruit. For others, there were 6 – 12 educators registered, for the study but some did not participate for various reasons. For most of these tests, the panel’s recommendation was the same as the RSV. Regardless, for these test titles, the state may wish to have a content expert from the IDOE review the test and test-related data in order to make an additional recommendation.

Table 3. Praxis Titles where the IN Score-Setting Panel did not Recommend the Median Adopted Score

Test Name (Code)	Panel Size	IN RSV	-2 SEM	-1 SEM	MAS	+1 SEM	+2 SEM
Middle School English Language Arts (5047)	6	161	153	158	164	170	176
		<i>-0.75 SEM from the MAS</i>					
Special Ed.: Core Knowledge & Mild to Moderate Applications (5543)	7	155	147	153	158	164	170
		<i>-0.50 SEM from the MAS</i>					
Physical Ed.: Content Knowledge (5091)	6	145	141	145	148	152	156
		<i>-1.00 SEM from the MAS</i>					
Spanish: World Language (5195)	5	166	156	163	168	175	180
		<i>-0.50 SEM from the MAS</i>					
French: World Language (5174)	8	159	149	156	162	167	174
		<i>-0.50 SEM from the MAS</i>					
Chinese (Mandarin): World Language (5665)	2	161	152	159	164	170	177
		<i>-0.50 SEM from the MAS</i>					
Note. All scores are listed as Praxis scale scores.							

Appendix A. Indiana Score-Setting Panelists

Full Name	Affiliation	Tests by Code
Neal Adams	Randolph Eastern Schools	5701
Lori A. Adkins	Fort Wayne Community Schools	5561
Dr. Donna L. Albrecht	Indiana University Southeast	5362
Rebecca L. Ashcraft	Portage Township Schools	5122
Dr. Francoise Bachelder	American College of Education	5174
Paul E. Baker	Westview Jr. Sr. High School	5652, 5701
Billie Ballenger	Jennings County Schools	5543, 5545
Tammy Bauchert, CFCS	Mt. Vernon HS	5551
Angelika Becker	Carmel High School	5183
Allisha Beerwart	Indiana Wesleyan University	5272, 5282
Susanna Benko	Ball State University	5038, 5047
Jane Biting	Huntington University	5038, 5047
Deborah Blaz	Angola High School	5174
Kevin Blemker	Vincennes University College of Technology	5051
Chad E Bobb	Pike High School	5561
Brian Bobbitt	Evansville Vanderburgh School Corporation	5051
Benjamin Boche	Valparaiso University	5621, 5622, 5038, 5047
Deborah Brim	Lawrence Township Schools	5122
Amy K. Brown	Wawasee Middle School	5358
Mrs. Cathie J. Bryant	Terre Haute North Vigo High School	5561
Paulette A Conner	Marian University	5543, 5545, 5362
Beth Ann Cooper	Teacher of Deaf/Hard of Hearing Perry Twp. Schools	5272
Miriam Cox	Bedford North-Lawrence High School	5183
Mrs. Gen Craft	Terre Haute South Vigo High School	5561
Ms. Nicole Cruz	Indianapolis Public Schools	5362
Kathleen D. Darnell	Cathedral High School	5195
Dr. Roben Taylor Daubler	Western Governors University	5543, 5545
Dr. Gayle E. Davis	Barker Middle School	5652, 5051, 5561
Craig Denney	TSC / Wainwright Middle School	5051
Elizabeth Churchman Dix	Penn High School	5183
Doris Downing, Ed.D.	Marian University Indianapolis	5358
Dr. Kim A. Duchane	Manchester University	5091
Dr. Maryann Dudzinski	Department of Education	5122
Suzanne Ehst	Goshen College	5624
Brittany Farmer	FCCLA Adviser and FCS Educator	5122
Andrea Ganger	Millersburg Elementary Middle School	5183, 5362
Jessica Geisinger	Fishers High School	5174
Demi Gibson, RN, BSN, CPN, CET	Baugo Community Schools	5551

