



#### **MAT Annual Reporting Measures 2022**

#### **NCATE/CAEP Programs**

- MAT, Secondary Education, Biology (7-12)
- MAT, Secondary Education, Chemistry (7-12)
- MAT, Secondary Education, Computer Science (7-12)
- MAT, Secondary Education, Earth/Space Science (7-12)
- MAT, Secondary Education, English (7-12)
- MAT, Secondary Education, French (PK-12)
- MAT, Secondary Education, German (PK-12)

- MAT, Secondary Education, History (7-12)
- MAT, Secondary Education, Mandarin Chinese (PK-12)
- MAT, Secondary Education, Chemistry (7-12)
- MAT, Secondary Education, Mathematics (7-12)
- MAT, Secondary Education, Physics (7-12)
- MAT, Secondary Education, Social Studies (7-12)
- MAT, Secondary Education, Spanish (PK-12)

**Candidates**- All UMGC students in P-12 preparation programs

**Completers**- Candidates who have graduated and successfully fulfilled program requirements

Following is consumer information on UMGC MAT student performance, retention, and satisfaction.

## Measure 1: Impact on P-12 learning and development (Component 4.1)

## **Applicant Content Specific Coursework and GPA**

The content knowledge of UMGC MAT is demonstrated multiple times across their student lifespan. The admission criteria include at least 30 credits in their content area with a GPA of at least 2.75. By using the following transcript review templates, department staff thoroughly audit applicants' transcripts to ensure that they meet the requisite credit requirements and have the content area expertise for the certification area. Table 1 illustrates the average GPA for accepted students.

Table 1. Grade Point Average in Content Coursework for Admitted Students

	AY	2018- 20	019	AY	2019- 20	020	AY 2020- 2021			
	Mean	SD	N	Mean	SD	N	Mean	SD	N	
Biology	3.50	.50	6	3.03	.34	6	3.36	.50	7	
Chemistry	3.75	.64	2	*	*	*	*	*	*	
Comp. Science	*	*	*	3.2	0	1	3.55	.35	2	
Earth/Space	3.00	0	2	3.35	.49	2	3.4	0	1	
English	3.39	.30	8	3.47	.37	12	3.28	.43	11	
French	3.10	0	1	*	*	*	*	*	*	
German	*	*	*	*	*	*	*	*	*	
History	3.31	.34	11	3.71	.38	10	3.3	.40	7	
Man. Chinese	*	*	*	*	*	*	*	*	*	
Mathematics	3.32	.31	9	3.49	.39	7	3.51	.47	5	

Physics	3.80	0	1	3.30	0	1	*	*	*
Social Studies	3.41	.26	13	3.48	.37	13	3.56	.48	5
Spanish	3.45	.63	2	*	*	*	*	*	*
Average GPA	3.39	.36	65	3.46	.39	52	3.56	.43	38

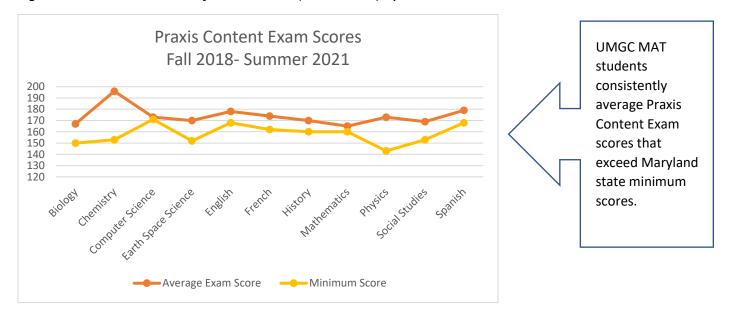
## **Praxis Data**

Table 2. Praxis Exam Scores for Graduates 2018- 2021 by Content Area

		AY 2018	3- 2019		AY 201	9- 2020	)	AY 2020- 2021			
	Min.	Mean	SD	N	Mean	SD	N	Mean	SD	N	
Biology	150	161	9	7	178	12	5	157	0	2	
Chemistry	153	*	*	*	*	*	*	*	*	*	
Com. Science	171	173	0	1	*	*	*	*	*	*	
Earth/Space	152	*	*	*	181	0	1	158	0	1	
English	168	181	7	13	176	8	14	176	7	6	
French	162	*	*	*	*	*	*	174	0	1	
German	163	*	*	*	*	*	*	*	*	*	
History	160	170	8	8	173	14	9	162	1	1	
Man. Chinese	165	*	*	*	*	*	*	*	*		

