

**EVIDENCE # 9**

**GPA and Licensure Data Summary Per Specialty  
Program**

**Department of Education  
MARYGROVE COLLEGE**



GRADUATE STUDIES &  
PROFESSIONAL DEVELOPMENT

**GPA Comparisons and Trends Across the Institution and Analysis**

Program	WI18		SU18		FA18		2018 GPA MEAN	GPA Mean +/-		
	# of STU	MEAN GPA	# of STU	MEAN GPA	# of STU	MEAN GPA		WI18	SU18	FA18
Social Justice	24	3.21	17	3.21	21	3.31	3.24	-0.03	-0.03	0.07
HRM	25	3.90	15	3.18	19	2.76	3.28	0.62	-0.10	-0.52
MAT	192	3.83	172	3.73	168	3.65	3.74	0.09	-0.01	-0.08
Non-MAT Education	159	3.56	129	3.66	133	3.45	3.56	0.00	0.10	-0.11

The above table provides data on mean student GPAs over the three semesters in the calendar year, 2018. The College programs were represented in four groups – Social Justice, Human Relations Management (HRM), Master in the Art of Teacher (MAT) which is a non-licensure program, and non-MAT Education which included: Educational Leadership, Educational Technology, Reading Specialist, Special Education / Autism Spectrum Disorder, and the 8 students in Initial Certification programs.

As an institution, Mean GPAs per program remained relatively stable over time and are above the college requirement of 3.0. Non-Education programs across the College showed declines in two of three semesters, whereas non-MAT programs showed a decline only in the final semester.

## GPA Summary and Analysis

Specialty Program	Winter 2018	Summer 2018	Fall 2018
<b>Educational Leadership</b>			
	<b>N = 76</b>	<b>N = 54</b>	<b>N = 55</b>
	GPA Mean: 3.451	GPA Mean: 3.556	GPA Mean: 3.518
	GPA Median: 4.0	GPA Median: 3.85	GPA Median: 4.0
	Cumulative GPA Mean: 3.58	Cumulative GPA Mean: 3.699	Cumulative GPA Mean: 3.699
<b>Special Education</b>	<b>N = 17</b>	<b>N = 18</b>	<b>N = 23</b>
	GPA Mean: 3.7	GPA Mean: 3.812	GPA Mean: 3.103
	GPA Median: 3.871	GPA Median: 4.0	GPA Median: 3.85
	Cumulative GPA Mean: 3.769	Cumulative GPA Mean: 3.786	Cumulative GPA Mean: 3.645
<b>Reading Specialist</b>	<b>N = 14</b>	<b>N = 18</b>	<b>N = 22</b>
	GPA Mean: 3.864	GPA Mean: 3.318	GPA Mean: 3.62
	GPA Median: 4.0	GPA Median: 4.0	GPA Median: 4.0
	Cumulative GPA Mean: 3.658	Cumulative GPA Mean: 3.731	Cumulative GPA Mean: 3.888
<b>Educational Technology</b>	<b>N = 39</b>	<b>N = 32</b>	<b>N = 26</b>
	GPA Mean: 3.751	GPA Mean: 3.893	GPA Mean: 3.635
	GPA Median: 4.0	GPA Median: 4.0	GPA Median: 4.0
	Cumulative GPA Mean: 3.858	Cumulative GPA Mean: 3.9	Cumulative GPA Mean: 3.921

### Licensure Scores Per Program Summary and Analysis \*

Specialty Program	Academic Cycle	Number who took the test	Number who passed the test	Qualifying Score	National Mean	EPP Range and Passing Percentage
Educational Leadership – Test 5411	FA 16 through SU 17	N= 3	N= 3	145	163.68	146 – 163 / 100%
	FA 17 through SU 18	N= 7	N= 7	145	164.35	141 – 187 / 85.71%
	FA 18	N= 10	N= 9	145	163.30	139 – 186 / 75%
Educational Leadership Test 6011	FA 16 through SU 17	N= 5	N= 5	158	174.19	171 – 180 / 100%
	FA 17 through SU 18	N= 2	N= 2	158	173.84	163 – 171 / 100%
	FA 18	N= 3	N= 3	158	173.67	159 – 181 / 100%
Special Education	Winter 2018	N= 0	N=0	220	N/A	N/A
	Summer 2018	N= 0	N=0	220	N/A	N/A
	Fall 2018	N= 7	N= 7	220	N/A	100%
Reading/Reading Specialist	Winter 2018	N= 2	N= 2	220	N/A	100%
	Summer 2018	N= 0	N= 0	220	N/A	N/A
	Fall 2018	N= 0	N= 0	220	N/A	N/A

(\* There are no licensure scores for Educational Technology because there is no appropriate national or state test – see below for more)

#### Brief description of Licensure Exam per Specialty Program:

- Educational Leadership
  - The State of Michigan does not offer or require an MTTC test for Educational Leadership
  - Michigan students are not required to take either the Praxis II: Educational Leadership: Administration and Supervision (5411) or School Leadership Series Test (6011); however, they are encouraged to do so.

