



**MISSOURI ADVISORY COUNCIL
FOR THE CERTIFICATION
OF EDUCATORS
(MACCE)**

**UPDATE
MISSOURI EDUCATOR
GATEWAY ASSESSMENTS**

November 17, 2015

Missouri Department of Elementary
and Secondary Education



Missouri Educator Gateway Assessments

2

- **MEGA'S Three Objectives**
 - **Recruit the Right People**
 - **Assess Content Knowledge**
 - **Assess Performance**



- **Missouri General Education Assessment (MoGEA)**
 - Replaced *CollegeBASE* in Fall 2013
 - Concerns Voiced During the First Year
 - Important Meeting – June 2014
 - Various Recommendations for Changes
 - Pearson & the Department Establishes Timelines
 - Implementation Set for August 31, 2015





- **MoGEA Changes**
 - **Reduction of specific content knowledge related to literature, science, and social studies;**
 - **Elimination of assessment related to oral communication & public speaking;**
 - **Emphasis on the assessment of the following:**
 - **Reading comprehension**
 - **Basic mathematical knowledge & skills**
 - **Basic science & social studies concepts & inquiry;**
 - **Reduce length of passages used to assess candidates' ability to understand & analyze text;**
 - **Implement next test structure with four subtests.**



MoGEA Framework – English/Language Arts

- **MoGEA 2013-15**
 - Comprehension & Analysis of Text
 - Informational & Persuasive Text
 - Literary Text
 - Oral Communication & Public Speaking
- **MoGEA 2015-Present**
 - Literal Comprehension
 - Inference & Interpretation
 - Critical Evaluation



MoGEA Framework – Writing

- **MoGEA 2013-15**
 - Writing Assignment
- **MoGEA 2015-Present**
 - Writing Assignment



MoGEA Framework – Science & Social Studies

- **MoGEA 2013-15**

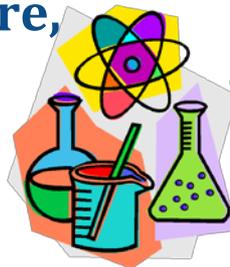


- **Science**

- Nature & Practice of Science
- Biology & Chemistry
- Physics, Geology, Astronomy

- **Social Studies**

- Inquiry & Literacy Skills
- History, Geography, Culture, and Society
- Government, Civics, Economics



- **MoGEA 2015-Present**

- **Science**

- Fundamental Scientific Concepts
- Science Inquiry & Literacy Skills

- **Social Studies**

- Fundamental Social Studies Concepts
- Social Studies Inquiry & Literacy Skills

Test Development Process

- **Conduct Program Planning**
- **Establish Advisory Committees**
- **Develop Test Framework**
- **Conduct Test Framework Review**
- **Conduct Content Validation Survey**
- **Develop Assessment Items**
- **Conduct Item Review Conference**
- **Marker Response Selection Meeting (CRI)**
- **Conduct Item Validation and Standard Settings**

Involvement – Test Development Process

Missouri Participation – PK-12, Arts & Sciences, EPPs

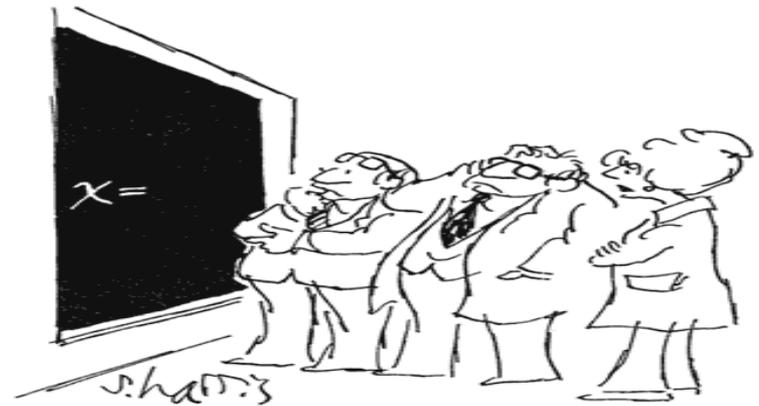
- **Bias Review Committee (BRC)**
 - Reviews for sensitivity and fairness
 - Checks for Bias
 - Reflects the diversity of the population
- **Content Advisory Committee (CAC)**
 - Assesses appropriate content for significance and accuracy
 - Free from bias
 - Determines job-relatedness and relevance
- **Marker Response Committee – Constructed Responses**
 - Reviews constructed response items (CRI)
 - Identifies scores based upon quality of responses

Validation of Items Includes:

- **Competency Match**
- **Accuracy of Information**
- **Free from Bias**
- **Job-Relatedness & Relevance**

Setting Standards on a Criterion-Referenced Test

- General Education background expected of a student entering an educator preparation program;
- Performance is compared to the criterion;
- Examinees are not compared to other examinees, as in norm-referenced tests



Setting Standards on a Criterion-Referenced Test

- **Standard setting process**
 - **Defining the general education background of a student entering a teacher education program;**
 - **Computing an expected total test score for each of the four subtests;**
- **Standard setting procedure referred to as the “modified Angoff method”**
- **Industry standard method used for many professions – education, law, medicine, etc.**

Expected Performance Judgments

Standard setting panelists estimated the expected general education knowledge of all “individuals who are just at the level of knowledge and skills required to perform effectively in this field in Missouri schools.”