		AY 2018	B- <b>201</b> 9		AY 2019	9- 2020		AY 2020- 2021		
	Min.	Mean	SD	N	Mean	SD	N	Mean	SD	N
Mathematics	160	176	0	1	*	*	*	162	2	4
Physics	143	*	*	*	173	0	1	*	*	
Social Studies	153	168	18	5	169	11	7	170	12	9
Spanish	168	*	*	*	*	*	*	179	2	2

Figure 1. Praxis Exam Scores for Graduates (2018-2021) by Content Area



#### **Internship Observation Rubric Data: Content**

During the formal internship observations, the candidate, mentor teacher, and university supervisors assess candidate content knowledge using observation forms for each content area have been designed to align with standards of the National Council for the Accreditation of Teacher Education (NCATE) Specialized Professional Associations (SPAs).

Table 3. Percentage of Content Standards Rated Highly Proficient/Proficient During Internship

	2	018- 2019	201	9- 2020	202	20-2021
	# of Students	% Highly Proficient/ Proficient	# of Students	% Highly Proficient/ Proficient	# of Students	% Highly Proficient/ Proficient
Biology*	7	77.78%	5	91.67%	2	77.78%
Chemistry	0	*	0	*	1	100%
Computer Science	1	90%	0	*	0	*
Earth Space Science	0	*	1	100%	1	100%
English	6	93.98%	13	84.4%	0	*
Foreign Language*	0	*	0	*	3	79.17%
History*	4	71.80%	9	89.29%	7	82.54%
Mathematics*	1	86.36%%	1	55.55%	4	54.55%
Physics*	0	*	1	57.14%	0	*
Social Studies*	5	77.85%	7	76.62%	9	88.89%

\*These subject specific content observation assessments include multiple domains; however, this table presents the percentage of total competencies that were rated highly proficient or proficient, across content domains.

The data illustrates that mentor teachers and university supervisors rate students as highly proficient or proficient across the standards for their respective content areas. The percentage of proficiency ratings for math (2019- 2020; 2020- 2021) and physics were below 60%. Closer examination of the raw data shows that for some of the items, between 25% and 62.5% of the respondents were rated as having "No opportunity to demonstrate" the standard. While this is likely a reflection of the data collection occurring within a specific course with a narrow set of curriculum standards (e.g., Geometry), there is an opportunity to further analyze this content area observation data to understand the types of experiences UMGC MAT interns have and identify potential gaps.

#### MAT Graduate GPA

To maintain national professional accreditation, the MAT program requires that candidates earn of 80% (B) or better on major assignments in courses. Additionally, candidates are required to complete each course with a grade of B or better to advance to the next course.

2018- 2019	2019-2020	2019-2020	2020- 2021
3.74	3.84	3.84	3.92

## Measure 2: Satisfaction of employers and stakeholder involvement (Components R4.2, R5.3, RA4.1)

Upon completion of the MAT program, graduates are surveyed about their experiences and asked to provide consent for the program to contact their employers. The employer contact information that is provided by exiting candidates and alumni during this survey is assembled into an employer distribution list. Each summer, employers on the list are sent an employer survey. Beginning during the 2021- 2022 school year, MAT staff will conduct phone interviews with selected employers.

Historically, the Education Unit (including the MAT and the Educational Technology programs) hosted an annual meeting with a large group of internal and external stakeholders, known as the Advisory Panel. The membership included representatives from various undergraduate degree programs, local district personnel (including human resource professionals and administrators), mentor teachers, faculty, university supervisors, and program staff. The advisory panel met at least annually until Spring 2019.

While these meetings afforded department staff to gather feedback from some stakeholders about the various UMGC Education programs, the process was time consuming and did not provide significant opportunities for stakeholders to engage with department faculty and staff, review program data and workshop new innovations. Additionally, the needs of the MAT program vary significantly from the needs of the Educational Technology programs and the panel members' time and expertise was not utilized effectively. The <a href="membership">membership</a> of the Advisory Panel was revised to ensure that the panel included expertise related to:

- Equity/Inclusion
- Assistive Technology
- Workforce Development- recruitment/retention of teachers
- Induction Support
- Teacher Education
- Inclusive Education

The UMGC MAT program began engaging with advisory panel members virtually to leverage their respective expertise. Intentionally soliciting input and feedback that is related to our internal strategic priorities (quality, growth, and branding) and is aligned with the members' respective expertise has already yielded significant program changes. A few examples from the 2020- 2021 year are described below:

- Feedback from LEA partners helped to shape the revised field and clinical experience requirements as part of the MAT preinternship course (EDTP 645)
- Feedback from community partners identified the need to recruit and retain teachers of color to the MAT program/field. As a
  result, MAT faculty collaborated with the UMGC Development Office to ensure that education students are eligible for a
  scholarship for HBCU graduates. In addition, UMGC has launched a fundraising effort to offset costs associated with teacher
  certification (e.g., certification exams).
- Faculty feedback has served as the impetus for numerous changes. One example is related to the development of a graduate award to recognize interns who demonstrate excellence across specific domains. Beginning in Fall 2020, MAT program completers will be eligible to be recognized for excellence during their internship.