- The 5411 Test consists of 110 selected-response questions and is a computer based test. While Michigan has not set a passing score, this test is required in 10 states, each of which determine the passing score for candidates in their state:

AL	CO	NC	NE	PA	SC	SD	UT	WV	MP*
149	145	145	145	143	145	145	151	141	122

\* Northern Mariana Islands

- Scores were reported in subcategories through Summer, 2018. Beginning August 1, 2018, Educational Testing Service reported only total scores to the EPP. Therefore, the total number of test takers during the cycles of data were 13, but the chart below contains sub scores for only the seven students who tested prior to August 1, 2018.
- A breakdown of the subcategories of the Praxis 5411 test is represented in the chart below:

Subarea		Approximate Number of Questions	Approximate Percentage of Questions on Test
I	Vision and Goals	18	19%
II	Teaching and Learning	24	25%
III	Managing Organizational Systems and Safety	13	14%
IV	Collaborating with Key Stakeholders	12	13%
V	Ethics and Integrity	16	16%
VI	The Education System	12	13%

- The 6011 Test consists of 100 selected-response questions in Section 1 and seven constructed response questions in Section 2 and is a computer based test. This test is required in 19 states/territories, each of which determines the passing score for candidates in their state. Michigan, like most states, requires a passing score of 163. Exceptions to this are listed in the chart below:

KS	KY	LA	MD	MS	RI	TN	US Virgin Islands
165	160	166	165	169	166	160	156

- Scores were reported in subcategories. One candidate’s scores were only reported as total scores; therefore, the total number of test takers during the cycles of data were six, but the chart below contains sub scores for only the five students who tested prior to August 1, 2018.
- A breakdown of the subcategories of the Praxis 6011 test is represented in the chart below:

Subarea		Approximate Number of Questions	Approximate Percentage of Questions on Test
	Section 1 – Selected Response	100	70%
IA	Vision and Goals	18	12%
IIA	Teaching and Learning	25	18%
III	Managing Organizational Systems and Safety	15	10%
IV	Collaborating with Key Stakeholders	21	15%
V	Ethics and Integrity	21	15%

Subarea		Approximate Number of Questions	Approximate Percentage of Questions on Test
	Section II – Constructed Response	7	30%
VI	The Education System	2	10%
IB	Vision and Goals	2	8%
IIB	Teaching and Learning	3	12%

- Special Education – Autism Spectrum Disorder

- The MTTC Autism Spectrum Disorder Test (064) consists of 100 multiple choice questions and is a computer based test. Passing score is a 220. Scores are reported to the candidate and the institution in both a total numeric form and a score of 1 to 4 for each of the subcategories where 1 is low and 4 is high (see chart below).

	<b>Subarea</b>	<b>Range of Objectives</b>	<b>Approximate Percentage of Questions on Test</b>
I	Understanding Students with Autism Spectrum Disorder	001–004	21%
II	Assessing Students with Autism Spectrum Disorder and Developing Individualized Programs	005–010	28%
III	Promoting Development and Learning in Students with Autism Spectrum Disorder	011–018	36%
IV	Working in the Professional Environment	019–022	15%

- There are two national Praxis test to consider: Special Education: Core Knowledge and Applications (5354) and Special Education: Teaching Students with Behavioral Disorders and Emotional Disturbances (5372).
  - Test 5354
    - This test consists of 120 selected response questions and is a computer based test. The Special Education: Core Knowledge and Applications test is designed for examinees who plan to teach in a special education program at any grade level from preschool through grade 12. The questions on the test assess an examinee’s knowledge of the basic principles of special education and the application of these principles to realistic situations. Its focus is on five major content areas: Development and Characteristics of Learners, Planning and the Learning Environment, Instruction, Assessment, and Foundations and Professional Responsibilities. Questions may address disabilities of any degree varying from mild to profound. The content of this test is based largely on the Special Educator Professional Preparation Standards created by the Council for Exceptional Children (CEC).



- This test is required in 28 states/territories, each of which determines the passing score for candidates in their state. Marygrove does not have any enrolled students teaching in any of these 28 states/territories. Most stakes require a passing score of 151. Exceptions to this are listed in the chart below:

AL	ID	LA	MS	MT	NV	SD	UT	WY	MP*	VI **
153	145	145	152	159	159	145	160	158	150	155

\* Northern Mariana Islands      \*\* U.S. Virgin Islands

- Test 5372 - Special Education: Teaching Students with Behavioral Disorders and Emotional Disturbances test
  - This test consists of 120 selected response questions and is a computer based test. This test measures whether entry-level special educators of students with behavioral disorders and emotional disturbances (EBD) have the standards-relevant knowledge, skills, and abilities believed necessary for competent professional practice. This test includes the concepts of functional behavioral assessment, which is taught in the Marygrove Special Education: Autism Spectrum Disorder Masters and certificate programs; however, this test also includes concepts around a variety of maladaptive behavior /emotional disturbances such as conduct disorder, attention-deficit hyperactivity disorder, oppositional defiant disorder, Schizophrenia, etc. and does not include specific questions assessing the communication challenges of those students with Autism Spectrum Disorder.
  - This test is required in 9 states/territories, each of which determines the passing score for candidates in their state. Marygrove does not have any enrolled students teaching in any of these 9 states/territories. Most stakes require a passing score of 154. Exceptions to this are listed in the chart below:

