Agricultural Education Data

1. PRAXIS Content Knowledge Test (5701) Scores

Cohort Year	# Completers	Distribution of Scores
2016-17	4 + 1 GR	All five student tested and passed the Praxis. Of a total of 200 points, test scores ranged from 153 to 187, with an average score of 173 and the median score of 178. Looking at the seven content subareas, the average percentage of correct answers is as follows: Agribusiness Systems 52%, Animal Systems 72%, Food Science 77%, Natural Resource Systems 81%, Plant Systems 85%, Technical Systems 74%, and Leadership 85%.
2015-16	11 + 2 GR	All 13 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 160 to 190, with an average score of 170 and the median score of 166. Looking at the seven content subareas, the average percentage of correct answers is as follows: Agribusiness Systems 50%, Animal Systems 77%, Food Science 76%, Natural Resource Systems 82%, Plant Systems 76%, Technical Systems 69%, and Leadership 79%.
2014-15	12 + 1 GR	All 13 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 154 to 180, with an average score of 168 and the median score of 169. Looking at the seven content subareas (not all subarea scores are available), the average percentage of correct answers is as follows: Agribusiness Systems 45%, Animal Systems 73%, Food Science 78%, Natural Resource Systems 80%, Plant Systems 75%, Technical Systems 71%, and Leadership 79%.

Interpretation

Looking across the subarea data, student responses are fairly even across six of the content areas. Students are well prepared to respond to, and successfully complete the state required teacher exam for agriculture. This preparation comes through their coursework, and other experiences through the agricultural education program at Penn State. Continuing with similar coursework that provides students with an overview of various areas of agriculture production prepare the students well for this exam, and should be continued.

However, the lowest percentage of correct answers is in the Agribusiness Systems subarea. This area covers capitalism and entrepreneurship in the agribusiness industry as well as knowledge of management, record keeping, accounting and marking principals. . Due to the lower percentage of correct answers in this area, the teacher preparation team in agricultural education will meet with the instructors of the coursework that is required for the degree and determine if this is the

appropriate course to prepare our teachers. If not, alternative coursework will be sought out and implemented as part of the degree program.

Agricultural Education Exemplar 2

Grade Performance in Content Coursework

AEE 100: Agricultural Education Orientation

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A	100%
2014-15	13	A	A	A	100%

INTAG 100: Introduction to International AG

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A-	A	B	100%
2015-16	13	B	A	C+	100%
2014-15	13	B+	A	C	100%

SOILS 101: Introduction to Soil Science

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A-	A	B	100%
2015-16	13	B+	A	C	100%
2014-15	13	B	A	C	100%

AEE 311: Developing Youth Leadership

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A-	100%
2014-15	13	A	A	B+	100%

AEE 313: School-Based Program Planning & Instructional Devel

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A-	100%
2014-15	13	A	A	A	100%

WF ED 413: Voc ED for Special-Needs Learners

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A	100%
2014-15	13	A	A	A-	100%

Interpretation:

The biggest feedback that we get from our students is that they do struggle at times in some of the "science heavy" classes such as Soils in understanding/seeing the connections of the upper level science in what they will be teaching their own students. While they understand the importance of soils to agriculture, the concepts may be "above" what they will be teaching and therefore not as meaningful to them. The WF ED classes, as well as the AEE courses, on the other hand are focused on working with the pedagogy and content (agricultural mechanics specifically in AEE 349 and 350) that these students will use each and every day with their students. Additionally, these courses are taught by teacher educators that understand the importance of teaching the material in a practical way for the high school classroom. Our courses are also very focused on competency-based education, whereas the INTAG, SOILS, and other courses are often not focused in such a way. We often work towards mastery learning in our WF ED and AEE courses, where other content areas (especially in the lower-level courses) may just be teaching and then testing; no chance for improvement in many cases.

Agricultural Education Exemplar 3

Grade Performance in Methods Coursework (including instructional design)

AEE 295: Observation of Teaching in AG and Environ Science

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A	100%
2014-15	13	A	A	A	100%

AEE 349: Shop Processes for Agricultural Educators

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A	100%
2014-15	13	A	A	A	100%

AEE 350: Teaching Methods for AG and Environ Labs

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A	100%
2014-15	13	A	A	A	100%

AEE 412: Methods of Teaching AG and Environ Science

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	B	100%
2014-15	13	A	A	A-	100%

AEE 413: Program Planning & Instructional Design

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5	A	A	A	100%
2015-16	13	A	A	A-	100%
2014-15	13	A	A	A	100%

Interpretation:

The Agricultural and Extension Education (AEE) core courses upper level courses that are required for teacher certification in Agriculture (1200) are taken by students that have made the

commitment to becoming certified through the agricultural education program. Many of these students are highly motivated to perform well in these upper-level courses, as these courses are the primary courses that prepare them for their student teaching experience (AEE 495). These courses are all part of the student teacher candidate check-out presentation at the end of the fall semester prior to beginning student teaching in the spring semester. A majority of the assignments in these courses are offered in such a way that the students can work towards mastery of the content; thus, the large proportion of “A” grades. The teacher education faculty believe that the students need to be prepared to enter student teaching, and that may mean correcting errors in assignments to ensure the work is of the quality that will benefit the secondary students in a few short months.

Secondary English/Communication (ENGCO) Exemplar 1

Students who complete the SECED ENGCO program are eligible for PDE certification in both English 7-12 and Communication 7-12. Each certification area has its own Praxis II exam to test for content knowledge.

1a. PRAXIS II English Content Knowledge Test (5038) Scores

Cohort Year	# Completers	Distribution of Scores
2016-17	20 BS 7 GR	26 out of 27 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 169 to 194, with an average score of 181. Looking at the three content subareas, the average percentage of correct answers is as follows: Reading 83%, Language Use and Vocab 79%, and Writing, Speaking & Listening 86%..
2015-16	15 BS 11 GR	26 out of 26 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 171 to 193, with an average score of 182. Looking at the three content subareas, the average percentage of correct answers is as follows: Reading 83%, Language Use and Vocab 79%, and Writing, Speaking & Listening 82%..
2014-15	34 BS 6 GR	38 out of 38 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 165 to 200, with an average score of 181. Looking at the three content subareas, the average percentage of correct answers is as follows: Reading 80%, Language Use and Vocab 82%, and Writing, Speaking & Listening 84%..

1b. PRAXIS II Speech Communication Content Knowledge Test (5221) Scores

Cohort Year	# Completers	Distribution of Scores
2016-17	20 BS 7 GR	16 out of 16 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 150 to 174, with an average score of 162 and the median score of 165
2015-16	15 BS 11 GR	12 out of 12 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 150 to 175, with an average score of 165 and the median score of 165
2014-15	34 BS 6 GR	23 out of 24 students tested and passed the Praxis. Of a total of 200 points, test scores ranged from 139 to 177, with an average score of 163 and the median score of 165

Interpretation: All students attempting the PRAXIS during this time period passed it. (While we do not have specific data on why a students would not attempt the PRAXIS, in the past this has sometimes been the case when a student had concrete plans to leave Pennsylvania after graduation and teach in a state requiring an exam other than PRAXIS.) This reflects that students completing our program have mastered content knowledge included on that assessment.

Secondary English/Communication (ENGCO) Exemplar 2

Grade Performance in Common Content Coursework

CAS 100A: Effective Speech

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A-	A	B	100%
2015-16	26	A-	A	B-	100%
2014-15	40	A-/B+	A	C	100%

ENGL 015: Rhetoric and Composition

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A-/B+	A	C	100%
2015-16	26	A-	A	C+	100%
2014-15	40	A-	A	C+	100%

ENGL 202: Effective Writing

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A-	A	C+	100%
2015-16	26	A-	A	B	100%
2014-15	40	A-/B+	A	C	100%

ENGL 444: Shakespeare

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	B+	A	C	100%
2015-16	26	A-/B+	A	D	100%
2014-15	40	B+	A	C	100%

Interpretation: In a large, comprehensive university such as Penn State, it is common for content knowledge to be developed and assessed in courses offered outside the College of Education. The performance of our students in these courses can be roughly assessed using course grades. The data above reflect that our students attain high levels of performance in content courses in areas relevant to the teaching of English at the secondary level.

Secondary English/Communication (ENGCO) Exemplar 3

Grade Performance in Methods Coursework (which includes instructional design)

LL ED 411: Teaching Language Arts in Secondary Schools I

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	A-	100%
2015-16	26	A	A	B	100%
2014-15	40	A	A	B+	100%

LL ED 412W: Teaching Language Arts in Secondary Schools II

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	A-	100%
2015-16	26	A	A	B	100%
2014-15	40	A	A	B-	100%

LL ED 420: Adolescent Literature and Literacy

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	A	100%
2015-16	26	A	A	B	100%
2014-15	40	A	A	A-	100%

LL ED 480: Media Literacy in the Classroom

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	A	100%
2015-16	26	A	A	A	100%
2014-15	40	A	A	A-	100%

Interpretation: Methods courses in language and literacy education are important sites in which students develop pedagogical knowledge and skills. Designed for congruence with the NCTE Standards for the Preparation of Teachers of English Language Arts, these courses include assessments of content knowledge, planning for instruction, assessment of student learning, professional ethical conduct, and ongoing professional engagement. The course grades above are a big-picture snapshot showing that students completing the program In secondary English have mastered the objectives of those courses through performance on within-course assessments.

