Self-Study Report

Selected Improvement (SI) Pathway

UNIVERSIDAD DE PUERTO RICO DE MAYAGÜEZ

PPMES-DECEP

PO Box 9024

Mayaguez, PR 00681-9024

May 7-9, 2017

Type of Visit:

Continuing visit - Initial Teacher Preparation

CAEP Council for the Accreditation of Educator Preparation

CAEP Self-Study Report for SI Pathway

I. EPP Overview

a. Context and Unique Characteristics

The UPRM is a Science Technology Engineering & Mathematics (STEM) focused, Land Grant, Sea Grant, Space Grant Hispanic Serving Institution and the second largest institution of the UPR system, serving approximately 12,000 students every year. During the 2016 spring semester student enrollment reached 12,226 with 5,655 (46%) female and 1,032 (8.5%) graduate students. Among the four colleges, the largest enrollment was in Arts and Sciences with 4,984 students (sciences: 3,117, arts: 1,867), followed by Engineering with 4,462 students.
Established in 1911, UPRM has evolved into a comprehensive institution with over 50 undergraduate and 36 graduate programs in Engineering, Agricultural Sciences, Arts and Sciences, and Business Administration.

There is no College of Education at UPRM. The Teacher Preparation Program under the Dean of Academic Affairs, the College of Arts and Sciences, and the College of Business Administration share responsibility for initial teacher preparation in 12 subject areas. The Department of Agricultural Education in the College of Agriculture is responsible for all aspects of agriculture teacher preparation.

The UPR admission index is based on high school GPA, CEEB verbal reasoning and math aptitude scores (see http://estudiantes.upr.edu/admisiones/carreras/igs.php for calculator). The UPRM average admission index has been at least 24 points on a 400 point scale above the average UPR system admission index for the past 5 years (see 1.1.8 pages 5-60). The UPRM accepted 66% to 78% of applicants over the past 5 years and admitted 92% to 95% of those admitted.

The UPRM is one of the leading institutions awarding degrees to Latinos in the United States in STEM fields: ranking first in bachelor's degrees, fourth in master's degrees, and twelfth in doctoral degrees in 2012-2013 (Excelencia in Educación. (2015). Finding Your Workforce: Latinos in Science, Technology, Engineering, and Math (STEM). Washington, D.C.: Excelencia in Educación).

b. Description of Organizational Structure

There is no College of Education at UPRM. Established in 1966 and headed by the Dean of Academic Affairs, the Teacher Preparation Program (TPP or PPM in Spanish) offers the full range of initial teacher preparation education courses to candidates who have completed a bachelor's degree or are pursuing a bachelor's degree at UPRM as well as to those enrolled in the Math Education or Teaching in Physical Education programs. Altogether, the TPP prepares teacher candidates in 12 areas: art, biology, business education, chemistry, English, history, mathematics, physical education, physical science, social studies, Spanish, and theater. The TPP offers fundamental education courses in alternate route including methodology and teaching practice needed by teacher candidates who are:
1) pursuing a bachelor's degree at UPRM in a non-educational program,
2) holding a bachelor's degree in a non-educational field from any accredited institution, or
3) pursuing a BA in K-12 Teaching in Physical Education or a BS in Mathematics Education.

The Math Education BS in Mathematics and the Teaching in Physical Education BA in Physical Education are offered by the Departments of Mathematical Sciences and Physical Education (Kinesiology) respectively. These departments respond to the Dean of Arts and Sciences.
Established in 1932, the College of Agriculture's Department of Agricultural Education, offers all education courses to agriculture teacher candidates. UPRM is the only institution in Puerto Rico that prepares agriculture teachers.
All teacher preparation at UPRM emphasizes breadth and depth of content knowledge ranging from 21 credits in theater to 63 credits in English. UPRM teacher candidates approved Puerto Rico's Teacher Certification exams (PCMAS in Spanish) with a preliminary 92% summary pass rate in 2016 and one or more highest scores on one to four exams (Fundamentals, Professional Competencies, or one of the five Specialization Exams) every year for the past seven years.

c. Vision, Mission, and Goals

UPRM Vision

To be a leading institution in higher education and research, transforming society through the pursuit of knowledge in an environment of ethics, justice, and peace.

UPRM Mission
To provide excellent service to Puerto Rico and to the world by:
. Forming educated, cultured, capable, critical thinking citizens professionally prepared in the fields of agricultural sciences, engineering, arts, sciences, and business administration so they may contribute to the educational, cultural, social, technological and economic development.
. Performing creative work, research and service to meet society's needs and to make available the results of these activities.
We provide our students with the skills and sensibility needed to effectively address and solve current challenges and to exemplify the values and attitudes that should prevail in a democratic society that treasures and respects diversity (see 1.1.9 UPRM Strategic Plan 2012-2022 page 5).

UPRM Teacher Preparation Vision
In the context of the vision and mission of the institution, the Teacher Preparation Programs aspire to develop subject matter specialists who are active teachers and lifelong learners who are highly capable, effective, dedicated educators in their fields.