IA	MP*
172	150

\* Northern Mariana Islands

- Because this test is not limited to Autism Spectrum Disorder and related concepts, and because it does not include a method to assess the understanding of communications issues, it is **not** appropriate to assess graduates from an Autism Spectrum Disorder program.
- Reading/Reading Specialist –
  - The MTTC Reading Specialist Test (092) consists of 100 multiple choice questions and is a computer based test. Passing score is a 220. Scores are reported to the candidate and the institution in both a total numeric form and a score of 1 to 4 for each of the subcategories where 1 is low and 4 is high (see chart below).

Subarea		Range of Objectives	Approximate Percentage of Questions on Test
I	Meaning and Communication	001–005	16%
II	Genres and Craft of Literature and Language	006–009	14%
III	Skills and Processes	010–014	16%
IV	Instruction	015–020	20%
V	Assessment	021–024	14%
VI	Professional, Program, and Curriculum Development	025–030	20%

- The Praxis Reading Specialist test (5301) is the national test for reading specialists.
  - The State of Michigan does not require the Praxis test.
  - Test which consists of 80 selected-response questions, one constructed response question and one case study and is a computer based test. While the Praxis is not required in Michigan, this test is required in 23 states, each of which determines the passing score for candidates in their state. Passing score for most states is 164 (see list below); exceptions are itemized below.

AL	IA
157	173

- States/Territories Requiring a 164 Passing Score: Arkansas, Colorado, Washington D.C., Delaware, Hawaii, Iowa, Idaho, Kansas, Kentucky, Maine, North Carolina, North Dakota, Nebraska, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Vermont, West Virginia, Guam, and Northern Mariana Islands.
- A breakdown of the test items is provided in the table below:

Subarea		Approximate Number of Questions	Approximate Percentage of Questions on Test
	<b>Part A: Selected –Response Questions</b>	80	80%
I	Assessment and Diagnostic Teaching	20	20%
II	Reading and Writing Development	45	45%
III	Leadership Skills and Specialized Knowledge of Pedagogical Principles and Instructional Practices	15	15%
	<b>Part B: Constructed-Response Questions</b>	2	20%
IV	Professional Learning and Leadership	1	10%
V	Analysis of Individual Student Case Study	1	10%

- Marygrove currently has no students in the Reading Specialist Program from any of these states, so there is no available Praxis test data for the Reading Specialist Test.
- Educational Technology
  - There is no Michigan assessment for Educational Technology. The Michigan Department of Education determined that technology changes faster than tests can be constructed and normed.
  - There is a national Praxis test, Technology Education (5051) and is a computer based test. The Technology Education test is designed for candidates seeking certification as a middle school or high school teacher. The test focuses on the knowledge and skills a teacher must have to support the technology education curriculum. It incorporates essential concepts from the Technological Literacy Standards prepared by the International Technology and Engineering

Educators Association (ITEEA). In addition, the test reflects concepts from the International Society for Technology Standards for Teachers (ISTE® Standards•T).

The 120 selected-response questions cover topics in technology education, including knowledge of information and communication; construction, manufacturing, and energy/power/transportation technologies; and the impact of these areas on individuals, the environment, and society. The test taker is required to apply pedagogical and professional knowledge to answer questions focused on the individual understanding and application of current technology education principles. The test is designed to assess those who wish to teach courses in the area of Technology in a high school, vocational, or middle college program, rather than those who wish to use technology as an effective teaching tool. Therefore, there is **no** appropriate, available state or national test by which to measure the competence of graduates of the Masters or Certification in Educational Technology.

**Analysis per Specialty Program:**

- **Educational Leadership**

- Praxis Test 5411

- Institutional Data Compared to State and National Data
    - **Note:** As reported by ETS – The range of scores earned by the middle 50% of a group of examinees

2016-2017*		Percent Pass At								
	Examinees	145	150	155	Median	Mean	STD	Average Performance Range	Highest Observed Score	Lowest Observed Score
National	3420	94.21	87.89	76.96	164	163.68	12.54	155-172	198	116
State	106	90.57	87.74	80.19	166	164.87	14.00	158-174	189	119
Marygrove	3*								163	146

\*ETS offered no data because the Marygrove examinees were fewer than 5. Marygrove had three candidates take the exam in 2016-2017. Those scores are reflected here [146, 152, 163]