Secondary English Communication (ENGCO) Exemplar 4

English Student Teacher Assessment: Summary and Interpretation

Cohort Year 2016-17 (*n* = 27, missing 16)

ELA Standard	Met	Not Met	Not Obs - Emerging
Elem1 Plan Instruction	11		
Elem2 Use Data	11		
Elem3 Differentiate Instruction	11		
Elem4 Vary Instructional Strategies	11		
Elem1 Plan Social Justice	11		
Elem2 Plan Identities	10		1
VIL Interaction	11		
Elem1 Ethical Practices	11		
Elem2 Engage and Reflect	11		

Cohort Year 2015-16 (*n* = 26, missing=4, used old form=3)

ELA Standard	Met	Not Met	Not Obs - Emerging
Elem1 Plan Instruction	11		
Elem2 Use Data	11		
Elem3 Differentiate Instruction	11		
Elem4 Vary Instructional Strategies	11		
Elem1 Plan Social Justice	9		2
Elem2 Plan Identities	10		1
VIL Interaction	11		
Elem1 Ethical Practices	10		1
Elem2 Engage and Reflect	11		

Cohort Year 2014-15 (*n* = 40, missing=33, used old form=2)

ELA Standard	Met	Not Met	Not Obs - Emerging
Elem1 Plan Instruction	5		
Elem2 Use Data	5		
Elem3 Differentiate Instruction	5		
Elem4 Vary Instructional Strategies	5		
Elem1 Plan Social Justice	5		
Elem2 Plan Identities	5		
VIL Interaction	5		
Elem1 Ethical Practices	5		
Elem2 Engage and Reflect	5		

Rating Scale: **E—*Exemplary***
G—*Good*
S—*Satisfactory*
U-Unsatisfactory
NO-Not Observed

Cohort Year 2015-16 (used old form=3) SUPERVISOR

M	E	G	S	U	NO
g, evaluating, and selecting resources, such as textbooks, t materials, video, film, recordings, and software which ort the teaching of ELA.					
instruction to meet the needs of all students and r students continues progress and success.					
g classroom environments and learning experiences ote effective whole class, small group, and individual					
g interdisciplinary teaching strategies and materials.					
earning environments which promote respect for and f individual differences of ethnicity, race, language, ender, and ability.					
ting technology and print/non-print media into n.					
students in discussion for the purpose of interpreting ating ideas presented through oral, written, or visual					
ng students to respond critically to different media and cations technologies					
ruction that promotes understanding of varied uses and for language in communications.					
students in making meaning of texts through personal					
students with appropriate reading strategies that cess to and understanding of a wide range of print and texts.					
g and using a variety of formal and informal assessment and instruments to evaluate processes and products.					
g a variety of means to interpret and report assessment nd results to students, administrators, parents, and iences.					
ating a respect for the worth and contributions of all					
English language arts to help students become familiar own and others cultures.					

tudents develop lifelong habits of critical thinking and t.					
g the arts and humanities in the daily lives of students.					

Cohort Year 2014-15 (used old form=2) SUPERVISOR

M	E	G	S	U	NO
g, evaluating, and selecting resources, such as textbooks, at materials, video, film, recordings, and software which ort the teaching of ELA.					
instruction to meet the needs of all students and r students continues progress and success.					
g classroom environments and learning experiences ote effective whole class, small group, and individual					
g interdisciplinary teaching strategies and materials.					
earning environments which promote respect for and f individual differences of ethnicity, race, language, ender, and ability.					
ting technology and print/non-print media into n.					
students in discussion for the purpose of interpreting ating ideas presented through oral, written, or visual					
ng students to respond critically to different media and cations technologies					
ruction that promotes understanding of varied uses and for language in communications.					
students in making meaning of texts through personal					
students with appropriate reading strategies that cess to and understanding of a wide range of print and texts.					
g and using a variety of formal and informal assessment and instruments to evaluate processes and products.					
g a variety of means to interpret and report assessment nd results to students, administrators, parents, and iences.					

ating a respect for the worth and contributions of all					
English language arts to help students become familiar own and others cultures.					
udents develop lifelong habits of critical thinking and t.					
g the arts and humanities in the daily lives of students.					

These tables aggregate results of the English student teacher assessment over the last several years of students teachers completing the program. Students are assessed by a Penn State field experience supervisor who has observe the students teacher directly in the classroom. This table does not include the Mentor teacher evaluations, which are also available as data files.

Taken as a whole, results of the English Student Teacher Assessment show that program completers have met the stated criteria. What the forms can not directly show is how, on the way to meeting the criteria, supervisors and faculty work closely with students to develop the capacities needed to do so. When initial observations indicate a problem, the supervisor and student work together, drawing in faculty as needed, to create a plan for improvement. In the end, students completing our program have shown through direct classroom performance that they are well prepared for classroom teaching.

Secondary Science Education (SCIED) Exemplar 1

Biology - PRAXIS Content Knowledge Test (5235) Scores

Cohort Year	# Completers UG/GR	Reported of Test Scores
2016-17	5/3	7 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 154-185, mean 171, median 174, average percentage of correct responses: 86% Most points scored subarea: Genetics and Evolution Least points scored subarea: Organismal Biology
2015-16	3/6	8 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 155-193, mean 178, median 178, average percentage of correct responses: 89% Most points scored subarea: Science, Technology and Social Perspectives Least points scored subarea: Molecular Biology
2014-15	5/3	8 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 155-186, mean 173, median 175, average percentage of correct responses: 86% Most points scored subarea: Organismal Biology Least points scored subarea: Science, Technology and Social Perspectives

Interpretation:

Chemistry - PRAXIS Content Knowledge Test (5245) Scores

Cohort Year	# Completers UG/GR	Reported of Test Scores
2016-17	3/1	4 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 163-185, mean 176, median 177 Most points scored subarea: Nomenclature; Bonding & Structure Least points scored subarea: Solutions and Solubility
2015-16	2/2	4 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 174-182, mean 178, median 177.5 Most points scored subarea: Nomenclature; Bonding &

		Structure Least points scored subarea: Solutions and Solubility
2014-15	6/0	6 completers tested, 5 passed the Praxis (83.3%) Scores (out of 200): range 135-179, mean 163, median 167 Most points scored subarea: Atomic and Nuclear Structure Least points scored subarea: Solutions and Solubility

Interpretation:

Earth Space - PRAXIS Content Knowledge Test (5571) Scores

Cohort Year	# Completers UG/GR	Reported of Test Scores
2016-17	1/3	4 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 162-199, mean 181, median 182 Most points scored subarea: Basic Principles and Processes Least points scored subarea: Earth's Atmosphere
2015-16	0	
2014-15	2/0	2 completers tested, and all passed the Praxis (100%) Completer number too small to break down. Data not available

Interpretation:

Physics - PRAXIS Content Knowledge Test (5265) Scores

Cohort Year	# Completers UG/GR	Reported of Test Scores
2016-17	3/2	5 completers tested, and all passed the Praxis [1 used GPA sliding scale] (100%) Scores (out of 200): range 137-188, mean 155, median 152.5 Most points scored subarea: Optics and Waves Least points scored subarea: Heat, Energy, and Thermodynamics
2015-16	0	
2014-15	1/2	3 completers tested and passed the Praxis (100%) Scores (out of 200): range – n too small, mean 162, median

		154 Most points scored subarea: Modern Physics Least points scored subarea: Electricity and Magnetism

Interpretation:

Secondary Science Education (SCIED) Exemplar 2

Biology Grade Performance in Content Coursework

BMB 211 Biochem

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	3.33	4.0	2.67	100%
2015-16	3/6	3.0	4.0	2.0	100%
2014-15	5/3	2.67	4.0	2.0	100%

BIOL 220W Populations & Communities

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	2.67	3.33	2.0	100%
2015-16	3/6	3.0	4.0	2.33	100%
2014-15	5/3	2.84	4.0	2.33	100%

BIOL 230W Molecules & Cells

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	3.0	3.67	2.67	100%
2015-16	3/6	3.0	4.0	2.33	100%
2014-15	5/3	2.84	4.0	2.67	100%

BIOL 240W Organisms

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	2.67	3.0	2.33	100%
2015-16	3/6	3.0	4.0	2.0	100%
2014-15	5/3	3.0	4.0	2.0	100%

BIOL 427 Evolution

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	3.0	3.33	2.33	100%
2015-16	3/6	2..0	4.0	2.0	100%
2014-15	5/3	2.0	3.67	2.0	100%

Chemistry Grade Performance in Content Coursework

CHEM 202/210 Organic I

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	3.33	4	3.33	100%
2015-16	2/2	3.67	4	2.67	100%
2014-15	6/0	3.0	3.67	2.33	100%