The panelists represented PK-12 schools, arts & sciences, and educator preparation faculty.

Considerations for Standard Setting

- **Statistical Measurement Issues**
- **Two types of measurement error**
 - **False Positive: Examinee passes who should fail**
 - **False Negative: Examinee fails who should pass**
- **Striking a proper balance**

Considerations for Standard Setting

- **Consequences of False Positives**
 - **Candidate admitted who may perform poorly in the classroom**
 - **But candidate still must meet numerous other criteria – program requirements, advisor evaluations, other assessments, job interviews, etc.**

Considerations for Standard Setting

- **Consequences of False Negatives**
 - **May exclude talented candidates with potential to succeed**
 - **But failing candidates can retake test, which is not required of false positives**

Considerations for Standard Setting

- **Adjust cutscores by using the Standard Error of Measurement (SEM)**
- **Accepted method of taking inherent measurement error and other considerations into account**
- **Raise panel-based cutscores by +1 or +2 SEMs to minimize false positives**
- **Lower panel-based cutscores by -1 or -2 SEMs to minimize false negatives**

Operational Results:

- **Data from candidates who tested from August 31, 2015 through October 25, 2015**
- **Candidate/Test Combinations:**
 - **425 – All Four Subtests**
 - **17 – Reading Comprehension & Interpretation**
 - **148 – Mathematics**
 - **35 – Science & Social Studies**
 - **9 – Writing**
 - **634 – Candidates Taking at Least 1 or More Subtests**

Operational Results: Considerations

- **Candidate preparation may improve in the future.**
- **Initial sample of candidates is typical of future populations.**
- **Change is relative, difficult, and improvement occurs over time.**



Requested Information @ Registration

- **Gender – Male or Female**
- **Race**
 - **American Indian/Alaskan Native**
 - **Asian**
 - **Black/African-American (Not of Hispanic Origin)**
 - **Hispanic or Latino**
 - **Multi-Racial**
 - **Native Hawaiian/Pacific Islander**
 - **Other or Unknown**
 - **White (Not of Hispanic Origin)**

**Reports Generated
@ N \geq 30**

MoGEA Raw Scores

MoGEA Subtest	-2 SEM	-1 SEM	Panel Based Score	+1 SEM	+2 SEM
Reading Comprehension 30 Scorable Items N = 455	11	14	17	20	22
Writing 8 Scorable Items N = 452	3	4	5	6	7
Mathematics 32 Scorable Items N = 450	14	17	20	23	25
Science & Social Studies 32 Scorable Items N = 449	11	14	17	20	23

MoGEA Raw Scores & Scaled Scores

MoGEA Subtest	-2 SEM	-1 SEM	Panel Based Score	+1 SEM	+2 SEM
Reading Comprehension 30 Scorable Items N = 455	11 183	14 202	17 220	20 238	22 251
Writing 8 Scorable Items N = 452	3 167	4 193	5 220	6 247	7 273
Mathematics 32 Scorable Items N = 450	14 180	17 200	20 220	23 240	25 253
Science & Social Studies 32 Scorable Items N = 449	11 188	14 204	17 220	20 236	23 252

MoGEA Raw Scores, Scaled Scores & Pass Rates

MoGEA Subtest	-2 SEM	-1 SEM	Panel Based Score	+1 SEM	+2 SEM
Reading Comprehension 30 Scorable Items N = 455	11 183 99%	14 202 95%	17 220 86%	20 238 62%	22 251 42%
Writing 8 Scorable Items N = 452	3 167 99%	4 193 96%	5 220 63%	6 247 46%	7 273 10%
Mathematics 32 Scorable Items N = 450	14 180 98%	17 200 97%	20 220 92%	23 240 82%	25 253 72%
Science & Social Studies 32 Scorable Items N = 449	11 188 99%	14 204 94%	17 220 82%	20 236 59%	23 252 36%

Next Steps for MoGEA

- **Share Results with MACCE**
- **Share MACCE Discussion & Results with EPPs**
- **Set & Communicate Scores with Students & the Department**
- **Student Results Available of Friday, December 18 on the Pearson Website**
- **Scores Retroactive to August 31, 2015**