## Measure 3: Candidate competency at program completion (Component R3.3)

## Praxis II Data (2018- 2021)

Table 3. MAT Program Completer Praxis II Scores

	AY 2018	3- 2019		AY 2019	9- 2020		AY 2020- 2021			
Min. Score	Mean	SD	N				Mean	SD	N	
157	177.8	12.94	57	178.8	9.89	29	178.1	12.26	19	

Table 4. Praxis II MAT Program Pass Rates Completers

	University o	of Maryland Globa	l Campus		Statewide	
	Number Taking Assessment	Number Passing Assessment	Institutional Pass Rate	Number Taking Assessment	Number Passing Assessment	Statewide Pass Rate
All program completers (2020- 2021)	20	18	90%	319	304	95.3%
All program completers (2019- 2020)	28	28	100%	342	327	95.61%
All program completers (2018- 2019)	57	52	91.23%	534	517	96.82%

## **Student Learning Objectives Project**

The Student Learning Objectives (SLO) Project is an important initiative in the state of Maryland as well as in other states in the U.S. Student Learning Objectives (SLOs) are measurable instructional goals established for a specific group of students over a set period.

In Maryland SLOs serve as one of the measures of student growth for the State Teacher Evaluation model and may represent 20% - 35% of a teacher's annual evaluation (REL Mid-Atlantic, 2018). As part of the MAT Program, the SLO Project is intended to help internship candidates become skilled in the ability to use instructional practices that promote student achievement. The MAT program tracks and improves support for SLO performances by providing coaching to university supervisors. Additionally, emphasis has been placed on helping candidates develop a thorough literature review. The data indicates that candidates need additional support in examining data and the impact on student learning, as well as describing implications for future practice. The table provides the percentage of total students who met standards of 80% or better on each rubric criterion (2016-2019).

Table 5. Student Learning Objectives Project Results (SLO)

	# of Completers	Min	Max	Mean	% Proficient across all rubric criterion
AY 2018- 2019					
Fall 2018	N=8	80%	100%	94%	76%
Spring 2019	N=19	85%	100%	96.1%	100%
AY 2019- 2020					
Fall 2019	N=22				
Spring 2020	N=12	93%	100%	98.2%	100%
AY 2020- 2021					
Fall 2020	N=16	80%	98%	92.8%	87.5%
Spring 2021	N=10	80%	100%	90%	90%

#### Candidate Preservice Assessment of Student Teaching (CPAST) Observation Rubric Data

Interns are rated using the CPAST summative assessment by both their mentor teachers and university supervisors. The rubric is comprised of two subscales: (1) Pedagogy and (2) Dispositions with detailed descriptors of observable, measurable behaviors, to guiding scoring decisions. The percentage of students who met or exceeded expectations as measured by the CPAST pedagogy scale during the final internship observation is presented in the table below. The items that are aligned to AAQEP standards are presented in the respective sections of this report, along with the operational definition and criteria for the scale.

Table 6. CPAST Pedagogy Ratings: Percentage of Students Exceeded/Met Expectations