CHEM 203/212 Organic II

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	2.33	2.67	2	100%
2015-16	2/2	3.67	4	3.33	100%
2014-15	6/0	3.0	4	2	100%

CHEM 450 Thermodynamics

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	2.33	3.67	2.0	100%
2015-16	2/2	3.67	3.67	3.0	100%
2014-15	6/0	3.0	4.0	2.33	100%

CHEM 457 Exp Phys Chem

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	3.33	3.33	3.33	100%
2015-16	2/2	3.67	4.0	3.67	100%
2014-15	6/0	3.0	3.67	2.33	100%

CHEM 452 Physical Chem

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	2.33	2.67	2.0	100%
2015-16	2/2	3.67	4.0	3.33	100%
2014-15	6/0	3.0	4.0	2.0	100%

Earth Space Grade Performance in Content Coursework

Environmental Option

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	4.0	4.0	3.0	100%

Geology Option

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	4.0	4.0	3.33	100%

Meteorology Option

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	3.33	4.0	2.67	100%

Marine Option

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	3.67	4.0	3.67	100%

Astronomy Option

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	3.67	4.0	3.0	100%

Physics Grade Performance in Content Coursework

PHYS 213 Thermal Physics

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	3.3	4.0	2.67	100%
2015-16	0				
2014-15	1/2	4.0	4.0	3.0	100%

PHYS 214 Quantum Physics

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	3.67	4.0	2.33	100%
2015-16	0				
2014-15	1/2	4.0	4.0	3.33	100%

PHYS 237 Intro Modern Physics

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	3.67	4.0	3.33	100%
2015-16	0				
2014-15	1/2	4.0	4.0	3.67	100%

PHYS 400 Intermed Electricity

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	3.33	4.0	2.0	100%
2015-16	0				
2014-15	1/2	4.0	4.0	2.0	100%

PHYS 419 Theoretical Mechanics

Cohort Year	# Completers UG/GR	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	2.67	2.67	2.67	100%
2015-16	0				
2014-15	1/2	2.67	3.33	2.0	100%

Overall Interpretation:

Across these 3 cohort years, all Penn State completers in Secondary Biology took the above academic content courses, typically in their first 2 years of collegiate coursework. These courses reliably serve as a common baseline for indicating the general academic content preparation of biology teacher-candidates. On the whole, these data suggest that the program completers have

adequate and in many cases exemplary academic content preparation. That 100% of completers pass these courses with a grade of “C” is misleading—since the program requires completing these classes with such a grade in order to remain in the program (and, thus, those who can’t pass won’t become completers).

More illustrative is the range (low-high grades) vis-à-vis the media. While the very common low grade of “C” indicates that in every cohort year at least one teacher-candidate performs at the minimum allowable threshold, the ubiquitous “A” high grade encouragingly indicates that there is always at least one teacher-candidate performing at the exemplary level too. Most encouraging is that the median grade is always at least in between the low and high grade and usually closer to the high grade, strongly indicating above-average performance by these teacher-candidates overall.

Secondary Science Education (SCIED) Exemplar 3

BIOLOGY Grade Performance in Methods Coursework

SCIED 411: Secondary Science Methods I

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	4.0	4.0	4.0	100%
2015-16	3/6	4.0	4.0	3	100%
2014-15	5/3	4.0	4.0	3.67	100%

SCIED 412: Secondary Science Methods II

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	5/3	4.0	4.0	4.0	100%
2015-16	3/6	4.0	4.0	3.33	100%
2014-15	5/3	4.0	4.0	3.67	100%

CHEMISTRY Grade Performance in Methods Coursework

SCIED 411: Secondary Science Methods I

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	4.0	4.0	4.0	100%
2015-16	2/2	4.0	4.0	4.0	100%
2014-15	6/0	4.0	4.0	3.67	100%

SCIED 412: Secondary Science Methods II

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/1	4.0	4.0	4.0	100%
2015-16	2/2	4.0	4.0	4.0	100%
2014-15	6/0	4.0	4.0	4.0	100%

EARTH SPACE Grade Performance in Methods Coursework

SCIED 411: Secondary Science Methods I

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	4.0	4.0	3.67	100%

SCIED 412: Secondary Science Methods II

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
Three years combined – low numbers	3/3	4.0	4.0	4.0	100%

PHYSICS Grade Performance in Methods Coursework

SCIED 411: Secondary Science Methods I

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	4.0	4.0	4.0	100%
2015-16	0				100%
2014-15	1/2	3.89	4	3.67	100%

SCIED 412: Secondary Science Methods II

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	3/2	4.0	4.0	4.0	100%
2015-16	0				100%
2014-15	1/2	4.0	4.0	3.67	100%

General Interpretation:

Secondary Science Education (SCIED) Exemplar 4

Student-Teacher Performance and Impact Assessment

Cohort Year 2016-17 (*n* = 17 of 20 completers)

Rating Scale: **E—*Exemplary* G—*Good* S—*Satisfactory* U-Unsatisfactory NO-Not Observed**	E	G	S	U	NO
1. Engaging students effectively in studies of the nature of science including, when possible, the critical analysis of doubtful assertions made in the name of science.	8	8	1		
2. Engaging students effectively in developmentally appropriate inquiries that require them to develop concepts and relationships from their observations, data, and inferences in a scientific manner.	8	8	1		
3. Engaging students successfully in cost/benefit analysis, problem-solving, and decision making on scientific and/or technological issues.	8	6	2		1
4. Varying teaching actions, strategies, and methods to promote the development of multiple student skills and levels of understanding.	11	5	1		
5. Effectively promoting the learning of science by students with different abilities, needs, interests, and backgrounds.	8	7	2		
6. Effectively organizing and engaging students in collaborative learning using different student group learning strategies.	10	6	1		
7. Effectively using technological tools, including, but not limited to, computer technology, to access resources collect and process data, and facilitate learning.	10	6	1		
8. Understanding and building effectively upon the prior beliefs, knowledge, experiences, and interests of students.	8	7	2		
9. Creating and maintaining a safe and supportive learning environment.	13	4			
10. Identifying, accessing, and/or creating resources and activities for science education that are consistent with standards.	9	6	2		
11. Planning and implementing internally consistent units of study that address the goals of Science Education Standards and the needs and abilities of students.	9	6	2		
12. Involving students effectively in activities that relate science to resources in the community or to the resolution of issues important to the community.	3	8	2		4
13. Using multiple assessment tools and strategies to achieve important goals for instruction that are aligned with methods of instruction and the needs of students.	9	6	2		
14. Using the results of multiple assessments to guide and modify instruction, the classroom environment, or the assessment process.	10	6	1		
15. Evaluating student assessment outcomes fairly and equitably, using the results of assessments to inform students and assist them in self-analysis of their own work.	13	3	1		
16. Preparing, storing, dispensing, supervising, and disposing of all materials used in science instructions in a safe and proper manner.	11	4	1		1
17. Knowing emergency procedures and maintaining emergency equipment as appropriate for the nature of the activities in which students are engaged.	10	6	1		
18. Treating all living organisms used in the classroom or found in the field in a safe, humane, and ethical manner; and respect legal restrictions on their collections, keeping, and use.	8				9
19. Reflecting constantly upon teaching and identifying ways and means to grow professionally.	11	5	1		
20. Using information from students, supervisors, colleagues, and others to improve teaching and facilitate professional growth.	11	6			
21. Interacting effectively with colleagues, parents, and students.	9	7	1		

Cohort Year 2015-16 (*n* = 9 of 13 completers)

Rating Scale: **E—*Exemplary* G—*Good* S—*Satisfactory* U-Unsatisfactory NO-Not Observed**	E	G	S	U	NO
1. Engaging students effectively in studies of the nature of science including, when possible, the critical analysis of doubtful assertions made in the name of science.	4	3	2		
2. Engaging students effectively in developmentally appropriate inquiries that require them to develop concepts and relationships from their observations, data, and inferences in a scientific manner.	4	3	2		
3. Engaging students successfully in cost/benefit analysis, problem-solving, and decision making on scientific and/or technological issues.		8	1		
4. Varying teaching actions, strategies, and methods to promote the development of multiple student skills and levels of understanding.	4	4	1		
5. Effectively promoting the learning of science by students with different abilities, needs, interests, and backgrounds.	4	4	1		
6. Effectively organizing and engaging students in collaborative learning using different student group learning strategies.	5	3	1		
7. Effectively using technological tools, including, but not limited to, computer technology, to access resources collect and process data, and facilitate learning.	3	5	1		
8. Understanding and building effectively upon the prior beliefs, knowledge, experiences, and interests of students.	4	4	1		
9. Creating and maintaining a safe and supportive learning environment.	6	2	1		
10. Identifying, accessing, and/or creating resources and activities for science education that are consistent with standards.	4	3	2		
11. Planning and implementing internally consistent units of study that address the goals of Science Education Standards and the needs and abilities of students.	5	3	1		
12. Involving students effectively in activities that relate science to resources in the community or to the resolution of issues important to the community.	2	5		1	1
13. Using multiple assessment tools and strategies to achieve important goals for instruction that are aligned with methods of instruction and the needs of students.	3	5	1		
14. Using the results of multiple assessments to guide and modify instruction, the classroom environment, or the assessment process.	3	5	1		
15. Evaluating student assessment outcomes fairly and equitably, using the results of assessments to inform students and assist them in self-analysis of their own work.	6	2	1		
16. Preparing, storing, dispensing, supervising, and disposing of all materials used in science instructions in a safe and proper manner.	4	2	3		
17. Knowing emergency procedures and maintaining emergency equipment as appropriate for the nature of the activities in which students are engaged.	5	3	1		
18. Treating all living organisms used in the classroom or found in the field in a safe, humane, and ethical manner; and respect legal restrictions on their collections, keeping, and use.	3	1			5
19. Reflecting constantly upon teaching and identifying ways and means to grow professionally.	5	3	1		
20. Using information from students, supervisors, colleagues, and others to improve teaching and facilitate professional growth.	4	4	1		
21. Interacting effectively with colleagues, parents, and students.	6	2	1		