UPRM Teacher Preparation Mission
The mission of the Teacher Preparation Programs reflect the UPRM mission. The unit's mission is to serve society by preparing professional educators who are subject matter specialists with dispositions of social, cultural, humanistic sensibilities and ethical values, who also possess competence, skills and general knowledge, all of which will allow them to be highly effective teachers. The unit prepares subject matter specialists as professional educators, committed to vanguard educational paradigms, with an inquisitive attitude, capable of creative and critical thinking, and with mastery of pedagogical and conceptual knowledge in their discipline.

d. EPP's Shared Values and Beliefs for Educator Preparation

Ten core UPRM TPP teacher candidate proficiencies. [Alignment to standards 1.1.1a]
1. Content knowledge - Understand the central concepts, fundamental structure, and principal inquiry tools of their discipline in a way that enables them to design and present learning experiences that make these aspects of the subject matter evident and meaningful to students. Encourage them to pursue deeper disciplinary knowledge, technology or other area.
2. Pedagogical content knowledge - Develop a solid pedagogical content knowledge and an understanding of a broad variety of active methodologies in order to design, modify, and deliver instruction that leads learners to meet curricular goals that lead students to learn.
3. Human development and learning - Understand how children learn and develop so they can provide opportunities to support their intellectual, social, and personal development promoting the integration of knowledge in all its manifestations. Savvy consumers of evidence-based research to identify and adopt effective strategies for developing academic proficiency.
4. Reflexive, creative, critical thinking - Practice reflexive, creative, critical thinking and are able to make these processes visible to students and thereby contribute to the formation of reflexive, creative, critical thinking individuals who value, practice, and develop these processes throughout their lives.
5. Exhibit comprehensive formation - communication leadership skills - Contribute to the comprehensive formation of individuals by developing their intellectual, emotional, and psychological abilities and their communication and leadership skills, as well as esthetical and ethical values. To use effective verbal - nonverbal communication and technology to foster active inquiry, collaboration, and supportive interaction among students.
6. Demonstrate community building skills - Foster effective professional relationships with colleagues, parents, and educational stakeholders in the surrounding community in order to support learning and well-being in a manner that encourages students to develop ethical, civic, moral and esthetic values in harmony with their individual and collective needs contributing to a culture of peace.
7. Assessment - Monitor student learning progress through formal and informal assessment strategies in order to design, modify, and deliver learning experiences that contribute to the continuous growth of each learner. To evaluate assessment results to improve their own teaching effectiveness.
8. Caring dispositions - Confront new challenges, social as well as educational, in a way that

contributes to improving the quality of life in PR and the world. Who can establish and sustain a positive, safe learning environment in which interpersonal relationships furnish the stability, trust, and caring that support learners' sense of belonging, self-respect and self-acceptance as well as the security to make mistakes and learn from them.

9. Sensitivity to diversity - Recognize, understand, and value a diversity of learning styles, intelligences, and talents as well as the diversity of social, economic, and cultural experiences. Enable them to create a learning environment in which all students regardless of their race, color, religion, gender or sexual orientation, linguistic ability, ethnic or geographical origin feel secure. That recognizes and responds to the diversity of learners with varied learning opportunities that promote the development of critical thinking, problem solving, and performance skills of each learner.

10. Demonstrate reflective practice - Reflect on the effectiveness of their classroom practices in order to identify areas for improvement. Develop commitment to shared professional life long learning that improves classroom practice in order to provide students the skills to meet the technological, educational, scientific, social, and cultural demands of the working world.

e. Is the EPP regionally or institutionally accredited?

◉ Yes

○ No. the EPP is ineligible for regional/institutional accreditation or such accreditation is not available

EPP is regionally or institutionally accredited

a. If your institution/EPP is regionally accredited, please upload a PDF copy of the award of regional accreditation here. If your institution/EPP is NOT regional accredited, please move to the next page.

UPRM MSCHE Accreditation Status
UPRM NCATE Accreditation Letter
UPRM NCATE Accreditation Report
UPRM Operation Licence Renewal CEPR

See Attachment panel below.

Table 1 - Capacity

a. Institutional (EPP) ability to meet its financial obligations. The EPP uploads one of three items: (IF YOUR INSTITUION/EPP IS REGIONALLY ACCREDITED, DO NOT COMPLETE TABLE 1, PLEASE MOVE TO NEXT PAGE)

    1) Legal entity's 990 form (for non-profit EPPs) or

    2) corporate income tax returns for the past year (for for-profit EPPs), or

    3) equivalent evidence of financial health (for international EPPs).

b. Prepared budget for current year. The EPP uploads:

    1) The most current approved budget for the current academic or calendar year whichever is most relevant for the EPP's context, or

    2) equivalent evidence of revenues and expenditures.

    Budget figures must be converted to USD if another currency is used.

c. Financial projections for long-term financial sustainability. The EPP uploads:

    1) Revenues and expense projections for the next two years (either calendar or fiscal), including funding streams, or

    2) equivalent evidence of financial sustainability.

    If funding is exclusively tuition based, the EPP must upload:

    1) Its tuition refund policy, and

    2) its teach-out plan in the case that the EPP's programs are discontinued.

d. External audit process. The EPP uploads:

    1) Clean independent audits of a full set of financial statements for the EPP, or

    2) equivalent evidence of administrative budgetary oversight (for international EPPs).

e. Administrative structure. The EPP uploads:

    1) A one-to-two page narrative describing the EPP's relationship with the legal entity in which it is housed (if any), and

2) an organizational chart.

Table 2. Program Characteristics

a. Complete this table of program characteristics by entering the information requested for every program or program option offered by the EPP. Cross check the list with the programs listed in the EPP's academic catalog, if any, as well as the list of state-approved registered programs, if applicable. Site Visitors will reference this list in AIMS during the accreditation review process.