Missouri Content Assessments

- **Summer – Two Bias Review Committees**
 - **Elementary Education Multi-Content Assessments**
 - **Building Level Administrator**
- **The Bias Review Committee**
 - **15 Members**
 - **2 Males; 8 Females; 5 Undeclared**
 - **5 White; 4 Black; 1 Two or More; 5 Undeclared**
 - **6 PK-12; 9 Educator Preparation Programs**
 - **4 with ≤ 10 Years of Experience/11 with ≥ 10 Years**

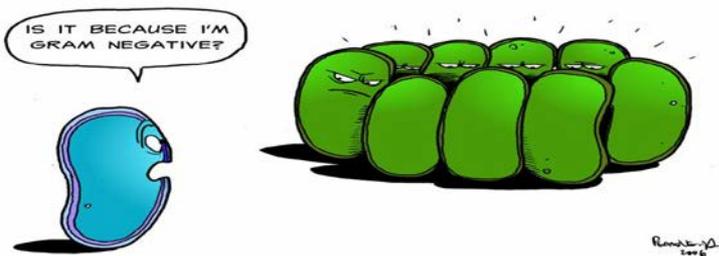
The Work – Bias Review Committee

- **Review Criteria**

- **Content**
- **Language**
- **Offense**
- **Stereotypes**
- **Fairness**
- **Diversity**

- **Disadvantages**

- **Age, Gender & Race**
- **Nationality**
- **Ethnicity**
- **Sexual Orientation**
- **Religion**
- **Disability**
- **Cultural**
- **Economic**
- **Geographic**



The Results – Bias Review Committee

- **Elementary Education**
 - English/Language Arts – 138 Items with 4 Removed
 - Mathematics – 123 Items with 3 Removed
 - Science – 116 Items with 5 Removed
 - Social Studies – 116 Items with 4 Removed
- **Building Level Administrator**
 - 174 Items Reviewed with 0 Removed



philipw@tmo



Missouri Content Assessments

- **Revise 7 Test Titles**
 - **Middle School**
 - **Mathematics**
 - **Science**
 - **Social Studies**
- **Secondary**
 - **Biology**
 - **Chemistry**
 - **Mathematics**
 - **Physics**
- **The Revisions**
 - **Reduced Test Items**
 - **From 100 Items**
 - **80 Scorable Items**
 - **20 Non-Scorable Items**
 - **To 80 Items**
 - **64 Scorable Items**
 - **16 Non-Scorable Items**
 - **Added 15 Minutes**
- **Rigor & Framework Remains the Same**



Missouri Content Assessments

- **Correlational Studies – December 2, 2015**
 - **Three Groups of 12 PK-12/EPP Representatives**
 - **Mathematics – Middle & Mild-Moderate**
 - **Sciences – Biology, Chemistry, Physics**
 - **Social Sciences – US History, World History, Political Science**
 - **Determine Alignment**
 - **Missouri Content Assessment Frameworks**
 - **Missouri Learning Standards**
 - **Specialized Professional Associations**



Missouri Performance Assessments

- **School Leaders Performance Assessment**
 - **Implemented in 2014-2015**
 - **Standard Setting – June 24-26, 2015**
 - **Recommendations**
 - **MACCE – August 19**
 - **MABEP – August 20**
 - **Results Shared with MPEA – October 23**
- **Presentation to State Board – October 27, 2015**

Missouri School Leaders Performance Assessment

32

MoSLPA (0252)	-2 SEM	-1 SEM	Panel Based Score	+1 SEM	+2 SEM
Results	27.42	31.96	36.50	41.04	45.58
Pass Rate %	27	32	37	41	46
	96%	91%	83%	69%	48%

Panel Recommendation: 37

MABEP Recommendation: 41 (+1 SEM)

MACCE Recommendation: 46 (+2 SEM)

Department Recommendation: 41 (+1 SEM)



Missouri Performance Assessments

- **Pre-Service Teacher Assessment**
 - **Implemented in Fall 2015**
 - **Expectations for 2015-2016**
 - **Score a 1 out of 4 points possible for each step**
 - **Tasks 2 – 3 – 4 = 11 Steps Total**
 - **Standard Setting Set for June 9 & 10**
 - **Recommendations to MACCE and MABEP**
 - **SBE Sets Missouri Qualifying Scores in August**
 - **Scores Effective on August 29, 2016**



Missouri Performance Assessments

- **Supporting – Pre-Service Teacher Assessment**
 - **Communication with Candidates & Programs**
 - **Emails**
 - **Webinars**
 - **Frequently Asked Questions**
 - **Surveys**
 - **MACTE Fall Conference – October 27, 2016**
 - **January Activity – Looking Ahead to 2016-2017**