Cohort Year 2014-15 (*n* = 12 of 19 completers)

Rating Scale: **E—*Exemplary* G—*Good* S—*Satisfactory* U-Unsatisfactory NO-Not Observed**	E	G	S	U	NO
1. Engaging students effectively in studies of the nature of science including, when possible, the critical analysis of doubtful assertions made in the name of science.	7	4			1
2. Engaging students effectively in developmentally appropriate inquiries that require them to develop concepts and relationships from their observations, data, and inferences in a scientific manner.	9	2	1		
3. Engaging students successfully in cost/benefit analysis, problem-solving, and decision making on scientific and/or technological issues.	1	2	1		8
4. Varying teaching actions, strategies, and methods to promote the development of multiple student skills and levels of understanding.	9	3			
5. Effectively promoting the learning of science by students with different abilities, needs, interests, and backgrounds.	6	6			
6. Effectively organizing and engaging students in collaborative learning using different student group learning strategies.	11	1			
7. Effectively using technological tools, including, but not limited to, computer technology, to access resources collect and process data, and facilitate learning.	9	3			
8. Understanding and building effectively upon the prior beliefs, knowledge, experiences, and interests of students.	6	5	1		
9. Creating and maintaining a safe and supportive learning environment.	11	1			
10. Identifying, accessing, and/or creating resources and activities for science education that are consistent with standards.	8	3	1		
11. Planning and implementing internally consistent units of study that address the goals of Science Education Standards and the needs and abilities of students.	11	1			
12. Involving students effectively in activities that relate science to resources in the community or to the resolution of issues important to the community.	1	2			9
13. Using multiple assessment tools and strategies to achieve important goals for instruction that are aligned with methods of instruction and the needs of students.	10	2			
14. Using the results of multiple assessments to guide and modify instruction, the classroom environment, or the assessment process.	7	5			
15. Evaluating student assessment outcomes fairly and equitably, using the results of assessments to inform students and assist them in self-analysis of their own work.	8	3			1
16. Preparing, storing, dispensing, supervising, and disposing of all materials used in science instructions in a safe and proper manner.	5	2			5
17. Knowing emergency procedures and maintaining emergency equipment as appropriate for the nature of the activities in which students are engaged.	9				3
18. Treating all living organisms used in the classroom or found in the field in a safe, humane, and ethical manner; and respect legal restrictions on their collections, keeping, and use.	4				9
19. Reflecting constantly upon teaching and identifying ways and means to grow professionally.	10	2			
20. Using information from students, supervisors, colleagues, and others to improve teaching and facilitate professional growth.	10	1	1		
21. Interacting effectively with colleagues, parents, and students.	9	3			

Interpretation:

These data are drawn from the summative final evaluation of each student-teacher's performance and impact at the end of their student-teaching field practicum (CI 495E). This evaluation is completed by the teacher-candidate's field supervisor in consultation with the teacher-candidate's mentoring schoolteacher. The standards to be observed for this instrument are…

Secondary Social Studies (SOCST) Exemplar 1

PRAXIS Content Knowledge Test (5081) Scores

Cohort Year	# Completers	Reported of Test Scores
2016-17	26	24 completers tested, and passed all the Praxis (100%) Scores (out of 200): range 157-191, mean 173, median 173 Average correct responses by content subarea: US History 74%; World History 72%; Government/Civics 75%; Geography 71%; Economics 68%; Behavioral Sciences 70%
2015-16	39	35 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 152-192, mean 171, median 170.5 Average correct responses by content subarea: US History 69%; World History 67%; Government/Civics 72%; Geography 72%; Economics 67%; Behavioral Sciences 66%
2014-15	27	26 completers tested, and all passed the Praxis (100%) Scores (out of 200): range 158-200, mean 172, median 172 Average correct responses by content subarea: US History 75%; World History 66%; Government/Civics 72%; Geography 76%; Economics 60%; Behavioral Sciences 65%

Interpretation:

Across these 3 cohort years, over 90% of Penn State completers in Secondary Social Studies undertook Praxis subject content examination. These data demonstrate that, on the whole, social studies teacher-candidates prepared by Penn State enter the teacher force with above-average mastery of content knowledge. This conclusion is indicated by the mean and median scores exceeding the bottom end of the range (which is closest to the minimum passing cut score) by 10+ points in all 3 years. That both the mean and median are very close and relatively evenly positioned between the low and high ends of the range in all 3 years indicate that average performance is not overly skewed by outliers and, thus, the conclusion is warranted for most of the completers in general.

The lower and fluctuating content subarea percentages likely suggest as much about the nature of the test as about the completers. That the raw percentages are relatively low (60-75%, which would translate to grades from D to C+ under Penn State's standard grade point template) while the overall pass rate is very high (100%) suggests that the individual item difficulty is quite high yet the passing scores allowed are fairly generous. It would be invalid to draw strong overall generalizations from these data, but it is valid to make limited internal comparisons.

Across these 3 cohort years, Economics and Behavioral Sciences are consistently the lowest subarea scores. This is not surprising. Very few middle and high schools offer courses in behavioral sciences, so teacher-candidates have little experience working with these subjects

after completing introductory Psychology courses (PSYCH 100 and EDPSY 14, typically in their first 2 years of coursework). All teacher-candidates take a course in Macroeconomics (ECON 104), and a few choose to take Microeconomics (ECON 102) as a selected option, but many of them struggle or are intimidated by this demanding subject. Very few teacher-candidates choose Economics as a concentration in the Secondary Social Studies Teaching Option. Few choose economic topics for their lesson design assignments in their methods courses (SSED 411 or SSED 412). Few area school field placements provide opportunities for teaching Economics. Strengthening teacher-candidate preparation in Economics and looking to expand opportunity to engage in teaching these topics in field placements is one possible area for future improvement.

On the other side, it is not surprising that Geography and Government/Civics are consistently the highest subarea scores, as these teacher-candidates took a series of directly related collegiate content courses (GEOG 10, GEOG 20, PLSC 1, and commonly also GEOG 160, PLSC 3, and PLSC 14). Furthermore, these teacher-candidates very commonly had opportunities to engage with teaching Geography and Government/Civics topics in their area school field placements. Seeking to build on this strength is one possible area for future improvement.

Most baffling is these teacher-candidates' highly unstable performance on US History and World History: sometimes among the highest, other times among the lowest. These teacher-candidates completed the equivalent of an academic minor (18 credits/6 classes), specifically across both US and world history, in their collegiate coursework. Furthermore, history is heavily featured in their methods courses (SSED 411 and SSED 412), and virtually all area school field placements provided opportunities to engage with teaching history. That history is not consistently among the highest scores, and why World History performance is notably worse than US History, are perplexing questions that will need to be monitored and examined in the future.

Secondary Social Studies (SOCST) Exemplar 2

Grade Performance in Content Coursework

ECON 104: Macroeconomics

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	B	A	C	100%
2015-16	39	B	A	C	100%
2014-15	27	B	A	C	100%

GEOG 010: Physical Geography

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	C	100%
2015-16	39	A-	A	C	100%
2014-15	27	A-	A	C	100%

HIST 020: U.S. History to 1877

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	B+	A	B-	100%
2015-16	39	A-	A	C+	100%
2014-15	27	A-	A	B-	100%

HIST 021: U.S. History Since 1877

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	C+	100%
2015-16	39	A-	A	B-	100%
2014-15	27	A-	A	B-	100%

PLSC 001: American Government

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	B+	A	C	100%
2015-16	39	A-	A	C	100%
2014-15	27	B+	A	C	100%

Interpretation:

Across these 3 cohort years, all Penn State completers in Secondary Social Studies took the above academic content courses, typically in their first 2 years of collegiate coursework. These courses reliably serve as a common baseline for indicating the general academic content

preparation of social studies teacher-candidates. On the whole, these data suggest that the program completers have adequate and in many cases exemplary academic content preparation. That 100% of completers pass these courses with a grade of "C" is misleading—since the program requires completing these classes with such a grade in order to remain in the program (and, thus, those who can't pass won't become completers).