Name of Program/specialty area	Enrollment in current fall cycle	Enrollment in last fall cycle	Degree, certificate or licensure level	Method of Delivery	State(s) which program is approved	Date of state approval(s)	Program Review Option (National Recognition, state-only, or Program Review with Feedback)
Agricultural Education	Fall 2015 60, 24	Fall 2014 50, 4	BS, Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Mathematical Education	32, 13	24, 8	BS, Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Physical Education (Kinesiology)	101, 5	93, 3	BS, Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Physical Science	64	66	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Social Studies	24	25	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
History	10	13	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Chemistry	6	6	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Biology	21	28	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
English	26	17	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Spanish	8	5	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Business Education	4	5	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Art	8	8	Alternate Route	Face to Face	PR	NA	Program Review with Feedback
Theater	0	0	Alternate Route	Face to Face	PR	NA	Program Review with Feedback

Table 3. EPP Characteristics

Complete a table of EPP characteristics in AIMS to provide an expanded profile by which the accreditation process is managed by CAEP staff. EPP characteristics are also used by CAEP staff in compiling CAEP's Annual Report to the public and used as a series of filters for dashboard comparison by the EPP itself. The AIMS version of this table, in which the data are actually entered, has drop-down menus by which characteristics are selected and the table is completed.

Control of Institution	Public
Student Body	Coed
Carnegie Class	Master's Colleges and Universities (larger programs)
Location	Urban
Teacher Preparation Levels	Currently offering initial teacher preparation programs Not currently offering advanced teacher preparation programs
EPP Type	Hispanic Serving Institution Land Grant Institution Institution of Higher Education: State/Regional Alternate Route
Religious Affiliations	Undenominational

Language of Instruction	English Spanish
Institutional Accreditation (Affiliations)	Middle States Association of Colleges and Schools

Table 4. Clinical Educator Qualification Table

a. The clinical educator (EPP faculty & supervisors) qualifications table is completed by providing information for each of the EPP-based clinical educators.

Name	Highest degree earned	Field or specialty area of highest degree	Program Assignment(s)	Teaching assignment or role within the program(s)	P-12 certificates or licensures held	P-12 experiences including teaching or administration dates of engagement in these roles
Ana Lebrón Tirado	EdD	Administration and Supervision	Faculty & Supervisor	Fundamentals Eds, Methodology, Teaching Practice Teaching	Science Teaching Licensure	Science Teacher, Department of Education of P.R 1982-1990
Rebeca Orama Meléndez	EdD	Faculty & Supervisor TPP Program Director	Faculty & Supervisor TPP Program Chair	Fundamental Ed, Methodology, Teaching Practice	General Science Biology Teaching Licensure	District Science Coordinator 1991-1993 Secondary Science Teacher 1977-1995
José Ferrer López	EdD	Technology in Education	Faculty & Supervisor	Fundamental Ed, Technology, Teaching Practice	Arts Teaching Licensure School Director & Fine Arts Director License Music Teacher	Arts Teacher 2000-2012 Elementary School Director
Janette Ferrer Montes	PhD	Special Education	Faculty	Fundamental Ed, Technology, Special Education	Teaching: Learning Behavior Specialist I. State Teacher Certification Board, State of Illinois	Special Education Educator Lifetime Certificate, Department of Education, San Juan, Puerto Rico
Griselle Rivera Villafañe	EdD	Administration and Supervision	Faculty & Supervisor	Fundamental Ed,Teaching Practice	Health Education Program Director Vocational School General Supervisor	Health Education Director 2000-2003 Supervisor Health Education 1992-2000
Jose Figueroa	MS	Math Education	Adjunct Faculty & Supervisor	Technology, Methodology, Teaching Practice	Secondary Math Teacher Licensure	Secondary Math Teacher Mayaguez Math District Supervisor
Carmen Bellido Rodríguez	PhD	Psychology Academic Research	Faculty & Supervisor	Methodology, Teaching Practice CAEP Accreditation Program Coordinator	Educational Psychologist	
Herbert Bravo Garcia	MS	Health Education	Faculty	Fundamental Ed Courses	Certified Health Education Specialist Certified Food Safety/Protection Manager	
Moisés Camacho Galván	PhD	Science Education	Faculty	Fundamental Ed Courses		
Antonio Santos Cabrera	MA	Counseling	Faculty	Fundamental Ed Courses		
Efraín Gracia Pérez	Juris Dr., MA	Counseling	Faculty	Fundamental Ed Courses		
Maribel Acosta	EdD	Hispanic Studies	Adjunct Faculty & Supervisor	Methodology, Teaching Practice	Spanish Secondary Teacher Licensure	
Ana Maria Aponte	EdD	Curriculum and Education	Adjunct Faculty & Supervisor	Methodology, Teaching Practice		
Maria Barbot	MA	History	Adjunct Faculty & Supervisor	Teaching Practice	History Secondary Teacher Licensure	10 years Social Studies Teacher
Iris Figueroa	PhD	Physical Education	Adjunct Faculty & Supervisor	Methodology, Teaching Practice	Puerto Rico Department of Education (DEPR) Teaching Certification Certified Adapted	January 2003 - DEPR (Special Education Teacher) August 2003 Ohio State University-Nisonger Center Pre School Physical Adapted

