Completer Effectiveness Case Study
Middle Level Math/Science 4-8 Program Completer

Description: The data on Evidence 30 represents a single case study of the effectiveness of a Middle Level (ML) Math/Science program completer who was teaching for the third year at one of the WTEP's partner school districts. **Evidence is provided for both aspects of CAEP R4.1:** the ML completer effectively contributed to P-12 student learning growth **and** effectively applied the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve. **See the rationale below and the table of contents for links to the data and analysis.**

Rationale: The Middle Level Math/Science Program represents the second highest number of completers in the WTEP following Elementary Education K-6. Thus, a case study of the effectiveness of a completer from that program is **representative** of the overall program effectiveness. The P-12 student learning data included are from teacher-created student assessments that were aligned with state math standards. The data demonstrate marked student learning growth in three courses (Geometry, TMR, and Algebra II) as shown in the included analysis. The teacher effectiveness ratings provided are from the Arkansas proprietary TESS evaluation and were rated by the administrator who evaluated the teacher in his first year of teaching. The alignment of TESS standards to the InTASC standards that the WTEP preparation experience was designed to achieve is also included making these data **relevant, verifiable, and representative**. The **teacher was rated Highly Effective in 91% of the ratings, and effective in 9% in TESS components aligned with InTASC Standards 1, 2, 3, 5, 7, 9, and 10 and CAEP Standards R1.1, R1.2, R1.3, and R1.4.**

Table of Contents

Data Analysis for P-12 Student Learning Growth Data

Evidence that the ML Math/Science Completer **effectively contributes to P-12 student learning growth** is provided in the summary tables and growth analysis shown below. The document below shows the summary results of three pre and post-assessments for units taught in Geometry (10th grade), Traditional Math Ready (TMR -12th grade), and Algebra II (10th-11th grade). The pre and post assessments for each content area are teacher-created and aligned to the Arkansas State Math Standards.

P-12 student learning growth was demonstrated by students in all three math courses for the four month period; Geometry (92%), TMR (74%), and Algebra II (91%).

Information About the Tests	
Date the First Test Was Given	8/28/2020
Date The Second Test Was Given	12/17/2020

Geometry

Growth: 92% of students showed growth from pre to post-assessment in Geometry with 44% increasing their scores by 25 points.

Geometry Score Statistics					
Test 1 Average	Test 2 Average	Number of Students Whose Score Improved	Number of Students Whose Score Increased by 10 Points	Number of Students Whose Score Increased by 25 Points	Total Students
23.19	44.37	35	27	17	38

Percent of Students Whose Score Increased	Percent of Students Whose Score Increased by 10 Points	Percent of Students Whose Score Increased by 25 Points
92.11	71.05	44.74

Transition Ready Math

Growth: 74% of students showed growth from pre to post-assessment in TRM with 32% increasing their scores by 25 points.

Transitional Math Ready Score Statistics					
Test 1 Average	Test 2 Average	Number of Students Whose Score Improved	Number of Students Whose Score Increased by 10 Points	Number of Students Whose Score Increased by 25 Points	Total Students
56.77	73.06	23	20	10	31

Percent of Students Whose Score Increased	Percent of Students Whose Score Increased by 10 Points	Percent of Students Whose Score Increased by 25 Points
74.19	64.52	32.26

Continued, Data Analysis for P-12 Student Learning Growth Data

Algebra II

Growth: 91% of students showed growth from pre to post-assessment in TRM with 73% increasing their scores by 25 points.

Algebra II Score Statistics					
Test 1 Average	Test 2 Average	Number of Students Whose Score Improved	Number of Students Whose Score Increased by 10 Points	Number of Students Whose Score Increased by 25 Points	Total Students
34.62	64.52	21	18	17	23

Percent of Students Whose Score Increased	Percent of Students Whose Score Increased by 10 Points	Percent of Students Whose Score Increased by 25 Points
91.30	78.26	73.91

CAEP Standard 4.3 Satisfaction of Completers

Statement by Case Study participant demonstrating Satisfaction of Completers:

From an email from the case study participant sent 6/9/21

"All the data I have gotten together while teaching, I first learned when working on my Teacher Work Sample for Williams. The work sample was extremely helpful in preparing me for a career in teaching. That's really when I learned how to align assessments to learning outcomes in order for the data to be a meaningful representation of student growth."*

*The Teacher Work Sample is an action research project that is completed in ED 4603 Internship Seminar. Requirements for the project include establishing standards-based learning goals, pre and post-assessment measurements of the learning goals, and intern reflections on student growth.

Description of Effectiveness Data for ML Math/Science Completer – (principal's rating forms on following pages)

Evidence that the ML Math/Science completer **effectively applied the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve** is provided in the following two pages. **The summary and analysis of the data is provided below, and the raw data follows on the next two pages in the evaluation reports that were analyzed.** The teacher was evaluated using the proprietary Arkansas TESS assessment that is used to evaluate all teachers in the state of Arkansas. The WTEP also uses TESS to evaluate clinical interns. **An alignment of the TESS domains to InTASC and CAEP Standards is provided** in the following pages of this case study. **See analysis of the data below.**

Analysis of the Teacher Effectiveness Data

The WTEP Middle Level Math/Science completer in his first year of teaching was rated by his principal on 11 of the 22 TESS components in all 4 Domains, as shown on the rating forms on the following pages. The evaluations of the effectiveness of the ML completer were done by the principal in the fall (Oct. 2018) and spring (March 2019) of the completer's first year of teaching. It is important to note that **Arkansas teachers are not rated on all 22 TESS components until** after the third year of teaching.