More illustrative is the range (low-high grades) vis-à-vis the media. While the very common low grade of "C" indicates that in every cohort year at least one teacher-candidate performs at the minimum allowable threshold, the ubiquitous "A" high grade encouragingly indicates that there is always at least one teacher-candidate performing at the exemplary level too. Most encouraging is that the median grade is always at least in between the low and high grade and usually closer to the high grade, strongly indicating above-average performance by these teacher-candidates overall.

Performance by subject is not surprising. ECON 104 seems to be the hardest for these teacher-candidates. This is consonant with their reported performance on the Praxis Content Knowledge Test. Their generally good performance in GEOG 10 and PLSC 1 are also consonant with their Praxis performance. Their performance in HIST 20 and HIST 21 tends to be exemplary: lowest grade is uniformly better than "C" while median grade is typically "A" level. Yet, it is perplexing that the teacher-candidate cohorts that had the best performance in these courses did not later have the highest US History content subareas scores on the Praxis.

Continuing to build on the strength of preparation provided by GEOG 10 and PLSC 1, as well as looking to expand on the preparation provided by ECON 104, would be a possible avenue for future improvement. Furthermore, the performance of social studies teacher-candidates in HIST 20 and HIST 21 vis-à-vis the Praxis merits future monitoring. There is the possibility that these introductory courses provided by Penn State's Department of History, or waived via Advanced Placement credit, are not necessarily, at least on their own or stably, adequate content preparation for teachers. It may be necessary to consider creating some kind of "bridge" course in history as a direction for future improvement.

Secondary Social Studies (SOCST) Exemplar 3

Grade Performance in Methods Coursework

SSED 411: Secondary Social Studies Methods I

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	B-	100%
2015-16	39	A	A	B	100%
2014-15	27	A	A	A-	100%

SSED 412: Secondary Social Studies Methods II

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	26	A	A	B+	100%
2015-16	39	A	A	B	100%
2014-15	27	A	A	B+	100%

Interpretation:

Across these 3 cohort years, all Penn State completers in Secondary Social Studies took the above content-area teaching methods courses, typically spread over year 3 and 4 of collegiate coursework. A common feature in all sections of both of these courses is an emphasis on lesson design and written planning. What can be concluded from these data is very limited. That 100% of completers pass these courses with a grade of "C" is misleading—since the program requires completing these classes with such a grade in order to remain in the program (and, thus, those who can't pass won't become completers). Situated in Penn State's College of Education, the norms for grading are clearly higher than for the prescribed academic content courses in other departments (i.e., ECON 104, GEOG 10, HIST 20, HIST 21, PLSC 1).

That the median grade and high grade across all 3 cohort years are both "A" indicates that almost all students meet their instructor's expectations for this maximum grade. There are only two instructors who teach SSED 411 and SSED 412 in the Secondary Social Studies Teaching Option, and their grading distribution is clearly very similar. It can be concluded that "B" level final grades are indicative of performance that may be, in context, suboptimal. Encouragingly, though, low grades for the second methods course (SSED 412) are typically not worse than low grades for the first (SSED 411), which suggests that the bottom-performing students aren't getting worse and in some cases may improve across the two-course sequence. It is also encouraging that the low grade was "B–" (the lowest grade before the mandatory "C" cutoff for the program) only once across the 3 cohort years.

With overall grade performance not providing much useful evidence, one possible direction for future improvement is for the methods courses to attempt to capture more fine-grained data through other kinds of performance instruments, such as competency-based assessment rubrics.

Secondary Social Studies (SOCST) Exemplar 4

Student-Teacher Performance and Impact Assessment

Cohort Year 2016-17 (*n* = 21, four supervisors)

NCSS Thematic Standard	Success	Potential	Difficulty	Not Obs.
1.1 Culture and Cultural Diversity	20	1		
1.2 Time, Continuity, and Change	20	1		
1.3 People, Places, and Environment	21			
1.5 Individuals, Groups, and Institutions	21			
1.6 Power, Authority, and Governance	20	1		
1.7 Production, Distribution, Consumption	14	7		
1.9 Global Connections	18	3		
1.10 Civic Ideals and Practices	20	1		

Cohort Year 2015-16 (*n* = 6, one supervisor)

NCSS Thematic Standard	Success	Potential	Difficulty	Not Obs.
1.1 Culture and Cultural Diversity	4	2		
1.2 Time, Continuity, and Change	6			
1.3 People, Places, and Environment	4	2		
1.5 Individuals, Groups, and Institutions	5	1		
1.6 Power, Authority, and Governance	5	1		
1.7 Production, Distribution, Consumption	2	2		2
1.9 Global Connections	5	1		
1.10 Civic Ideals and Practices	4	2		

Cohort Year 2014-15 (*n* = 11, one supervisor)

NCSS Thematic Standard	Success	Potential	Difficulty	Not Obs.
1.1 Culture and Cultural Diversity	9	2		
1.2 Time, Continuity, and Change	11			
1.3 People, Places, and Environment	10	1		
1.5 Individuals, Groups, and Institutions	11			
1.6 Power, Authority, and Governance	9	1		1
1.7 Production, Distribution, Consumption	4	6		1
1.9 Global Connections	7	2		2
1.10 Civic Ideals and Practices	7	3		1

Interpretation:

These data are drawn from the summative final evaluation of each student-teacher's performance and impact at the end of their student-teaching field practicum (CI 495E). This evaluation is completed by the teacher-candidate's field supervisor in consultation with the teacher-candidate's mentoring schoolteacher. The standards to be observed for this instrument are the themes for Social Studies Teacher Education provided by the National Council for the Social Studies (NCSS). However, this instrument only employs the 8 NCSS themes that are directly

reflected in the Commonwealth of Pennsylvania's standards as authorized by the General Assembly. Only the ratings are presented and analyzed here, though the full instrument (3 pages, including definitions) is available (see "SECED SSED Student-Teacher Assessment" PDF).

Across these 3 cohort years, many of these completers were observed successfully planning, teaching, and having impact on student learning for most of these thematic standards. Of those completers who were not observed successfully performing for a thematic standard, most were observed demonstrating potential. None were observed still having difficulty by the time of this end evaluation (though it should be acknowledge that any teacher-candidates who may have performed with such difficulty might not have passed the student-teaching practicum and, thus, would not become completers). It is further encouraging that the numbers of completers who were in classroom placements that did not afford opportunity to attempt to perform particular thematic standards ("not observed") declined across the 3 cohort years (though this may also be a function of the field supervisors and mentor-teachers becoming more attuned to looking for these performance themes in evaluating their teacher-candidates).

In terms of specifics, two general trends stand out. First, completers overwhelmingly are prepared to demonstrate observable success related to the themes of "Time, Continuity, and Change," "Individuals, Groups, and Institutions," and "Power, Authority, and Governance"—all quite likely a reflection of the Secondary Social Studies Teaching Option's content course preparation including HIST 20, HIST 21, and PLSC 1, as well as popular selection choice SOC 1 (Introduction to Sociology). These teacher-candidates' readiness to perform along these standards also could be a reflection of the broader Secondary Education major's courses that impel students to attend to issues of race, diversity, access, and equity. The heavy emphasis on historical thinking in the methods courses (SSED 411, SSED 412) likely also contributes. The second trend is the consistently lower numbers prepared to demonstrate observable success related to the theme of "Production, Distribution, Consumption"—in other words, economics. This is consonant with these completers' lower grade performance in the prescribed course ECON 104 as well as on the Economics portion of the Praxis Content Knowledge Test. Certainly this further merits attention to providing teacher-candidates with stronger preparation and support for learning and teaching economics issues as a possible direction for future improvement.

The limitation of these data must be acknowledged. They were first collected after a major overhaul of this instrument in 2014-15. At that time, the instrument was piloted with just one collaborating field supervisor, who had a large portion (11) of the candidates that year. After being piloted a second year with that supervisor (though with only 6 of the candidates), it was then widened in use to the four main supervisors beginning in 2016-17. Furthermore, the "cohort year" when a teacher-candidate completes the final student-teaching practicum (CI 495E) often but not always corresponds to the year in which s/he takes the Praxis Content Knowledge Test, which may account for some of the discrepancy in number. Additionally, occasionally some teacher-candidates need to be placed in schools under a field supervisor who does not directly work with the Secondary Social Studies Teaching Option and thus would not submit this form, which could further account for the discrepancy in number. A future direction for improvement will be to strength this instrument's validity and reliability, chiefly by ensuring that it is filled out by all field supervisors and supposed for all Secondary Social Studies teacher-candidates.

Secondary Social Studies (SOCST) Exemplar 5

Future Innovation: Observable Competencies-Based Assessment of "Signature Assignments" in Methods Coursework

SECONDARY SOCIAL STUDIES
INSTRUCTIONAL DESIGN ASSESSMENT RUBRIC

Design secondary-grade social studies instruction (lesson/unit) for peer teaching and/or in conjunction with your school field placement, as directed by your University course instructor.