2017-2018		Percent Pass At								
	Examinees	145	150	155	Median	Mean	STD	Average Performance Range	Highest Observed Score	Lowest Observed Score
National	3921	94.59	88.85	77.66	165	164.35	12.34	156-173	198	100
State	39	89.74	87.18	82.05	165	164.56	12.85	155-174	187	140
Marygrove	7	85.71	85.71	85.71	167	167.29	15.31	155-186	187	141

2018-2019**		Percent Pass At								
** Partial year at time of self-study submission. Full report for site-visit	Examinees	158	163	168	Median	Mean	STD	Average Performance Range	Highest Observed Score	Lowest Observed Score
National	791	91.40	83.69	73.70	165	163.30	13.56	154-173	198	119
State	11	81.82	81.82	81.82	168	165.18	15.30	159-174	186	135
Marygrove	10	90.00	90.00	90.00	169	168.20	12.54	162-174	186	139

- School Leadership Series Test 6011
  - Comparison by National, State, and Institution

**SCHOOL LEADERSHIP SERIES 6011**

<b>2016-2017</b>		<b>Percent Pass At</b>								
	<b>Examinees</b>	<b>158</b>	<b>163</b>	<b>168</b>	<b>Median</b>	<b>Mean</b>	<b>STD</b>	<b>Average Performance Range</b>	<b>Highest Observed Score</b>	<b>Lowest Observed Score</b>
National	7028	94.69	89.41	78.39	175	174.19	9.43	169-181	197	114
State	103	100	99.03	94.17	180	178.94	6.40	175-184	193	162
Marygrove	5	100	100	100	176	175.80	2.93	175-177	180	171

<b>2017-2018*</b>		<b>Percent Pass At</b>								
	<b>Examinees</b>	<b>158</b>	<b>163</b>	<b>168</b>	<b>Median</b>	<b>Mean</b>	<b>STD</b>	<b>Average Performance Range</b>	<b>Highest Observed Score</b>	<b>Lowest Observed Score</b>
National	7235	94.24	88.89	77.11	175	173.84	9.42	168-181	197	128
State	128	100	97.66	90.62	178	177.49	7.12	172-183	192	160
Marygrove	2*								171	163

\*ETS offered no data because the Marygrove examinees were fewer than 5. Marygrove had two candidates take the exam in 2017-2018. Those scores are reflected here [ 163 and 171]

<b>2018-2019**</b>		<b>Percent Pass At</b>								
	<b>Examinees</b>	<b>158</b>	<b>163</b>	<b>168</b>	<b>Median</b>	<b>Mean</b>	<b>STD</b>	<b>Average Performance Range</b>	<b>Highest Observed Score</b>	<b>Lowest Observed Score</b>
National	1843	94.09	87.63	74.77	175	173.67	9.65	167-181	196	135
State	34	97.06	88.24	82.35	178	176.18	9.43	169-181	195	156
Marygrove	3**								181	159

\*\*Three candidates had taken the SLS exam at time of self-study submission. A full report will be available during the site-visit when all winter and summer scores have been added. Scores of three candidates are reflected here [ 159, 176, 181]

**Test Data by Category**

<b>PRAXIS 5411</b>		<b>Average % Correct</b>			<b>Quartiles</b>			
<b>Test Category</b>	<b>Points Available</b>	<b>National</b>	<b>State/ Agency</b>	<b>Institution</b>	<b>1<sup>st</sup> Quartile [lowest]</b>	<b>2<sup>nd</sup> Quartile</b>	<b>3<sup>rd</sup> Quartile</b>	<b>4<sup>th</sup> Quartile [highest]</b>
<b>Vision &amp; Goals</b>		<b>18</b>						
	<b>2016-2017</b>	71.07	66.67	72.22	0	1	1	1
	<b>2017-2018</b>	71.90	84.72	80.95	1	0	2	4
	<b>2018-2019</b>	70.86	0	80.56	1	2	1	6
<b>Teaching &amp; Learning</b>		<b>24</b>						
	<b>2016-2017</b>	73.31	80.21	65.28	1	2	0	0
	<b>2017-2018</b>	72.81	72.92	76.10	1	1	0	5
	<b>2018-2019</b>	71.69	0	78.47	1	1	4	4
<b>Managing Org. Systems &amp; Safety</b>		<b>13</b>						
	<b>2016-2017</b>	69.46	75	58.97	1	1	0	1
	<b>2017-2018</b>	70.02	63.46	73.63	1	2	0	4
	<b>2018-2019</b>	68.58	0	75.64	3	1	1	5
<b>Collaborating Key Stakeholders</b>		<b>12</b>						
	<b>2016-2017</b>	66.86	54.17	50.00	1	1	1	0
	<b>2017-2018</b>	66.80	79.17	70.24	1	0	2	4
	<b>2018-2019</b>	65.39	0	70.83	2	1	4	3
<b>Ethics &amp; Integrity</b>		<b>16</b>						
	<b>2016-2017</b>	69.26	76.56	66.67	0	2	1	0
	<b>2017-2018</b>	66.80	79.17	70.24	1	0	2	4
	<b>2018-2019</b>	69.62	0	76.04	1	1	3	5
<b>Educational System</b>		<b>12</b>						
	<b>2016-2017</b>	66.02	72.92	58.33	2	0	0	1
	<b>2017-2018</b>	67.38	79.17	59.52	2	0	1	4
	<b>2018-2019</b>	65.54	0	72.22	2	2	1	5