The teacher was rated Highly Effective in 91% of the ratings, and effective in 9%. The *Highly Effective* and *Effective* **ratings in TESS components 1b, 1d, 2a, 2d, 3a, 4a, 4b, 4c, 4d, 4e, and 4f are directly aligned to the preparation experiences in the WTEP associated with InTASC standards 1, 2, 3, 5, 7, 9, and 10 and CAEP Standards R1.1, R1.2, R1.3, and R1.4** as shown on the TESS alignment chart linked in the Table of Contents of Evidence 30.

The 2018 and 2019 effectiveness ratings provide strong evidence that WTEP completers effectively apply the professional knowledge, skills, and dispositions that the preparation experience was designed to achieve.

Fall 2018 TESS Evaluation of WTEP ML Completer – First Year Teacher Rated by Principal

Informal Observation Oct 2018 - Rating

[redacted]

AR Educator Rubric

Code & Description	Ratings I.	P.	E.	H.E.
Arkansas - Educator Rubric				
Domain 1 - Planning and Preparation				
1a - Demonstrating Knowledge of Content and Pedagogy				
1b - Demonstrating Knowledge of Students			•	
1c - Setting Instructional Outcomes				
1d - Demonstrating Knowledge of Resources				
1e - Designing Coherent Instruction				
1f - Designing Student Assessments				
Domain 2 - The Classroom Environment				
2a - Creating an Environment of Respect and Rapport			•	
2b - Establishing a Culture for Learning				
2c - Managing Classroom Procedures				
2d - Managing Student Behavior			•	
2e - Organizing Physical Space				
Domain 3 - Instruction				
3a - Communicating with Students			•	
3b - Using Questioning and Discussion Techniques				
3c - Engaging Students in Learning				
3d - Using Assessment in Instruction				
3e - Demonstrating Flexibility and Responsiveness				
Domain 4 - Professional Responsibilities				
4a - Reflecting on Teaching				
4b - Maintaining Accurate Records				
4c - Communicating with Families			•	
4d - Participating in a Professional Community				
4e - Growing and Developing Professionally				
4f - Showing Professionalism		•		

Scale of TESS Rubric:
1=Ineffective, 2=Progressing, 3=Effective, 4=Highly Effective

Spring 2019 TESS Evaluation of WTEP ML Completer – First Year Teacher Rated by Principal

Informal Observation Mar 2019 - Rating

[redacted]

AR Educator Rubric

Code & Description	Ratings I.	P.	E.	H.E.
Arkansas - Educator Rubric				
Domain 1 - Planning and Preparation				
1a - Demonstrating Knowledge of Content and Pedagogy				
1b - Demonstrating Knowledge of Students				
1c - Setting Instructional Outcomes				
1d - Demonstrating Knowledge of Resources				•
1e - Designing Coherent Instruction				
1f - Designing Student Assessments				
Domain 2 - The Classroom Environment				
2a - Creating an Environment of Respect and Rapport				
2b - Establishing a Culture for Learning				
2c - Managing Classroom Procedures				
2d - Managing Student Behavior				
2e - Organizing Physical Space				
Domain 3 - Instruction				
3a - Communicating with Students				
3b - Using Questioning and Discussion Techniques				
3c - Engaging Students in Learning				
3d - Using Assessment in Instruction				
3e - Demonstrating Flexibility and Responsiveness				
Domain 4 - Professional Responsibilities				
4a - Reflecting on Teaching				•
4b - Maintaining Accurate Records				•
4c - Communicating with Families				
4d - Participating in a Professional Community				•
4e - Growing and Developing Professionally				•
4f - Showing Professionalism				•

Scale of TESS Rubric:
1=Ineffective, 2=Progressing, 3=Effective, 4=Highly Effective

Alignment of TESS Domains Scored to InTASC and CAEP Standards

TESS Domain 1	Planning and Preparation	InTASC Alignment	CAEP Alignment
1a	Demonstrating Knowledge of Content and Pedagogy	4	CAEP R1.2
1b	Demonstrating Knowledge of Students	1, 2, 7	CAEP R1.1, R1.3
1c	Setting Instructional Outcomes	1	CAEP R1.1
1d	Demonstrating Knowledge of Resources	1	CAEP R1.1
1e	Designing Coherent Instruction	1, 4, 7	CAEP R1.1, R1.2, R1.3
1f	Designing Student Assessments	6	CAEP R1.3
TESS Domain 2	**The Classroom Environment**	**InTASC Alignment**	**CAEP Alignment**
2a	Creating an environment of respect and rapport	3	CAEP R1.1
2b	Establishing a culture for learning	3	CAEP R1.1
2c	Managing classroom procedures	3	CAEP R1.1
2d	Managing student behavior	1, 2, 3	CAEP R1.1
2e	Organizing physical space	3	CAEP R1.1
TESS Domain 3	**Instruction**	**InTASC Alignment**	**CAEP Alignment**
3a	Communicating with students	5	CAEP R1.2
3b	Using questioning and discussion techniques	8	CAEP R1.3
3c	Engaging students in learning	1, 3, 4, 5, 8	CAEP R1.1, R1.2, R1.3
3d	Using assessment in instruction	6	CAEP R1.3
3e	Demonstrating flexibility and responsiveness	5	CAEP R1.2
TESS Domain 4	**Professional Responsibilities**	**InTASC Alignment**	**CAEP Alignment**
4a	Reflecting on Teaching	9	CAEP R1.4
4b	Maintaining Accurate Records	9	CAEP R1.4
4c	Communicating with Families	9, 10	CAEP R1.4
4d	Participating in a Professional Community	9, 10	CAEP R1.4
4e	Growing and Developing Professionally	9	CAEP R1.4
4f	Showing Professionalism	9, 10	CAEP R1.4