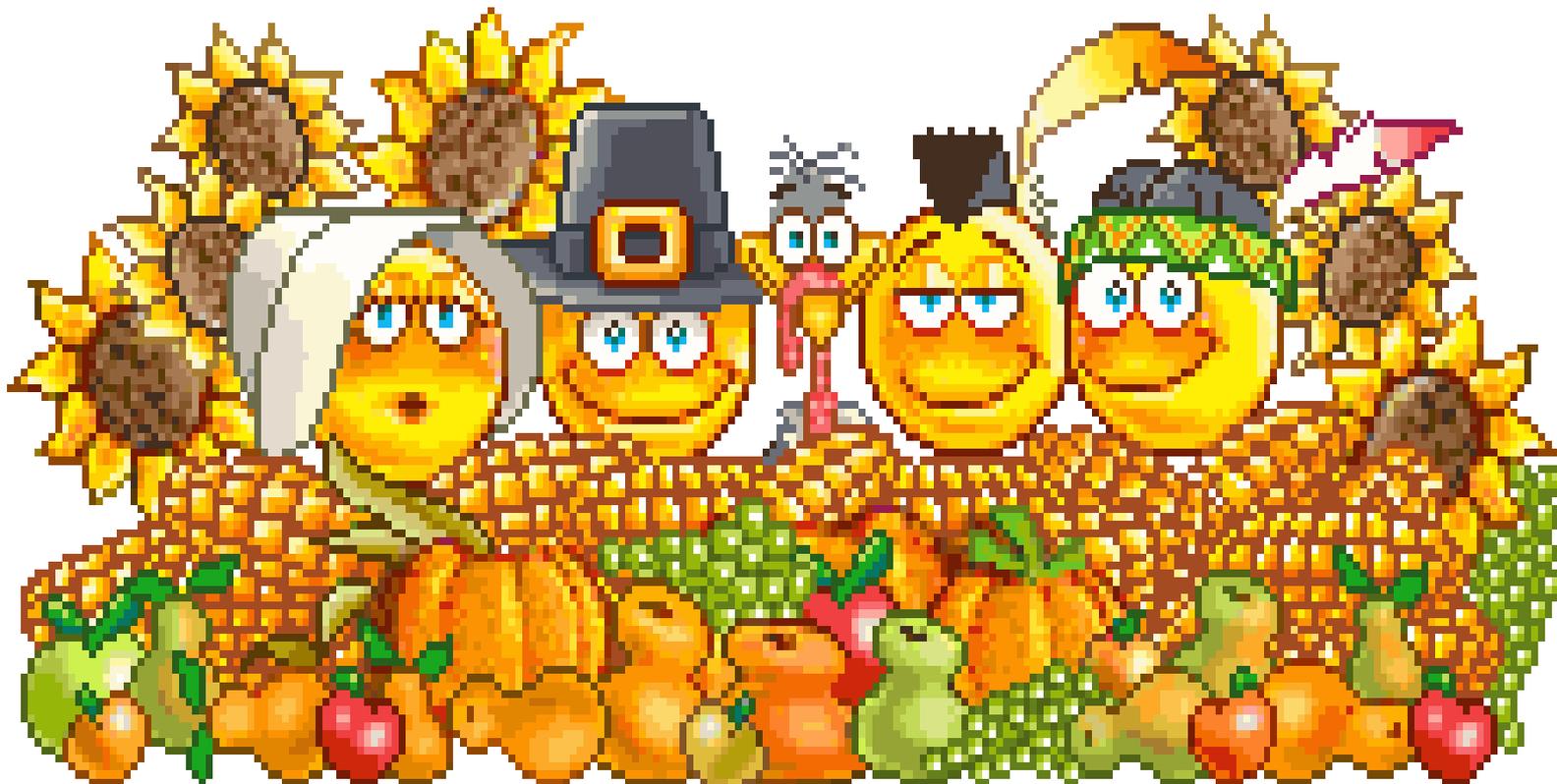
Missouri Performance Assessments

- **Counselor & Librarian Assessments**
 - **Implemented in Fall 2015**
 - **Expectations for 2015-2016**
 - **Score a 1 out of 4 points possible for each step**
 - **Standard Setting Set for June 7 & 8**
 - **Recommendations to MACCE and MABEP**
 - **SBE Sets Missouri Qualifying Scores in August**
 - **Scores Effective on August 29, 2016**
- **Supporting the Implementation**

Questions and/or Comments



Happy Thanksgiving!



Contact Us – Office of Educator Quality

573-751-2931

EQPrep@dese.mo.gov