	2018-	2019 (n=3	8)	2019-	2020 (n=	:39)	202	0- 2021 (n	=30)
Rubric	%	Mean	SD	%	Mean	SD	%	Mean	SD
A. Focus for Learning: Standards and Objectives / Targets	91.43%	2.68	0.63	77.14%	2.49	0.81	91.80%	2.73	0.57
B. Materials and Resources	94.28%	2.68	0.53	92.86%	2.72	0.54	91.80%	2.68	0.59
C. Assessment of P-12 Learning	91.43%	2.44	0.69	92.86%	2.57	0.6	98.36%	2.62	0.58
D. Differentiated Methods	85.72%	2.32	0.67	81.43%	2.4	0.73	93.45%	2.51	0.62
E. Learning Target and Directions	94.29%	2.57	0.65	90.00%	2.5	0.63	98.36%	2.75	0.53
F. Critical Thinking	90.00%	2.57	0.63	92.86%	2.43	0.6	93.45%	2.55	0.64
G. Checking for Understanding	88.57%	2.44	0.65	85.72%	2.3	0.69	95.09%	2.57	0.62
H. Digital Tools and Resources	94.28%	2.47	0.55	91.42%	2.67	0.53	96.72%	2.73	0.48
I. Safe and Respectful Learning Environment	92.86%	2.72	0.54	92.86%	2.7	0.57	96.72%	2.88	0.45
J. Data-Guided Instruction	84.29%	2.35	0.69	81.43%	2.42	0.77	96.72%	2.53	0.59
K. Feedback to Learners	92.85%	2.54	0.58	91.43%	2.48	0.63	91.80%	2.61	0.58
L. Assessment Techniques	94.29%	2.49	0.65	92.86%	2.6	0.55	96.73%	2.58	0.59
M. Connections to Research and Theory	82.86%	2.31	0.77	72.86%	2.27	0.91	95.08%	2.63	0.66
Total Percentage	90.55%			87.36%			95.08%		

Table 7. CPAST Dispositions Ratings: Percentage of Students Exceeded/Met Expectations

	2018-	2018- 2019 (n=38) % Mean SE			2020 (n=	39)	2020- 2021 (n=30)		
Rubric	%	Mean	SD	%	Mean	SD	%	Mean	SD
A. Participates in Professional Development (PD)	98.53%	2.69	0.46	95.71%	2.81	0.4	98.36%	2.8	0.51

	2018-	2019 (n=	=38)	2019- 2020 (n=39)			2020- 2021 (n=30)		
Rubric	%	Mean	SD	%	Mean	SD	%	Mean	SD
B. Demonstrates Effective Communication with Families	89.70%	2.49	0.61	87.14%	2.62	0.55	100.00%	2.72	0.45
C. Demonstrates Punctuality	92.65%	2.75	0.56	97.14%	2.77	0.48	100.00%	2.93	0.25
D. Meets Deadlines and Obligations	89.71%	2.67	0.63	95.71%	2.71	0.54	93.45%	2.77	0.61
E. Preparation	97.06%	2.73	0.48	91.42%	2.77	0.49	98.37%	2.88	0.32
F. Collaboration	98.53%	2.75	0.44	97.14%	2.77	0.48	98.37%	2.84	0.49
G. Advocacy to Meet the Needs of Learners or for the Teaching Profession	91.18%	2.42	0.6	92.85%	2.55	0.55	98.36%	2.7	0.55
H. Responds Positively to Feedback/ Constructive Criticism	98.53%	2.84	0.41	94.29%	2.74	0.55	98.36%		
Total Percentage	94.48%			93.93%			98.16%		

Note: Candidates are rated as 4= Highly Proficient; 3= Proficient; 2= Developing; 1= Insufficient.

## Measure 4: Ability of completers to be hired in education positions for which they have prepared

#### **UMGC MAT Complete Capstone Surveys (2018-2021)**

At the end of the internship semester, MAT candidates are given an opportunity to complete an online survey. The feedback gathered from this survey provides valuable information about candidates' perceptions of their learning and the support they received during the program. The following table indicates the percentage of MAT graduates who 'strongly agree' or 'agree' with the survey statements. Below is a comparative table with question-by-question responses for the past three AY's.

Table 8. UMGC MAT Completer Surveys (2018- 2021)

# Percentage of Completers who indicated they "Strongly Agree" or "Agree" with the following statements.

Survey Questions	Fall 2018; N=9	Spring 2019; N=18	Fall 2019; N=21	Spring 2020; N=9*	Fall 2020; N=10*	Spring 2021. N=7*
The MAT courses and field experiences prepared you adequately for the internship responsibilities.	89%	89%	89%	89%	100%	100%
After completing the internship, you were ready to begin a professional teaching assignment.	89%	94%	94%	100%	100%	100%
Internship helped you use data informed decisions to set long and short-term goals for future instruction and assessment.	100%	100%	89%	89%	100%	100%
Internship helped develop knowledge and skills to plan and implement research-based instructional plans.	100%	89%	89%	78%	100%	100%
Internship helped develop professional dispositions.	100%	89%	100%	89%	100%	100%
Internship helped develop knowledge and skills to assess student learning.	100%	100%	100%	89%	100%	100%
Internship helped with the ability to work with diverse students with exceptionalities and cultural backgrounds.	100%	94%	94%	100%	**100%	**100%
Internship helped with a use of a variety of appropriate technologies that engage learners, are relevant to the instructional objectives, and extend learners' understanding of concepts.	100%	89%	89%	100%	100%	100%
The internship helped you actively involve learners to create and manage a safe and respectful learning environment using routines and transitions.	100%	100%	100%	100%	90%	100%