+	Identify the instructional plan's intended **subject** and **grade level**
+	Title the instructional plan to identify its main **topic/focus**
+	Situate each lesson in an appropriate **unit**
+	Sources of materials/resources used in your instructional plan that you did not make (videos, webpages, articles, maps, charts) are appropriately identified
+	Instructional plan is appropriately written and doesn't have problems with spelling or grammar
+	Content is developmentally appropriate and doesn't have accuracy problems
+	Identify appropriate **academic subject standard(s)** ("PA" and/or "CC") addressed by instruction
+	Provide an **educational purpose** (enduring understanding) for the instructional plan's main conclusion(s)
+	Purpose identifies multiple perspectives for framing the topic/focus
+	Purpose identifies how instruction supports inquiry and evidence-based reasoning
+	Provide at least one appropriate **higher-order thinking** prompt (essential question) per lesson
+	Include with each prompt/question appropriate guidance on desired responses from students
+	Integrate at least one higher-order thinking prompt/question into instructional plan's activities
+	Provide **learning objectives** (special learning outcomes) for the instructional plan
+	These are sufficient to support the purpose (understanding) and higher-order thinking (questions)
+	These identify the significant content knowledge to be learned and assessed (e.g., key facts, concepts or vocabulary, and generalizations, interpretations, or other understandings)
+	Provide the sequence of **activities/procedures** (for teacher and students)
+	Estimate amount of **time** needed for each step (new subtopic or activity)
+	Instructional **methods** are correctly identified/applied for each step
+	Provide a **closure** that reinforces the purpose/main conclusion(s) of the instructional plan
+	Number and clarity of steps are sufficient for a reader to replicate the instructional plan
+	Provide a **graphical presentation** (e.g., PowerPoint) that organizes instruction
+	Provide **instructional materials** (e.g., data/evidence handout) needed to teach instructional plan
+	Materials are of sufficient quality ready to use with students in the classroom

Interpretation:

Based on analysis of available evidence by the Secondary Social Studies Education faculty, one useful direction for future improvement would be to collect better data on teacher-candidates' observable competencies in the lesson design and written planning.

Vocational I and Vocational II (VOC ED) Exemplar 1

Basic Skills Testing

Vocational I: Reading and Writing

Reading

Cohort Year	# Completers	Reported of Test Scores
2016-17	17	12 completers were required to test. Two took the earlier PPST. Passing=172, mean=179, median=179. Ten took the current CORE. Passing=148, mean=173.8, median=176.
2015-16	19	14 completers were required to test. 14 took the current CORE. Passing=148, mean=175.1, median=175.
2014-15	14	10 completers were required to test. Five took the earlier PPST. Passing=172, mean=178.2, median=180. Five took the current CORE. Passing=148, mean=179.2, median=186.

Writing

Cohort Year	# Completers	Reported of Test Scores
2016-17	17	12 completers were required to test. Two took the earlier PPST. Passing=173, mean=162, median=162*. Ten took the current CORE. Passing=158, mean=156.4, median=156.
2015-16	19	14 completers were required to test. 14 took the current CORE. Passing=158, mean=156.3, median=153*.
2014-15	14	10 completers were required to test. Five took the earlier PPST. Passing=173, mean=173.4, median=173. Five took the current CORE. Passing=148, mean=151.6, median=150*.

Vocational II: Math **(Reading and Writing previously obtained as VOC I)**

Math

Cohort Year	# Completers	Reported of Test Scores
2016-17	11	11 completers tested. Four took the earlier PPST. Passing=173, mean=179.3, median=178.5. Seven took the current CORE. Passing=142, mean=151.7, median=158
2015-16	14	14 completers tested. Five took the earlier PPST. Passing=173, mean=178.8, median=181. Nine took the current CORE. Passing=142, mean=156.4, median=152
2014-15	10	Eight completers tested. Four took the earlier PPST. Passing=173, mean=180, median=181.5. Five took the current CORE. Passing=142, mean=155, median=149

Reading

Cohort Year	# Completers	Reported of Test Scores
2016-17	11	11 completers tested with the PPST – passing score 172. Mean=180, median=181
2015-16	14	13 completers tested with the PPST – passing score 172. Mean=177.7, median=178
2014-15	10	9 completers tested with the PPST – passing score 172. Mean=180.9, median=181

Writing

Cohort Year	# Completers	Reported of Test Scores
2016-17	11	11 completers tested with the PPST – passing score 173. Mean=173.3, median=173
2015-16	14	13 completers tested with the PPST – passing score 173. Mean=175.3, median=175
2014-15	10	9 completers tested with the PPST – passing score 173. Mean=176.3, median=176

**The Pennsylvania Department of Education has a Composite Score Method to assist candidates who score high in one test area, but score below the qualifying score in another area. Means and medians that are equal to or below the passing score reflect the impact of this policy.*

Interpretation:

The Pennsylvania Department of Education issues Vocational Instructional Certificates to persons whose primary responsibility is teaching occupational skills in State approved vocational education programs in the public schools of the Commonwealth. Individuals qualifying for Vocational Instructional I certification are authorized to teach in the areas for which they also hold an occupational competency credential. To earn this certification candidates must have:

1. A minimum of 2 years wage-earning experience in addition to the learning period required to establish competency in the occupation to be taught;
2. Successfully completed the occupational competency examination or evaluation of credentials;
3. Completed 18 credit hours in an approved program of vocational teacher education;
4. Presented evidence of having passed the basic skills tests in reading and writing (not required for student in post-baccalaureate degree status);
5. Has met all requirements provided by law (School Code 1209 and Title 22, Pa. Code, Section 49.12); and
6. Received the recommendation of Pennsylvania State University that all of these certification requirements have been met.

Not all completers were required to submit basic skill scores – students who enter the program with a bachelor's degree or higher are exempt from the requirement.

Vocational I and Vocational II (VOC ED) Exemplar 2

VOC I Grade Performance in Program Coursework[1]

WFED 100 Orientation to Teaching

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	17	4.0	4.0	3.33	100%
2015-16	19	4.0	4.0	2.0	100%
2014-15	14	4.0	4.0	3.0	100%

WFED 105 Integrated Curriculum Implementation

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	17	4.0	4.0	3.33	100%
2015-16	19	4.0	4.0	3.0	100%
2014-15	14	4.0	4.0	2.67	100%

WFED 495C Student Teaching Initial

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	17	4.0	4.0	3.0	100%
2015-16	19	4.0	4.0	2.67	100%
2014-15	14	4.0	4.0	2.67	100%

WFED 495C Student Teaching Middle

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	17	4.0	4.0	2.0	100%
2015-16	19	4.0	4.0	2.0	100%
2014-15	14	4.0	4.0	3.0	100%

WFED 495C Student Teaching Final

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	17	4.0	4.0	3.0	100%
2015-16	19	4.0	4.0	3.0	100%
2014-15	14	4.0	4.0	3.33	100%

[1] AY 2016-17 completers include two students who were previously certified in Cooperative Education and Elementary Education and had prior student teaching experiences. AY 2014-15 completers include two previously certified Elementary Education teachers with prior student teaching experiences.

VOC II Grade Performance in Content Coursework

WFED 106/596/806

WF ED 106/596/806 Program Facility Management

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.0	100%
2015-16	14	4.0	4.0	4.0	100%
2014-15	10	4.0	4.0	4.0	100%

WF ED 207W/596/808 Assessment Techniques

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	2.33	100%
2015-16	14	4.0	4.0	3.0	100%
2014-15	10	4.0	4.0	3.67	100%

WF ED 323/596/807 Vocational Student Organizations

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.33	100%
2015-16	14	4.0	4.0	4.0	100%
2014-15	10	4.0	4.0	4.0	100%

WF ED 413 Vocational Education for Special-Needs Learners

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.67	100%
2015-16	14	4.0	4.0	3.0	100%
2014-15	10	4.0	4.0	3.0	100%

WF ED 441 Conceptual and Legal Bases for Cooperative Vocational Education

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.67	100%
2015-16	14	4.0	4.0	4.0	100%
2014-15	10	4.0	4.0	4.0	100%

WF ED 442 Operating Cooperative Vocational Education Programs

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.0	100%
2015-16	14	4.0	4.0	4.0	100%
2014-15	10	4.0	4.0	3.33	100%

WF ED 445 Vocational Guidance

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	4.0	100%
2015-16	14	4.0	4.0	4.0	100%
2014-15	10	4.0	4.0	4.0	100%

WF ED 495C Student Teaching Initial (taken during Voc I enrollment)

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	2.67	100%
2015-16	14	4.0	4.0	3.33	100%
2014-15	10	4.0	4.0	4.0	100%

WF ED 495C Student Teaching Middle (taken during Voc I enrollment)

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.33	100%
2015-16	14	4.0	4.0	3.33	100%
2014-15	10	4.0	4.0	3.67	100%

WF ED 495C Student Teaching Final (taken during Voc I enrollment)

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	11	4.0	4.0	3.33	100%
2015-16	14	4.0	4.0	3.33	100%
2014-15	10	4.0	4.0	3.67	100%

Interpretation:

Across these 3 cohort years, all Penn State completers pursuing Vocational I and II certification took the above program courses as working educators, over a timeline spanning as much as eight years or more. This data does include several students as noted above who may have taken equivalent courses prior to program enrollment under the umbrella of another teacher preparation program, typically K-6 Elementary certification or Cooperative Education certification. The findings above reveal that 100% of completers pass these courses with a grade of “C” or better. This is somewhat misleading, as the program requires completing these classes with such a grade in order to remain in the program (and, thus, those who can’t pass won’t become completers). Given this is an inservice teacher certification program, emphasis is placed on mastery learning in order to promote success for the candidate while actively serving in the classroom.