						Physical Education Teacher
Diana Rodriguez	PhD	Physical Education	Adjunct Faculty & Supervisor	Methodology, Teaching Practice		1975 -Physical Education Teacher 1994- Physical Education Teacher
Ibrahim Cordero	PhD	Physical Education	Adjunct Faculty & Supervisor	Teaching Practice		
Margarita Fernandez	PhD	Physical Education	Adjunct Faculty & Supervisor	Teaching Practice		
David Padilla Velez	PhD	Agricultural Education	Agriculture Education Department Chair	Research, Statistics and Seminar Courses Faculty		Agriculture Fair Consultant & Judge High School Student Mentor in agriculture
Edly Santiago Andino	PhD	Agricultural Education	Faculty Clinical Practice Coordinator & Supervisor	Teach Administration and Organization, Methodology, Teaching Practice		Agriculture Fair Consultant & Judge High School Student Mentor in agriculture
Luis Silva Guerrero	PhD	Agricultural Education	Faculty	Teach Agricultural Orientation, International Agriculture, Youth Organization and Programs		Agriculture Fair Consultant & Judge High School Student Mentor in agriculture
Jose Irizarry	PhD	English Literature	Adjunct Faculty & Supervisor	Teaching Practice	Bilingual Teacher Licensure	11 years as English Teacher
Carlos Padovani	PhD	Physical Education	Adjunct Faculty & Supervisor	Teaching Practice		
Myrna Rivera	MA	English Education	Adjunct Faculty & Supervisor	Methodology, Teaching Practice	Secondary English Teacher Licensure	4 years as Secondary School English Teacher
Rosa Roman	PhD	English Education	Adjunct Faculty & Supervisor	Methodology Teaching Practice	Secondary English Teacher Licensure	
Iris Toro	MA	English Education	Adjunct Faculty & Supervisor	Teaching Practice	Secondary English Teacher Licensure	10 years as English Teacher
Olgamary Rivera	EdD	Math Education	Adjunct Faculty & Supervisor Math Department Chair	Methodology, Teaching Practice		
Jose Perez	MA	Art History Education	Adjunct Faculty	Fundamental Ed		
Noemi Maldonado	PhD	Humanities	Adjunct Faculty & Supervisor	Methodology and Practice Teaching		

Upload the clinical educator qualifications table, if not provided in the previous table.

Table 5. The Parity Table

a. The parity table of curricular, fiscal, facility, and administrative and support capacity for quality is used to satisfy requirements of the U.S. Department of Education and is completed by providing data relevant for the EPP and making a comparison to an EPP-determined comparative entity. The comparative entity might be another clinical EPP within a university structure, a national organization, the college or university as a whole or another entity identified as a benchmark by the EPP. Again, this chart offers an example of how the chart might be completed.

Capacity Dimension	EPP description of metric(s)	EPP data	Comparative entity data	Title and description of supplemental evidence/documentation of quality for each dimension
Facilities	Square feet of buildings in use # of classrooms and dedicated facilities	TPP with an enrollment of 464 supported by 14 full time, 3 part time & 11 adjunct faculty members TPP with an enrollment of 464 33285 sq feet 2 computer centers, 1 Distance Education Resource Center (CREAD)	Department of Nursing with an enrollment of 442 33136 sq feet, 1 amphitheater, 1 computer center, 1 Skills Laboratory	Campus map and building register http://oiip.uprm.edu/registro -de-edificios-en-el-rum/
Fiscal Support	Annual budget & Average Budget per Student	$ 1,501,305.00 not including research of sponsored program support $3,235.57 budget per student	$ 2,129,719.45 not including research of sponsored program support $4,818.37 budget per student	Budgets for education and nursing from the reports of OIIP - Office of Institutional research and Planning
Administrative support	Organizational chart			

		Academic Affairs Dean, Assoc. Dean, Asst. Dean, TPP Director, TPP Students Officer, Office assistant, 2 student assistants	Arts and Sciences Dean, Nursing Department Director, Associate Director, Internship Coordinator, 4 office assistants, 1 skills nurse instructor	TPP Reports submitted http://uprm.edu/p/eppcaep/reports_submitte Nursing Department Self Study http://www.uprm.edu/enfe/UPRM%20_ACEN_SSR2013.pdf
Candidate support services	List of services, # of candidates seeking services, Annual report on candidate evaluation of support services	Services provided by the School of Education for use of its candidates: Field placement office, ombudsperson, and advisement.	Services provided by the School of Nursing for use of its students: Internship placement office, ombudsperson, and advisement.	TPP Reports submitted http://uprm.edu/p/eppcaep/reports_submitte Nursing Department Self Study http://www.uprm.edu/enfe/UPRM%20_ACEN_SSR2013.pdf
Candidate feedback, formal and informal	Surveys and complaint policy	Faculty evaluations, exit surveys, alumni surveys & complaint procedures with the TPP Students Officer	Faculty evaluations, alumni surveys & complaint procedures with the Nursing Dpt. Associate Director	TPP Reports submitted http://uprm.edu/p/eppcaep/reports_submitte Nursing Department Self Study http://www.uprm.edu/enfe/UPRM%20_ACEN_SSR2013.pdf

Upload Parity Table

Table 6. Accreditation Plan

a. The Accreditation Plan is an educator preparation provider's (EPP's) identification of the sites outside of the main campus or administrative headquarters and the programs offered at each site that will be included in the EPP's accreditation review. This information, in combination with the table of program characteristics, is used by CAEP staff and site visit team leads to plan the site visit, including the sites that will be visited by site team members.