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<i>Panelist List (continued)</i>		
Full Name	Affiliation	Tests by Code
S. Michelle Goudy	Westfield High School	5101, 5561
Jim Graves	Goshen High School	5195, 5362
Rhiannon Graves	Loogootee High School	5174
Chunmei Guan	Logansport High School	5665
Sam Hanley	Southport High School	5038, 5047
Alicia Harkins	Jimtown High School	5551
Mme Sara Harrison	Wawasee High School /Wawasee Community Schools	5174
Stacey Hartley	Tipton Community School Corporation	5701
James E. Hollenbeck	Indiana University Southeast	5091
Amanda D. Isaacs	Nettle Creek School Corporation	5358
MaryAnn James	Whitley County Consolidated Schools	5101
Kari Johnson	MSD of Wabash County	5101
Lisa Duffley-Kazmierski	North Newton Jr Sr High School	5122
Lauren Kocsis	Trine University	5551, 5091
Sara Kohlhoff	Huntertown Elementary	5621, 5622
Aimee Kroll	MSD of Decatur Township	5101
Brittany Krowiarz	Cardinal Ritter High School	5601
Susan Kuckie	Plymouth High School	5122
Angela LaRocco	LaPorte High School	5101
Sherry Lehr	South Spencer County School Corp	5038, 5047
Laura Liu	Indiana University-Purdue University, Columbus	5362
Sara Loete	Evansville Vanderburgh School Corporation	5358
Patricia Marcum	University of Southern Indiana	5551
Matthew M. Maurer, Ph.D.	Butler University	5101, 5282
Annemarie McClung	Jay County High School	5183
Andrea McMurtry	Ball State University	5551, 5091
Dr. Pamela L. Medows	Taylor University	5621, 5622
Rachael Miller	Fort Wayne Community Schools	5543, 5545, 5358
Jeanie Mitchell	Penn High School	5174
Julie Moore	Washington Township Middle High School	5561
Paula E. Moore	Jennings County Schools	5543, 5545
Sara Neville	Perry Township Schools	5122
Joann L. Novak	The Academy of Science and Entrepreneurship	5101, 5561
David O'Neil	University of Southern Indiana	5601
Matthew Perkins Coppola, Ph.D.	Purdue University Fort Wayne	5621, 5622, 5624
Amanda J. Ramirez	Vice-President and Conference Chair IFLTA	5358
Lindsey Ravis	Carroll High School	5174
Frances M. Reigle	Hamilton Southeastern Schools	5183
Dr. Keri L. Rodgers	Indiana University	5195
Tommie Roesch	Zionsville Community School	5282

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<i>Panelist List (continued)</i>		
Full Name	Affiliation	Tests by Code
Jason E. Rybinski	Teacher, Elkhart Community Schools	5091, 5051
Betty Salgado	Phalen Leadership Academies	5195, 5362
Travis Scherer	Tri-County High School	5701
Kim Schiavone	Pike Central High School	5183
Joseph A Shewman	Silver Creek High School	5051
Michele L. Shultz	Lebanon Middle School	5358
Jennifer E. Smith, Ph.D.	Purdue University	5543, 5545
Justin Smith	Pike High School Teacher	5652
Brienne Sprunger	Garrett-Keyser-Butler CSD	5101
Jennifer J. Steed	Brownsburg High School	5183
Mrs. Kelly Stout, M.Ed.	Vigo County School Corporation and Ivy Tech Community College	5543, 5545
Allen Brian Talbert	Purdue University	5701
Lauren Tarbet	Penn High School	5362
Carolyn Teddleton	Tecumseh High School	5183
Shannon Verhaeghe	Plymouth Community School Corporation	5701
Lisa Vukovits	John Glenn School Corporation- Harold C. Urey Middle School	5551
Ms. Jennifer Walker	Fort Wayne Community Schools	5272
Mr. Jeremy M. Walker	Crown Point High School	5601
Felicia Walls	Terre Haute North Vigo High School	5195
Carol Shafer Warner	Family and Consumer Sciences	5122
Viviane Weinmann-Tripp	Creekside Middle School	5174
Sara J. Wietbrock	Crown Point Community School Corporation	5601
Sarah Wilson	Oakland City University	5624
Sam Wysong	Warsaw Community Schools	5624
Youjin Yang	Saint. Mary-of-the-Woods College	5621, 5622
Ling-Yu Yang	Westlane Middle School, MSD of Washington Township	5665
Nick Zivanovic	Griffith High School	5652, 5101
<p>Note. Three teachers, a building- or systems-level administrator, and a college or university faculty member requested that their names not be listed. In total, they participated in score-setting meetings for eight tests (5038, 5047, 5183, 5358, 5561, 5621, 5622, & 5652).</p>		