Secondary World Language (WL ED) Exemplar 1

ACTFL Oral and Written Competency Scores

Spanish

Cohort Year	# Completers	Reported of Test Scores
2016-17	6	6 completers tested, and all passed both exams at the IH level or above (100%) OPI: IH=2; AL=4 WPT: AL=4; AM=2
2015-16	8	8 completers tested, 7 passed both exams at the IH level or above (87.5%) OPI: IH=5; AL=2; Superior=1 WPT: IM=1; IH=4; AL=1; AH=1; Superior=1
2014-15	8	8 completers tested, and all passed both exams at the IH level or above (100%) OPI: IH=6; AL=1; AM=1 WPT: IH=7; AL=1

French

Cohort Year	# Completers	Reported of Test Scores
2016-17	4	4 completers tested, 3 passed both exams at the IH level or above (87.5%) OPI: IH=1; AL=3 WPT: IM=1; IH=1; AL=1; AM=1
2015-16	4	4 completers tested, and all passed both exams at the IH level or above (100%) OPI: IH=2; AL=1; AH=1 WPT: AL=2; AH=2
2014-15	3	3 completers tested, and all passed both exams at the IH level or above (100%) OPI: IH=1; AL=1; AM=1 WPT: IH=3; AL=1

German

Cohort Year	# Completers	Reported of Test Scores
Three years combined – low numbers	1 completed, 1 completed non-certification	None of the completers attained the IH level required for PA certification. OPI: IM=1 WPT: IM=1

Interpretation:

Across these 3 cohort years, 100% of Penn State completers in World Languages Education undertook the American Council of Teachers of Foreign Languages Oral Proficiency Interviews and Written Proficiency Tests, as required for Pennsylvania certification. The provided data demonstrates that, on the whole, world languages teacher candidates prepared by Penn State have above-average mastery of content knowledge. This conclusion is indicated by

the fact that at least 87.5%, and very frequently 100%, of candidates in any given year passed with the required score of Intermediate High. It should be noted that candidates who did not reach the required score fell short by only one level, which indicates that their proficiency was still at least at the intermediate level. As the specific score ratings demonstrate, many candidates passed with scores above the minimum requirement. This indicates that teacher candidates have been well-prepared by their language department courses. It can also be inferred that candidates' required study abroad semester had a positive impact on their language abilities, as the exams were taken upon candidates' return to campus after their semester abroad.

As can be seen in the charts, there is similar data across cohorts and languages (French and Spanish), indicating that the cohorts did not differ significantly in their abilities from year to year and that the language departments did an equally adequate job of preparing candidates in their content areas. The small number of German teacher candidates, and the fact that one withdrew from the certification track, makes it difficult to compare data in this language area to the others. Future candidate data will need to be examined in order to have a better sense of the preparedness of these students and to determine any issues and/or necessary steps for improvement.

Further analysis of the data shows that scores for the Written Proficiency Test tend to be higher overall than those for the Oral Proficiency Interview. This is to be expected given that oral production is more spontaneous than written and that it requires a greater ability to use the language extemporaneously. This may also be due to the nature of the tests, where candidates have more time to think and make revisions during the written exam, but are required to respond spontaneously during the oral interviews.

One final note should be made that the teacher candidate receiving a score of Superior on both the OPI and WPT during the 2015 – 2016 cohort year was a native speaker of Spanish. All other candidates represented in the data were non-native speakers of their respective languages.

Secondary World Languages (WL ED) Exemplar 2

Spanish Grade Performance in Content Coursework

SP 215: Linguistics

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	3.67	4.0	3.0	100%
2015-16	8	3.33	4.0	2.67	100%
2014-15	8	4.0	4.0	3.33	100%

SP 253W: Literature

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	3.67	4.0	3	100%
2015-16	8	3.165	4.0	2.67	100%
2014-15	8	3.67	4.0	3.67	100%

SP499: Spanish Foreign Study

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	3.33	4.0	3.33	100%
2015-16	8	3.67	4.0	3.67	100%
2014-15	8	4.0	4.0	3.67	100%

French Grade Performance in Content Coursework

FR 316: Linguistics

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	4	3.165	4.0	2.0	100%
2015-16	4	3.33	4.0	2.67	100%
2014-15	3	4.0	4.0	3.67	100%

FR 351/352: Literature

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	4	3.67	4.0	3.0	100%
2015-16	4	3.5	4.0	3.0	100%
2014-15	3	3.33	3.67	3.33	100%

FR 417/418: Phonology/Syntax

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	4	4.0	4.0	3	100%
2015-16	4	4.0	4.0	2.67	100%
2014-15	3	4.0	4.0	3.0	100%

FR x99: French Foreign Study

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	4	4.0	4.0	3.0	100%
2015-16	4	4.0	4.0	3.67	100%
2014-15	3	4.0	4.0	3.67	100%

German: The two students who completed in WL ED German took five content courses: Speaking/Listening (GER 301), Literature (GER 310), Culture (GER 344), Advanced Composition (GER 401Y) and German Foreign Study (GER 499). The average of all courses taken was 3.37 and the median was 3.67. The High Grade was 4.0 and the Low Grade was 2.33.

Interpretation:

Across these 3 cohort years, all Penn State completers in Secondary Social Studies took the above academic content courses, typically in their first 2 or 3 years of collegiate coursework. These courses reliably serve as a common baseline for indicating the general academic content preparation of world languages teacher candidates. On the whole, these data suggest that the program completers have adequate and in many cases exemplary academic content preparation. That 100% of completers pass these courses with a grade of "C" is misleading—since the program requires completing these classes with such a grade in order to remain in the program (and, thus, those who can't pass don't become completers).

More illustrative is the range (low-high grades) vis-à-vis the median. While there are a few low grades of "C", which indicates that in some cohort years at least one teacher-candidate performed at the minimum allowable threshold, the ubiquitous "A" high grade encouragingly indicates that there is always at least one teacher candidate performing at the exemplary level as well. Most encouraging is that the median grade is always at least between the low and high grade and usually closer to the high grade, strongly indicating above-average performance by the teacher candidates overall. The consistency in this data across languages indicates that students in all content areas perform at a high level.

Differences in performance by language focus area (linguistics, literature, etc.) are not surprising. Linguistics courses seem to be the hardest for these teacher candidates, particularly those in French. This makes sense given that the study of detailed areas of language such as syntax, phonetics and semantics can be challenging in a foreign language when candidates are not often aware of these aspects of their own native language. Even given this potential difficulty, however, candidates generally performed at at least a "B" level in these courses. While it is difficult to make specific connections between these courses and teacher candidates'

scores on the ACTFL oral and written proficiency exams because of the holistic nature of language learning and language use, the fact that teacher candidates performed at the Intermediate Mid or higher level on these exams would seem to be consistent with attaining grades of “B” and “A” in content area courses.

Secondary World Languages (WL ED) Exemplar 3

Spanish Grade Performance in Methods Coursework

WLED 300: Foundations of Second Language Teaching

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	4.0	4.0	3.33	100%
2015-16	8	3.67	4.0	3.67	100%
2014-15	8	3.835	4.0	3.67	100%

WLED 411: Methods Teaching WL in Grades 1-5

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	4.0	4.0	4.0	100%
2015-16	8	4.0	4.0	4.0	100%
2014-15	8	4.0	4.0	4.0	100%

WLED 412: Methods Teaching WL in Grades 6-12

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	4.0	4.0	3.67	100%
2015-16	8	4.0	4.0	4.0	100%
2014-15	8	4.0	4.0	4.0	100%

French Grade Performance in Methods Coursework

WLED 300: Foundations of Second Language Teaching

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	3.835	4.0	3.33	100%
2015-16	8	3.835	4.0	3.67	100%
2014-15	8	4.0	4.0	4.0	100%

WLED 411: Methods Teaching WL in Grades 1-5

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	4.0	4.0	4.0	100%
2015-16	8	4.0	4.0	4.0	100%
2014-15	8	4.0	4.0	4.0	100%

WLED 412: Methods Teaching WL in Grades 6-12

Cohort Year	# Completers	Median Grade	High Grade	Low Grade	% C or Better
2016-17	6	4.0	4.0	3.67	100%

2015-16	8	3.665	4.0	3.0	100%
2014-15	8	4.0	4.0	3.67	100%

German: The two students who completed in WL ED German took the above referenced pedagogy courses: WLED 300, WLED 411 and WLED 412. The average of all courses taken was 3.945 and the median was 4.0. The High Grade was 4.0 and the Low Grade was 3.67.