Geographic Site(s) administered by the EPP	Program offered at each site	Is the program to be included in accreditation review? (Y or N)	Is the program approved by state in which program is offered? (Y or N or approval not required)	Notes/Comments

Table 7. EPP Assessments

Please list proprietary assessments used by the EPP (no more than 7):

Proprietary Assessment No.	Title of Assessment	Validity & Reliability information if available & applicable
Proprietary Assessment No.1	PCMAS	One of the Puerto Rico Department of Education's requirements for certification as a regular teacher is passing the Puerto Rico Teacher Certification Exams (PCMAS). In 2016 the basic exam combined the Fundamental Knowledge of General University Education and Professional Competencies of Teacher Preparation Programs. Until 2016, these exams were separate. To be certified by the PRDE to teach Spanish, English, Mathematics, Science or History / Social Studies candidates must also pass a Specialty Exam in that area. The exams are prepared and administered by the CollegeBoard®.
Proprietary Assessment No.2	Danielson Observation Framework	The Danielson Observation Framework is a classroom teaching performance rubric aligned to InTASC Standards. The Framework addresses the aspects of teaching that have been documented through empirical studies and theoretical research as promoting improved student learning. The Framework covers 4 domains: 1) Planning and preparation, 2) Classroom environment, 3) Instruction, and 4) Professional Responsibilities. This teacher performance observation protocol has being widely used in the U.S. (Little, Goe, & Bell, 2008, 2009). National Comprehensive Center for Teacher Quality. Washington: DC. For information on the validity and reliability of the instrument see Danielson, C., 1996 (4.2.1).
Proprietary Assessment No.3	Tripod Student Survey	

		Tripod Student Surveys collect student feedback about teaching practices and student engagement. The Tripod Student Surveys capture key dimensions of school life and teaching practices from a student's perspective. For information on the validity and reliability of the instrument see Bill & Melinda Gates Foundation, 2012. (4.2.2)
Proprietary Assessment No.4	Flowers & Hancock Interview Protocol	The Flowers/Hancock Interview Protocol was designed to assess a teacher's performance accurately and efficiently. In addition, the protocol optimizes evaluator teacher dialogue regarding the evaluation process and allows teachers to demonstrate adherence to the teaching standards established by several professional organizations including InTASC. The protocol uses existing data that focus on student learning so that the teacher need not produce new materials to be used exclusively for the evaluation process. Significant field-testing has demonstrated the validity and reliability of the instrument. For information on the validity and reliability of the instrument see Flowers, C. P. & Hancock, D. R., 2003. (4.4.1)
Proprietary Assessment No.5		
Proprietary Assessment No.6		
Proprietary Assessment No.7		

Please map above proprietary assessments to the appropriate CAEP Standards:

	CAEP Standard 1	CAEP Standard 2	CAEP Standard 3	CAEP Standard 4	CAEP Standard 5	State
Proprietary Assessment No.1	☑	☑	☑	☐	☐	☐
Proprietary Assessment No.2	☐	☐	☐	☑	☑	☐
Proprietary Assessment No.3	☐	☐	☐	☑	☑	☐
Proprietary Assessment No.4	☐	☐	☐	☑	☑	☐
Proprietary Assessment No.5	☐	☐	☐	☐	☐	☐
Proprietary Assessment No.6	☐	☐	☐	☐	☐	☐
Proprietary Assessment No.7	☐	☐	☐	☐	☐	☐

II. CAEP Standards and Evidence

Standard 1: Content and Pedagogical Knowledge

i. Evidence/data/tables (Upload each item of evidence under the appropriate components of the standard and answer the following questions for each item.)

1   1.1 Understanding of InTASC Standards at Appropriate Levels

   1.1.1a UPRM TPP Alignment with Applicable Professional Standards

   1.1.1b InTASC alignment with UPRM TPP Candidate Proficiencies and Standards

   1.1.2 Classroom Observation Instrument with Rubric

   1.1.2b InTASC Standards in Observation Instrument

   1.1.2c InTASC Standards demonstrated in TCWS

   1.1.3 Evidence and analysis of PCMAS Specialty

   1.1.4 Evidence and analysis of PCMAS Fundamentals & Pedagogical Knowledge

   1.1.4a College Board PRDE UPRM Teacher Preparation Program Rating

1.1 Understanding of InTASC Standards

1.2 Use of research and evidence to measure students' progress

1.3 Application of content and pedagogical knowledge

1.4 All P-12 students afforded access to college- and career-ready standards.

1.5 Model and apply technology standards

*   ii. Analysis of evidence (through comparison, benchmarking, trend interpretation, etc.) that makes the case that the standard is met

The URPM TPP aligns all course syllabi, rubrics, and evaluation instruments with the ten candidate proficiencies established in its conceptual framework (see 2.2.3 UPRM Conceptual Framework). These proficiencies align with the InTASC 2013 Standards, the CAEP Standards, the Puerto Rico Professional Standards for Teachers (PR-PST), the ISTE Standards, and the UPRM Student Learning Outcomes (SLO) (see 1.1.1a and 1.1.1b for alignments). The principle TPP evaluations that show UPRM teacher candidates meet or exceed criteria based on the InTASC standards are the Classroom Observation Instrument (1.1.2) and the Teacher Candidate Work Sample (TCWS, 1.2.2). These instruments are applied during Teaching Practice. See 1.1.2c for overall performance levels in the four InTASC categories. Since most candidates, over 75%, do their Teaching Practice during the spring semester, data for these two instruments is provided for the last three spring semesters.

The Learner and Learning

UPRM teacher candidates develop their initial knowledge about the learner and learning in fundamental education courses. UPRM Agricultural Education (AgED) teacher candidates follow a unique series of learner and learning courses to become licensed agronomists and teachers serving the community. These three courses are Methods in Teaching Vocational Agriculture, Curriculum Development, and Organization and Administration in Vocational Agriculture. With a 3.60 average course GPA in these three courses over the past three academic years, beginning Agricultural Education teacher candidates demonstrate that they are more than meeting instructor expectations at this level. Agricultural Education teacher candidates completing their teaching practice over the past three academic years earned an average 3.76 GPA in these three courses.