## Percentage of Completers who indicated they "Strongly Agree" or "Agree" with the following statements.

The SLO project helped you systematically examine learning outcomes of students with your mentor teacher.	100%	100%	83%	67%	90%	85.7%
The SLO project helped you analyze and reflect on student outcomes, and you were able to plan for improving student performance.	100%	100%	100%	67%	90%	85.7%
Your cooperating teaching effectively modeled professional dispositions.	100%	100%	100%	67%	100%	100%
Your cooperating teacher was supportive and served effectively as a mentor during the internship.	100%	100%	100%	67%	80%	100%
You would recommend your cooperating teacher as a mentor for future MAT interns in the program.	100%	100%	100%	67%	80%	85.7%
Your university supervisor effectively guided you through the internship process and was effective in carrying out the MAT procedures.	100%	89%	89%	78%	90%	85.7%
Your university supervisor communicated regularly, was supportive, and served effectively as a mentor during the internship.	85%	94%	94%	78%	90%	85.7%
You would recommend your university supervisor as a mentor for future MAT interns in the program.	88%	94%	94%	78%	90%	85.7%

<sup>\*</sup>Interns during the Spring 2020, Fall 2020, and Spring 2021 semesters experienced significant disruption due to the COVID-related school closures.

<sup>\*\*</sup>Question revised to read: Ability to implement culturally responsive instruction with diverse learners.

#### **Alumni Follow-Up Data**

The Maryland State Department of Education (MSDE) requires all approved Educator Preparation Programs (EPPs) to report percentage of completers who are working in Maryland public schools. To maintain updated, accurate records of alumni, their contact information, and employment status, the MAT program engages in the following processes:

- Completer/capstone surveys that solicit personal contact information for graduates.
- Alumni follow-up surveys and individual emails
- Review of publicly available staff data (Click <u>here</u> and scroll down to "Staff Data").

#### Alumni Survey

The MAT alumni survey feedback is part of a formal, scheduled process for receiving input about how prior candidates' program instruction and support have translated into their current teaching career. The survey uses fifteen, 4-point Likert-type scale questions (Strongly Agree, Agree, Disagree, Strongly Disagree). The survey is sent to alumni 1 year, 2 years and 3 years out. Questions are designed to elicit feedback on authentic application of the program's objectives, proficiencies and dispositions. The survey results then become a strong element for MAT continual improvement discussions and plans. This feedback loop also informs unit administration of program needs for refinement of assignments, rubrics, instructor and candidate support and training, candidate performance and unit operations.

In Summer of 2021, 36 alumni responded and 74% Agreed or Strongly Agreed that the MAT Program prepared them for their professional teaching position.

Table 9. Alumni survey feedback

Domain	Survey Questions	% "Strongly Agreed" or "Agreed"
Pedagogical Content Knowledge and Skills	Q5,- Q8, Q11, Q12	95%
Ability to Help All Students Learn	Q1- Q9	88%
Professional Dispositions	Q10, Q13- Q15	94%
Content Knowledge	Q5, Q6, Q8	92%

#### **Salary Information of Graduates**

The median annual national wage for high school teachers with a bachelor's degree was \$60,320 in May 2018. "Employment of high school teachers is projected to grow 4 percent from 2018 to 2028, about as fast as the average for all occupations. Rising student enrollment should increase demand for high school teachers." Although UMGC students can enroll in online courses from across the globe, the majority of completers find teaching jobs in Maryland after graduation. The annual mean wage of a secondary teacher in the Washington-Arlington-Alexandria, DC-VA-MD area is \$86,780.

Table 10. Salary Information for Secondary Teachers in the DC-VA-MD Area

Area Name	Employment	Annual mean wage	Employment per 1,000 jobs	Location Quotient
Washington-Arlington-Alexandria, DC-VA- MD-WV(0047900)	18240	\$86,780	6.219	0.86

### Source: U.S. Department of Labor, Bureau of Labor Statistics

#### Alumni Salary Information- Review of SteppingBlock Data

<u>SteppingBlocks</u> data is aggregated from hundreds of sources, including online profiles and resumes, job postings, government sources (Bureau of Labor Statistics), ONET and census data, public filings, company websites, public salary databases and company firmographic databases. The following is a summary of the data from the 1,011 UMGC alumni wo have a MAT.

- Teacher most common Job Title
- \$77,151 average current salary
- Montgomery County Public Schools top employer
- 43% reside in Maryland