Interpretation:

Across these 3 cohort years, all Penn State completers in World Languages Education took the above content-area teaching methods courses, typically spread over years 3 and 4 of collegiate coursework. A common feature in all sections of both of these courses is an emphasis on lesson design and written planning. What can be concluded from these data is very limited. That 100% of completers pass these courses with a grade of "C" is misleading—since the program requires completing these classes with such a grade in order to remain in the program (and, thus, those who can't pass won't become completers). Situated in Penn State's College of Education, the norms for grading are clearly higher than for the prescribed academic content courses in other departments (i.e., SPAN 215, SPAN 253W, FR 316, FR 351/352).

That the median grade and high grade across all 3 cohort years for the methods courses are both "A" or "A-" indicates that almost all students meet their instructor's expectations for this maximum grade. There were only three instructors who taught WL ED 411 and WL ED 412 during these years, and their grading distribution was clearly very similar. While there was some small variability in the low grades between WL ED 411 and WL ED 412 which may be attributed to slight differences in instructors' expectations, this does not seem to be so extreme that it would need to be addressed. Generally, it can be concluded that "B" level final grades are indicative of performance that may be, in context, suboptimal. Encouragingly, candidates' grades tend to improve from the foundations course, which introduces students broadly to theories of second language teaching and learning, to the methods courses where they are learning the theories in more detail and putting them into practice in concurrent practicum experiences. This indicates that as candidates progress in the program, their knowledge base tends to expand and improve. It is also encouraging that the low grade was "B" only once across the 3 cohort years.

With overall grade performance not providing much useful evidence, one possible direction for future improvement is for the methods courses to attempt to capture more fine-grained data through other kinds of performance instruments, such as competency-based assessment rubrics.

Secondary World Languages (WL ED) Exemplar 4

Student Teacher Performance and Impact Assessment

Cohort Year 2016-17 (*N* = 11) Supervisor/*Mentor Teacher*

Rating Scale: **E**—***Exemplary*** **G**—***Good*** **S—*Satisfactory*** **U-Unsatisfactory NO-Not Observed**

	E	G	S	U	NO
1. Pronunciation/fluency of speech pattern in target language.	8/*8*	3/*3*			
2. Facility in giving directions in target language.	4/*7*	6/*4*	1		
3. Facility in explaining key concepts in target language.	1/*5*	7/*5*	3/*1*		
4. Ability to provide clues to correct answers in target language without reverting to English.	1/*3*	6/*7*	4/*1*		
5. Ability to elicit correct answers from reluctant or struggling students.	5/*6*	5/*5*	1		
6. Conducting class in target language.	*5*	6/*4*	5/*2*		
7. Perceived incidence of grammatical or semantic accuracy.	10/*7*	1/*4*			
8. Demonstrated knowledge of culture through bulletin boards, discussion, projects informal assessments.	1/*8*	8/*2*	2/*1*		
9. Opportunities for understanding and accepting practices and perspectives of the target culture studied, as compared to student's native culture.	*7*	4/*3*	7/*1*		
10. Frequency of making connections between concepts learned in target language class and other disciplines.	*2*	1/*7*	10/*1*		*1*

Cohort Year 2015-16 (N=10, *n* =4 (supervisor**), n=7 (***mentor***)**

Rating Scale: **E**—***Exemplary*** **G**—***Good*** **S—*Satisfactory*** **U-Unsatisfactory NO-Not Observed**

	E	G	S	U	NO
1. Pronunciation/fluency of speech pattern in target language.	1/*5*	3/*1*	*1*		
2. Facility in giving directions in target language.	1/*4*	2/*2*	1/*1*		
3. Facility in explaining key concepts in target language.	1/*2*	*3*	3/*2*		
4. Ability to provide clues to correct answers in target language without reverting to English.	*3*	1/*2*	3/*2*		
5. Ability to elicit correct answers from reluctant or struggling students.	1/*4*	3/*2*	*1*		
6. Conducting class in target language.	1/*2*	*3*	3/*2*		
7. Perceived incidence of grammatical or semantic accuracy.	1/*5*	3/*1*	*1*		
8. Demonstrated knowledge of culture through bulletin boards, discussion, projects informal assessments.	2/*6*	1/*1*	1		
9. Opportunities for understanding and accepting practices and perspectives of the target culture studied, as compared to student's native culture.	2/*5*	1/*2*	1		
10. Frequency of making connections between concepts learned in target language class and other disciplines.	*4*	1/*3*	3		

Cohort Year 2014-15 (N=11, n = 5 (*mentor*), no supervisor data

Rating Scale:**E—*Exemplary* G—*Good* S—*Satisfactory* U-Unsatisfactory NO-Not Observed**

	E	G	S	U	NO
1. Pronunciation/fluency of speech pattern in target language.	*4*	*1*			
2. Facility in giving directions in target language.	*2*	*3*			
3. Facility in explaining key concepts in target language.	*2*	*1*	*2*		
4. Ability to provide clues to correct answers in target language without reverting to English.	*3*	*1*	*1*		
5. Ability to elicit correct answers from reluctant or struggling students.	*3*	*2*			
6. Conducting class in target language.	*2*	*2*	*1*		
7. Perceived incidence of grammatical or semantic accuracy.	*3*	*2*			
8. Demonstrated knowledge of culture through bulletin boards, discussion, projects informal assessments.	*1*	*3*	*1*		
9. Opportunities for understanding and accepting practices and perspectives of the target culture studied, as compared to student's native culture.	*3*	*1*			*1*
10. Frequency of making connections between concepts learned in target language class and other disciplines.	*1*	*3*			*1*

Interpretation:

These data are drawn from the summative final evaluation of each student teacher's performance and impact at the end of their student teaching field practicum (CI 495E). This evaluation is completed by both the teacher candidate's field supervisor and the teacher candidate's mentoring schoolteacher. The standards to be observed for this instrument are related to the Program Standards for the Preparation of Foreign Language Teachers provided by the American Council of Teachers of Foreign Languages (ACTFL). Only the ratings are presented and analyzed here, though the full instrument (3 pages, including definitions) is available (see "WL ED Student Teacher Assessment").

Across the 3 cohort years, many of these completers were observed successfully planning, teaching, and having impact on student learning for most of these program standards. None were observed still having difficulty by the time of this end evaluation (though it should be acknowledged that any teacher candidates who may have performed with such difficulty might not have passed the student teaching practicum and, thus, would not become completers). It is further encouraging that the number of completers who were in classroom placements that did not afford opportunity to attempt to perform particular standards ("not observed") declined across the 3 cohort years (though this may also be a function of the field supervisors and mentor teachers becoming more attuned to looking for these performance themes in evaluating their teacher candidates).

In terms of specifics, two initial trends stand out. First, it appears that both mentors and supervisors raised their expectations for performance across these 3 cohort years, as evidenced by the increase in numbers of candidates rated as "Satisfactory" as opposed to "Good" or "Exemplary". Given that candidates' grades in methods courses such as WL ED 411 and WL ED 412 did not decrease during this time, it seems more likely that this is a result of a change in rater expectations that a decrease in candidates' abilities in the classroom. The second trend is for the field supervisor to rate candidates on a slightly more rigorous scale than the mentor teachers.

This may be due to the fact that most mentor teachers change from year to year, and there are frequently new mentors, while the field supervisor often stays the same. In the case of these 3 years, there were two field supervisors working together during the 2014-15 and 2015-16 years and then one of those supervisors continued on as the lone field supervisor during 2016-17. As a result, the field supervisor is more familiar with the instrument and may be looking more closely than mentor teachers for these standards during observations and other evaluations.

Despite the apparent higher expectations as cohort years progressed, all candidates are still performing at least at the "Satisfactory" level, which indicates that their "knowledge and skills are emerging" and that they meet "nearly all performance indicators with acceptable quality consistent with a novice teacher". Thus, all candidates are performing at least adequately for novice teachers and many are performing above what would be expected for candidates at this level.

Also evident in the data is the fact that one of the most difficult areas for candidates seems to be in using the target (i.e., foreign) language in the classroom. This is indicated by significant numbers of "Satisfactory" ratings in standards 3, 4 and 6 across all three cohort years. Each of these areas relates to candidates' facility in using the target language to conduct class, teach key concepts, and clear up student confusion. Frequency of making connections between the concepts learned in the language classroom and other content areas is also an area that seems to provide some difficulty for candidates. Based on this, further attention to providing teacher candidates with stronger preparation and support for consistent use of the target language and frequent connections to other content that school students are learning is warranted and is a possible direction for future improvement in the WL ED program.

Finally, the limitation of this data must be acknowledged. Mainly, some portions of mentor and supervisor data are both missing during cohort years 2014-15 and 2015-16. While this was improved for 2016-17, a direction for continued improvement will be to strength this instrument's validity and reliability by ensuring that it is filled out by all field supervisors and mentors for all World Languages teacher candidates. Further improvement can also be made by ensuring that supervisors and mentors use the same or very similar standards for rating, as indicated in the discussion of trends above.