Other UPRM teacher candidates develop their initial knowledge of the learner and learning in Human Growth and Development I & II and a Seminar on the Nature and Needs of Exceptional Children. With an average 3.23 GPA in these three courses, UPRM teacher candidates completing their teaching practice over the past three academic years met program expectations (see 1.1.5a for comparison with recent course enrollees). In addition to these three courses, Physical Education teacher candidates expand their knowledge of learners' motor skills in the Fundamentals of Motor Learning and an Introduction to Motor Development with Laboratory courses. These candidates perform much better in the more advanced Introduction to Motor Development with Laboratory course (average GPA 3.55) than in the Fundamentals course. See 1.1.5a for Learner and Learning course GPA data.

UPRM teacher candidates practice their skills and disposition working with the learner and learning primarily in their methodology and teaching practice courses. An analysis of the available data on the Contextual Factors portion of the TCWS over the past three semesters shows that 86% to 97% of UPRM candidates fully meet each of the five criteria. See 1.1.2c pages 1 and 2 for more details, 1.2.2 page 5 for instructions regarding Contextual Factors and 1.2.2 page 12 for the corresponding evaluation rubric. An analysis of UPRM candidate performance on the five Learner and Learning items on the Classroom Observation Instrument over the past two spring semesters shows 98% to 100% reached or surpassed the target proficient level. The Classroom Observation Instrument underwent a major revision between spring 2014 and spring 2015 so item by item data is not directly comparable. Even so the data from spring 2014 shows all candidates meeting or exceeding the target proficient level. See 1.1.2b pages 1 and 2 for more details and 1.2.2 pages 1-3 for the corresponding evaluation rubric.

Content Knowledge

The bachelor's degrees completed by UPRM teacher candidates are characterized by content depth and breadth. Over the past three academic years, the average number of academic credits taken by UPRM teacher candidates in their content area at UPRM ranges from 30 in Physics to 80 in Agricultural Education. This is well above the Puerto Rico Department of Education requirement of 21 credits in licensure area. As for depth of content, the average number of upper level content credits taken by teacher candidates at UPRM ranges from 21 in History to 65 in Agricultural Education over the past three academic years. For the range of content credits and GPAs see 1.1.5b. Candidates enrolled in a bachelor's must meet specific content course credit and GPA requirements at transition points 2 and 3 to continue the TPP curricular sequence (see 3.1). Alternate route candidates, those who completed a bachelor's degree at UPRM or another institution, must meet content course and GPA requirements specific to the licensure area to be admitted. See 3.1a and 3.1b for the TPP Admission Applicant Register.

UPRM teacher candidates develop their skills using and applying content knowledge in their methodology and teaching practice courses. The principal evaluation instruments are the Classroom Observation Instrument and the TCWS. An analysis of the available data on the Content items in the TCWS over the past three years shows that 86% to 97% of UPRM candidates fully meet each of the five criteria. See 1.1.2c pages 1 and 3 for more details. All UPRM candidates reached or surpassed the target proficient performance level on three of the four Application of Content Knowledge items on the Classroom Observation Instrument over the past two spring semesters. All but one of the 51 candidates reached or surpassed the target proficient level on the fourth item. The data from spring 2014 shows all but one candidate meeting or exceeding the target proficient level on Application of Content Knowledge items. See 1.1.2b pages 1 and 3 for more details and 1.2.2 pages 3-4 for the corresponding evaluation rubric.

Agricultural education candidates are evaluated with respect to content knowledge during their two student teaching courses and at two earlier instances: the curricular guide and participation in Puerto

Rico's FFA agricultural exam.

Of the 174 times that UPRM candidates took one of the five Puerto Rico High School Teacher Specialization Certification Tests (PCMAS) over the past three years, 153 (88%) were successful. See 1.1.3. These tests are designed by the CollegeBoard® to measure the knowledge and skills needed to teach each subject competently.

Instructional Practice

UPRM teacher candidates develop their Instructional Practice skills and disposition in their methodology and teaching practice courses. Overall, UPRM candidates fully meet most of the 16 instructional practice criteria in the TCWS. An analysis of the available data on the TCWS over the past three spring semesters shows that over 90% of UPRM candidates fully meet each of the eight criteria under the aspects of Design for Instruction and Instructional Decision-Making. See 1.1.2c for more details, 1.2.2 pages 8-9 for instructions regarding these aspects, and 1.2.2 pages 14-15 for the corresponding evaluation rubrics. A more detailed analysis of the data under the aspects of Assessment Plan and Analysis of Student Learning shows that 1 out of 3 candidates need to improve with respect to the technical soundness of their assessment plan and the clarity and accuracy of their analysis of student learning. It also shows that 1 out of 5 need to improve the clarity of criteria and performance standards of their assessment plan and their interpretation of data in their analysis of student learning.

Half of the items on the Classroom Observation Instrument measure some aspect of Instructional Practice. Over 90% of UPRM teacher candidates reached or surpassed the target proficient level on these Instructional Practice items over the past two spring semesters. All of the 51 candidates reached or surpassed the target proficient level on all seven items related to Strategies (InTASC Standard 8). Forty-eight (95%) of the candidates reached or surpassed the proficient level on the four items related to Assessment (InTASC Standard 7). Forty-six (90%) candidates reached or surpassed the proficient level on the three items related to Planning (InTASC Standard 6). The data from spring 2014 shows similar results with respect to Instructional Practice. See 1.1.2b pages 1 and 4 for more details and 1.2.2 pages 4-6 for the corresponding evaluation rubric.