<b>SLS 6011</b>		<b>Average % Correct</b>			<b>Quartiles</b>				
<b>Test Category</b>	<b>Points Available</b>	<b>National</b>	<b>State/ Agency</b>	<b>Institution</b>	<b>1<sup>st</sup> Quartile [lowest]</b>	<b>2<sup>nd</sup> Quartile</b>	<b>3<sup>rd</sup> Quartile</b>	<b>4<sup>th</sup> Quartile [highest]</b>	
<b>Vision &amp; Goals</b>		<b>14</b>							
	2016-2017	75.81	82.14	68.57	3	1	1	0	
	2017-2018	74.88	75.27	71.43	0	0	1	0	
	2018-2019	72.14	0	64.29	0	1	0	1	
<b>Teaching &amp; Learning</b>		<b>19-24</b>							
	2016-2017	76.39	72.28	84.46	0	0	3	2	
	2017-2018	76.80	80.39	76.19	0	0	1	0	
	2018-2019	76.74	0	72.22	0	1	0	1	
<b>Managing Org. Systems &amp; Safety</b>		<b>12-13</b>							
	2016-2017	79.28	77.56	75.38	3	0	0	2	
	2017-2018	78.69	78.93	76.92	0	0	1	0	
	2018-2019	77.25	0	91.67	0	0	1	1	
<b>Collaborating Key Stakeholders</b>		<b>14-18</b>							
	2016-2017	80.59	76.50	67.08	3	2	0	0	
	2017-2018	78.77	80.03	75	0	1	0	0	
	2018-2019	75.99	0	77.78	1	0	0	1	
<b>Ethics &amp; Integrity</b>		<b>15-17</b>							
	2016-2017	77.82	70.20	88.63	0	0	3	2	
	2017-2018	77.88	80.92	80.00	0	1	0	0	
	2018-2019	77.47	0	76.47	0	0	0	2	
<b>Educational System</b>		<b>12</b>							
	2016-2017	73.36	79.17	85	0	1	1	3	
	2017-2018	71.51	79.69	83.33	0	0	0	1	
	2018-2019	69.34	0	66.67	0	1	0	1	
<b>Vision &amp; Goals: Constructed Responses</b>									
	2016-2017	<b>12</b>	66.14	70.83	71.67	1	0	1	3
	2017-2018		66.83	66.67	50.00	0	1	0	0
	2018-2019		65.03	0	75.00	0	1	1	0
<b>Teaching &amp; Learning: Constructed Responses</b>									
	2016-2017	<b>18</b>	71.32	79.17	72.22	0	3	1	1
	2017-2018		71.41	74.31	0	1	0	0	0
	2018-2019		68.39	0	83.33	0	0	0	2



**Note:** 2018-2019 represents only the Fall term [9.1.18-2.15.19]. The 2018-2019 data will be updated when the full yearly report is available.

**ETS Note on use of Category-level information:** Category-level information indicates the number of test questions answered correctly or raw points earned for relatively small subsets of the questions on the test. Because they are based on small numbers of questions, category scores are less reliable than the official scaled scores, which are based on the full set of questions. Furthermore, the questions in a category may vary in difficulty from one test form to another. Therefore, the category scores of individuals who have taken different forms of the test are not necessarily comparable. For these reasons, category scores should not be considered a precise reflection of a candidate’s level of knowledge in that category and ETS recommends that category information not be used to inform any decisions affecting candidates without careful consideration of such inherent lack of precision.

**National Examinations - Disaggregated by Ethnicity and Gender September 2016 – February 2019**

Praxis	N =	Total Mean	Male N=	Mean Score	Female N =	Mean Score
African American	3	*	1	*	2	*
White	16	171.00	2	*	14	171.43
Two or More Races						
Not Reporting	1	*			[1]	*
Total Cohort	20	165.70	3	*	17	166.24

SLS	N =	Total Mean	Male N=	Mean Score	Female N=	Mean Score
African American	1	*			1	*
White	7	174	3	*	4	*
Two or More Races	1	*	1	*		
Not Reporting	1	*	[1]	*		
Total Cohort	10	174	5	177	5	171

- Analysis
  - Beginning in Fall 2015, candidates entering the Educational Leadership Program have had one of two selected national examinations for administrative licensure listed on their Program Plan of Work. For out-of-state candidates, the School Leadership Series [SLS] # 6011 was the exam chosen since many states across the country