Professional Responsibility

UPRM teacher candidates demonstrate their professional responsibilities in the methodology and teaching practice courses. An analysis of the available data on the TCWS over the past three spring semesters shows that over 88% to 92% of UPRM candidates fully meet each of the five professional responsibility criteria. See 1.1.2c pages 7-8 for more details, 1.2.2 page 11 for instructions regarding these aspects and 1.2.2 page 18 for the corresponding evaluation rubrics.

Five items on the Classroom Observation Instrument measure candidate Professional Responsibility. Forty-six (90%) of the 51 UPRM teacher candidates reached or surpassed the target proficient level on all five items over the past two spring semesters. The data from spring 2014 shows similar results with respect to Professional Responsibility. See 1.1.2b pages 1 and 5 for more details and 1.2.2 pages 6-7 for the corresponding evaluation rubric.

Over the past three years, 153 (88%) of 174 UPRM prepared teacher candidate attempts to pass a Puerto Rico teacher specialization certification exam have been successful. Over the same period, 1223 (75%) of 1628 teacher candidates not prepared at UPRM were successful. Even though UPRM prepared candidates represent less than 10% of the teacher specialization exam takers, they make the highest score on 1 to 4 of the five exams each year. See 1.1.3 for a complete analysis of UPRM teacher candidate scores on specialty licensure area exams in comparison with all teacher candidate scores and an exam by exam performance analysis.

How does the provider ensure that candidates use research and evidence to develop an understanding of the teaching profession?

Beginning in their methodology course and finishing in their teaching practice course, UPRM teacher candidates prepare a Teacher Candidate Work Sample (TCWS). In the TCWS, the candidate must fully document the planning, execution, and student learning evaluation for a specific standards-based unit of instruction. The TCWS is fundamentally a classroom action research project. As such, the TCWS is a big part of how the UPRM TPP ensures that its teacher candidates use research and evidence to better understand the teaching profession. Successful completion of the TCWS is a requirement for the teaching practice course. See 1.2.1a pages 1-6 for candidate performance and 1.2.2, the TCWS Manual with Standards Alignment, for the tasks, instructions, and rubrics. During the past three spring semesters, over 80% of UPRM candidates have fully met each of the 32 criteria used to evaluate their TCWS and in the process demonstrated that they are able to conduct

classroom research, reflect on the evidence to improve their teaching effectiveness, and develop a better understanding of the teaching profession.

The current Classroom Observation Instrument includes six items regarding Professional Responsibility. Pages 1-4 in 1.2.1b show that UPRM candidates use research and evidence for planning, implementing, and evaluating student progress; to develop an understanding of the teaching profession; and to reflect on their teaching effectiveness at acceptable performance levels.

How do candidates apply content and pedagogical knowledge as reflected in outcome assessments in response to Puerto Rico Professional Standards for Teachers?

With respect to Puerto Rico's Professional Standards for Teachers, both the High School Teacher Specialization Certification Exams (PCMAS) and the Professional Skills Exam are designed by CollegeBoard®, assure that teacher candidates have the content and pedagogical knowledge and professional skills needed to teach their subject competently. Over the past three years, over 85% of UPRM teacher candidates have approved both exams. See https://cboard.odoo.com/slides/slide/boletin-especialidades-pcmas-7 and 1.3.3c for descriptions of the teacher certification exams. See 1.3.3b and 1.3.3d for a comparison of results for UPRM teacher candidates and those for all exam takers. See 1.3.1 for a summary of the exam results.

How do candidates demonstrate skills and commitment that afford all P-12 students access to rigorous college- and career-ready standards (e.g., Next Generation Science Standards, National Career Readiness Certificate, Common Core State Standards)?

UPRM teacher candidates prepare lesson plans and learning assessments in their Evaluation of Learning and The Use of Microcomputers in the Classroom courses as well as in their methodology and teaching practice courses. Every lesson plan and learning assessment must use Puerto Rico's (college and career ready by design - see 1.4.2a and 1.4.2b) Academic Standards. Candidate Classroom Observation Instrument scores on planning and implementing sequential instruction that supports learners in meeting curriculum goals, standards and grade level expectations have all reached the competent (acceptable) or exemplary level for the past two years. TCWS scores for aligning plans, instruction, and assessment with Puerto Rico's Academic Standards corroborate that UPRM candidates can effectively apply content and pedagogical knowledge to support learning at the appropriate grade level as defined by the standards. See 1.4.1 for further details. In addition, see 1.4.4 for how candidates observe and plan the accommodations, adaptations, and special strategies to prepare exceptional children.

With respect to commitment and diversity, UPRM teacher candidates carry out their practice teaching in more than 50 intermediate and high schools across Western and Central Puerto Rico. After carrying out their teaching practice, mostly in challenging public schools, candidates share their experiences with peers and UPRM TPP faculty in a small closing activity. The consistent passion for teaching demonstrated at these activities is remarkable. The majority of these candidates subsequently teach for $1800 monthly salaries in Puerto Rico's public school system with its nearly bankrupt pension fund and no participation in social security. Note: in general, private schools in Puerto Rico pay less than public schools and numerous states actively recruit teachers at UPRM.

Part of the motivation to teach in one of the largest and poorest school districts in the United States likely comes from candidates' background. See 1.4.3a to see that most UPRM teacher candidates come from diverse schools and families that gives them particular insight into the importance of rigorous college and career ready standards.

UPRM has a long tradition of community service and educational outreach that afford its teacher candidates opportunities to assist their content professors working with pre-college students. See 1.4.5 for a brief description of 22 ongoing programs and their impact.