- require that test for their state administrative certification. For Michigan candidates, the Praxis # 5411 exam was selected. The exam addresses the same standards and, because it is an older version, is less expensive. The financial cost was one consideration in its selection.
- Candidates' scores on the Praxis have gradually increased over the three-year period. This may reflect candidates' growing acceptance of the exam as a feature of the program and a more intentional preparation for the exam. Since Michigan has not published a passing score for Praxis 5411, if a benchmark score of 150 [a score more toward the high end accepted by states across the county] was employed, 85% of Marygrove test-takers would have passed the exam. Using 163 as the benchmark score for the SLS exam [one generally used across the states], 90% of Marygrove test-takers passed the exam.
  - Patterns within the Test Category Quartile data affirms strengths in the areas of vision and goals, as well as ethics and professional integrity. Data patterns also support the four areas faculty identified for focus in the review of courses and assessments during the transition to NELP Standards: a) collaboration with key stakeholders [ELCC Standard 4]; b) management and school operations [ELCC Standard 3.1 & 3.2]; c) curriculum and supervision [ELCC Standard 2.2 & 2.3]; and d) the education system [ELCC Standard 6].
  - Ethnicity and gender data indicates a larger percentage of female candidates took the exams than males and that an even smaller percentage of African American candidates took the exams. There is some indication that scores of African American females was lower on average than white females [Praxis].
- Actionable Items
    - The Michigan Department of Education does not currently require a national exam for administrative certification and Marygrove has experienced some noticeable pushback from candidates as a result. Faculty have had to manage a fine line between strongly promoting the program requirement and, at the same time, not holding back a recommendation for certification on the basis of having taken the national exam. The faculty would like to see the state require a national examination especially since it is also an element for national accreditation.
    - This first three-year period has been approached as a pilot study, using available data to analyze test results for patterns, identifying areas of strength as well as areas for improvement. Program faculty will continue to use both tests until a new administrative licensure exam – based on the NELP 2018 standards - is nationally

recognized. At that time, the EDL program will require the same exam of all candidates [Michigan and out-of-state].

- **Special Education** – during the time period January 1 – December 31, 2018 which encompassed three cycles of data, Winter 18, Summer 18 and Fall 18, a total of six candidates took the MTTC test 064 Autism Spectrum Disorders. Because the N is so small, the data will be analyzed as a group.
  - All six candidates passed the test on the first try.
  - There are four sub areas of the test. Scores for the students are as shown below
  - Course grades for each of the six students are listed in the table below. Note: EDU 602 is taken only by the Master’s students. Also, only student 5 has completed the entire program. Students 1,3, and 4 are student teaching during Winter, 2019; Students 2 and 6 will be student teaching during Fall, 2019.

Student	SED 565	SED 570	SED 573	SED 575	SED 601	SED 602	SED 603	SED 699	SED 651	SED 655	SED 661	SED 664	EDU 602
1	FA 18 A-	FA 17 A	FA 17 B-	SU 17 A	Su 17 A	SU 18 A	FA 18 A	Wi 19	Wi 18 B	WI 18 A	FA 18 B+	SU 17 A	Trans
2	SU 17 A	FA 17 A	FA 17 A-	SU 17 A	SU 17 A	WI18 A	SU 18 A		Wi 18 A	WI 18 A	FA 18 I	SU 17 A	SU 18 B
3	Trans	FA 17 A	SU 18 A	Trans	SU 17-A	Wi 18 A	SU 18 A	Wi 19	WI 17 A	WI 18 A	FA 18 A	SU 17 A	
4	FA 18 A-	FA 17 A	FA 17 A	FA 18 A-	Wi18 A	SU 18 A	Wi 19	Wi 19	Wi 18 A	WI 18 A-	FA 18 A	SU 18 A	SU 18 A
5	trans	Trans	Trans	FA 16 A	Wi 18 B	SU 18 C	FA 18 A	FA 18 A	WI 17 B-	Wi 18 C	FA 17 A	SU 18 A-	
6	Trans	SU 18 A	FA 17 A-	WI 18 A	Wi 18 A	FA 18 A	SU 18 A		Wi 18 A	WI 19	FA 17 A	SU 18 A-	

Scores are reported to the candidate and the institution in both a total numeric form and a score of 1 to 4 for each of the subcategories where 1 is low and 4 is high

**Comparison of GPA to Test and Sub Test Scores for the Autism Spectrum Disorder (064) Test**

		Student	1	2	3	4	5	6	Mean
<b>Sub Test</b>	<b>Sub Test Name</b> (Scores Range from 1 to 4 for each sub test)	cum GPA	3.63	3.73	3.98	3.96	3.52	3.94	3.79
<b>1</b>	Understanding Students with Autism Spectrum Disorder		3.00	4.00	4.00	4.00	2.00	3.00	3.33
<b>2</b>	Assessing Students with Autism Spectrum Disorder and Developing Individualized Program		3.00	3.00	4.00	3.00	2.00	3.00	3.00
<b>3</b>	Promoting Development and Learning in Students with Autism Spectrum Disorder		3.00	4.00	3.00	4.00	4.00	3.00	3.50
<b>4</b>	Working in the Professional Environment		4.00	3.00	3.00	3.00	3.00	2.00	3.00
	<b>Average Total Test Score</b>	<b>Mean Total Test Score</b>	3.25	3.5	3.5	3.5	2.75	2.75	

○ **Analysis**

- Scores on the MTTC are higher for candidates who complete all of their coursework at Marygrove. Candidates who transferred in courses, while achieving passing scores, had lower subtest scores than those who had no transfer credits.
- Candidates who are completing their programs while teaching in ASD classrooms experience both benefits and disadvantages. Discussion board threads and personal communications from candidates reveal often harsh conditions, including excessive paperwork and injuries. In one instance a candidate was forced to take incompletes during a semester when she was given a concussion by a student. Conversely, many course projects are similar to required tasks in the ASD classroom, giving candidates with experience teaching

students with ASD an advantage. These candidates often receive district level training in areas such as Functional Behavior Analysis, Behavior Intervention Plans, assistive technology, and behavior analysis. In this way, coursework informs job related tasks and vice versa. This factor sometimes makes analysis of course performance difficult, particularly when a candidate demonstrates poor performance in a class due to self-reported external factors.

- **Actionable Items**

- As a group, candidates have performed lower overall in SED 661, Applied Behavior Analysis. Review of performance on coursework, Key Assignments, and student transcripts revealed that candidates perform better when SED 661 is taken later in their program, and when it is the only course attempted in a term. Student advising will be adjusted to make these recommendations. When possible, candidates should complete SED 651 and SED 664 prior to taking SED 661.

- **Reading/Reading Specialist**

- During the time period January 1 – December 31, 2018 which encompassed three cycles of data, Winter 18, Summer 18 and Fall 18, a total of two candidates took the MTTC test 092 Reading Specialist.
  - Both passed.
  - One of the two students had taken the test in a prior year and failed.
  - The scores below, therefore, include the initial failure of student #2, in an effort to gather more data. Because the N is so small, the data will be analyzed as a group.
- Below is a chart of the cumulative GPAs and course grades of two candidates in the Masters of Education in Reading/Reading Specialist program who took the MTTC 092 Reading Specialist test.

#	CUM GPA	RDG 509	RDG 557	RDG 559	RDG 564	RDG 567	RDG 510	RDG 619	RDG 639	RDG 649	RDG 669	RDG 691
1	4.00	FA 16 A		WI 17 A	FA 16 A	Su 17 A	SU 17 A	WI 17 A	Su 17 A-	FA 17 A	FA 17 A	FA 17 A
2	3.80	FA 16 A		WI 17 B	FA 16 A	SU 17 A	WI 15 A	Wi 17 B	SU 17 B+	FA 17 A	FA 17 A-	SU 17 A-

- The candidates from the chart (above) were admitted prior to a programmatic change which required all students to take both RDG 564 (Elementary Reading Methods) and RDG 557 (Secondary Reading Methods). These two candidates were secondary teachers and had already taken a secondary reading methods course as undergraduates. Therefore, there is no grade data for RDG 557.

Scores are reported to the candidate and the institution in both a total numeric form and a score of 1 to 4 for each of the subcategories where 1 is low and 4 is high.

**Comparison of GPA to Test and Sub Test Scores for the Reading Specialist (092) Test**

		<b>Student</b>	1 Pass	2 Fail	2 (Retest) Pass	<b>Mean</b>
<b>Sub Test</b>	<b>Sub Test Name</b> (Scores Range from 1 to 4 for each sub test)	CUM GPA	4	3.80	N/A	3.90
<b>1</b>	Meaning and Communication		4	2	2	2.67
<b>2</b>	Genres and Craft of Literature and Language		4	3	3	3.33
<b>3</b>	Skills and Processes		4	2	2	2.67
<b>4</b>	Instruction		3	2	2	2.33
<b>5</b>	Assessment		4	1	2	2.33
<b>6</b>	Professional, Program, and Curriculum Development		3	2	3	2.67
		<b>Mean Total Test Score</b>	3.67	2	2.33	

○ **Analysis**

- Though N is small and not applicable or fair towards conclusions relative to representativeness and cumulativeness, it is obvious that one of the two candidates far exceeded the other on overall test success rate with a differential of 1.34. points in total test score average.
- The candidate who had to re-take the test consistently earned grades at or above a “B” average in all coursework. This would indicate a proficient meeting of expectations of course competencies. Following this analysis, the reason

for the first failed attempt seems to lie elsewhere than in mastery of content during coursework. A postulation can be made that test-taking skills and/or test-taking anxiety negatively impacted the outcome or that course competencies were not sufficiently aligned with test learning outcomes in each sub-test category.

○ **Actionable Items**

- As part of a comprehensive review and update of the Reading/Reading Specialist program curriculum, explicit and intentional work needs to be devoted to a greater alignment of course outcomes/competencies with the MTTC's competencies in all sub-test area.
- Though N was small (N=2), it seemed that both candidates scored lower in the "instruction" and "assessment" sub-test of the MTTC. These two areas could be explored as areas for improvement and coursework and content can be enriched accordingly. Perhaps the areas of "instruction" and "assessment" can be revamped towards more curricular breadth, depth, rigor aligned with best practices and models of excellence in the field. A focus group can be implemented to investigate whether candidates struggle with demonstrating *paper knowledge* of instructional strategies and assessment methods versus their *application in praxis*. The nature of test items can point to a clue in this respect. Already, in emerging online course discussions, a comment is often made by candidates that they struggle with the "implementation" aspect. Perhaps this can serve as rationale for more clinically-based tasks during coursework but that such be focused and rigorously articulated and designed in alignment with MDE and MTTC test competencies.
- Recent enrollment in the total Reading/Reading Specialist program has ranged between 14 and 22 candidates in 2018; however, only five candidates finished the program during the three data cycles. Of those five, two were interested in pursuing the actual certificate (therefore taking the MTTC test). The EPP needs to investigate how to better promote interest in the Reading Specialist Endorsement granted by the State of Michigan. Perhaps value-added test preparation materials can be developed and added to target courses as part of the comprehensive program curriculum review and update.
- Last, but not least, advising content relative to test and test-taking skills ought to be explored for maximal candidate success. The Reading/Reading Specialist program has a new program director (effective Winter 2019). A new vision



for advising throughout the Reading/Reading Specialist program includes plans for regular email blasts with test tidbits and/or study skills.

- Educational Technology – There is no national or state test data to analyze; however, below follows a brief analysis of the relationship between entering (Undergraduate) GPA and graduating (Graduate) GPA.
  - **Undergraduate GPA and Graduate GPA Analysis**
    - Without a state or national test for graduates’ competencies, and with high cumulative GPAs of graduates, the Educational Technology program sought to identify a measure to determine whether the course grades were reasonable. The program director postulated that if the program lacked rigor and/or there was grade inflation, the cumulative GPAs of graduates would be statistically higher than their corresponding undergraduate cumulative GPAs. The program director conducted an analysis of the correlation between the candidates’ undergraduate GPAs and their graduate GPAs.

Student	Undergraduate GPA	Current Graduate GPA	Courses Taken in the program at the time of data collection	Difference between 2 GPAs
Student 1	3.30	3.713	9	0.413
Student 2	3.97	3.963	9	-0.007
Student 3	3.57	3.940	6	0.370
Student 4	3.62	3.871	8	0.215
Student 5	3.69	3.963	9	0.273
Student 6	3.45	3.367	9	-0.083
Student 7	3.24	3.767	7	0.527
Student 8	3.97	3.875	8	-0.095
Student 9	3.25	3.489	9	0.237
Student 10	3.45	3.900	9	0.450
Student 11	3.33	3.425	9	0.092
Student 12	3.30	3.883	9	0.583
Student 13	3.64	3.750	9	0.110
Student 14	2.73	2.963	8	0.233
<b>MEAN</b>	<b>3.4653</b>	<b>3.7049</b>		<b>0.2396</b>

First, an F-test is done to determine if the variances are equal. The probability  $P=0.3724296$ . When the probability is more than 0.05, we assume that the variances are equal.

F-Test Two-Sample for Variances		
	Variable 1	Variable 2
Mean	3.4653714	3.704929
Variance	0.1026774	0.085409
Observations	14	14
df	13	13
F	1.2021868	
P(F<=f) one-tail	0.3724296	
F Critical one-tail	2.5769271	

Then a t-test two sample assuming equal variances is done to determine if the means (undergraduate GPA and graduate GPA) are statistically different. The mean for undergraduate GPA is 3.465371 and the mean for graduate GPA is 3.704928571. The  $t=-2.06678$  and the  $P \geq 0.05$  (0.048847). With 95% confidence, we can conclude that the means for undergraduate GPA and graduate GPA are statistically equal.

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	3.465371	3.704928571
Variance	0.102677	0.085408841
Observations	14	14
Pooled Variance	0.094043	
Hypothesized Mean Difference	0	
df	26	
t Stat	-2.06678	
P(T<=t) one-tail	0.024424	
t Critical one-tail	1.705618	
P(T<=t) two-tail	0.048847	
t Critical two-tail	2.055529	

- **The data analysis indicates the following:**
  - There exists a positive correlation between the undergraduate GPA and the graduate GPA. e.g. when the student has a higher undergraduate GPA, he or she is projected to receive a higher graduate GPA.
  - The data does not suggest students receive a higher graduate GPA in the program than the undergraduate GPA.
  
- **Actionable Items**
  - The director of the Educational Technology will stay current with possible State and/or national tests. If there is an appropriate test, the candidates in the program will be required to take it.
  - The director will look for other methods to measure program rigor and candidates' competencies.