In summary, UPRM teacher candidates use the Puerto Rico Academic Standards in their methodology and teaching practice as well as preparatory education courses. The Standards were explicitly designed to prepare students to be college and career ready. Candidate work is evaluated against the standards and measures up. Candidates demonstrate commitment to preparing all students to be college and career ready in an inclusive classroom environment.

How do candidates model and apply technology standards as they design, implement and assess learning experiences to engage students and improve learning; and enrich professional practice?

Since fall 2015, UPRM teacher candidates prepare a lesson with assessment and post in their class blog as a laboratory assignment in their Using Microcomputers in the Classroom course in which they must model and apply technology standards. Over the past year, 75% of the 190 students who enrolled in the course posted a lesson in their blog that was rated excellent. See 1.5.1 for the assignment instructions, scoring rubric, alignment with ISTE standards, results, and examples.

The revised Classroom Observation Instrument includes two criteria that specifically measure candidate use of technology in the classroom. All the spring 2015 and spring 2016 candidates were rated competent (adequate level) or better on these criteria. A total of 24 of the 28 criteria in the instrument are aligned with ISTE standards. The TCWS includes one criterion on the use of technology. Over the past three spring semesters, 96 of the 100 candidates integrated the appropriate technology in a way that made a significant contribution to teaching and learning or provided a strong rationale for not using technology to meet the use of technology criterion. See 1.5.2 for more about candidate performance with respect to the use of technology to design and deliver instruction and to assess learning during teaching practice.

This semester five UPRM TPP methodology professors are using simSchool to expand teacher candidate classroom experience. The main objective is to increase the diversity of learners that UPRM teacher candidates work with. Still simSchool gives them an opportunity to learn with technology, hence about simulation technology for learning. See 1.5.3 and 1.5.3a for more information.

UPRM teacher candidates show that they meet UPRM, ISTE, and CAEP standards for using technology effectively in the classroom to design and deliver instruction and to assess learning in their Using Microcomputers in the Classroom and teaching practice courses. They are developing their ability to work with diverse learners using the technology of simSchool. See technology learning opportunities through TPP in 1.5.4.

Specialty Licensure Area Data

Program Review Option (per state partnership agreement)

☐ CAEP Program Review with National Recognition (SPA)

☑ CAEP Program Review with Feedback (State-selected standards)

☐ State Program Review (State-selected standards)

Answer the following prompts for programs reviewed for National Recognition (SPA) and Program Review with Feedback. Upload state reports for state reviewed programs.

1. Based on the analysis of the disaggregated data, how have the results of specialty licensure area or SPA evidence been used to inform decision making and improve instruction and candidate learning outcomes?

The Teacher Preparation Program (TPP) and the Agricultural Education Department (AgED) use Puerto Rico's annual Teacher Certification Test results (PCMAS) to evaluate how well their respective programs are preparing candidates to meet UPRM and Puerto Rico Department of Education (DEPR) teacher requirements, particularly the requirements regarding content and pedagogical knowledge. The Teacher Certification Test (PCMAS) results are submitted to the Puerto Rico Title II reports on teacher preparation programs. The DEPR bases 80% of its rating of institutional teacher preparation programs on five years of Teacher Certification Test results. The latest (2014) UPRM TPP rating by the DEPR was excellent (see 1.1.4a). The next rating will be issued in 2017. The UPRM assessment board uses PCMAS results annually to identify strengths and weaknesses in the existing curricula and to make data driven decisions regarding course content and program requirements. The specific content courses required for each of the specialty licensure areas were revised in response to an analysis of PCMAS content test results from 2011 to 2014 for the methodology and student teaching courses [see http://uprm.edu/p/eppcaep/brochures_ppm for revised curricular requirements by licensure area].

The TPP and AgED also use the Teacher Certification Survey (PCMAS Survey) to assess candidate perception of their respective preparation, programs, courses, faculty, and clinical experience. The Teacher Certification Survey results are included in the annual institutional report sent to UPRM. The report provides aggregated responses for UPRM Teacher Certification Test takers and for all Teacher Certification Test takers in Puerto Rico. The survey has confirmed candidate satisfaction with their preparation, especially with regard to content knowledge and pedagogical content knowledge [see 3.6.1].

In addition to the PCMAS Survey conducted by College Board, the TPP and AgED conduct various surveys. These surveys have proven informative and, more importantly, helpful designing initiatives to improve program operations and quality. The surveys include: End of Program Surveys, Cooperating Teacher Surveys, and Practice Center Principal Surveys. Some results were similar regardless of candidate licensure area. One example of changes made in response to findings from these surveys is the remodeling of physical facilities and integrating more technology in courses. In the 2014 End of Program Survey, candidates made specific recommendations for improving the available technology

resources. The alumni survey of 2015 repeated similar concerns regarding technology resources and integrating technology in coursework [see 4.4.3].

The 2014 End of Program Survey and 2015 Alumni Survey paralleled 2014 clinical faculty reports that teacher candidate technology use during teaching practice was limited and weak in terms of instructional effectiveness. Since UPRM teacher candidates had performed relatively well with respect to the use of technology on the basic teacher certification battery (PCMAS - see 1.1.4), this was attributed in large part to the limited availability of computers, projectors, internet connections, and educational technology in the teaching practice center classrooms. Even though such limitations were and continue to be a common problem in the Puerto Rico public school system, the 2015 surveys showed that UPRM teacher candidates were aware of the need to further develop their educational technology skills to respond to student learning needs. Subsequently the TPP remodeled its facilities to provide an additional computer center and to add "smart boards" and data displays to several classrooms.

The TPP used the Resource Center for Investigation and Educational Services (CRUISE in Spanish http://uprm.edu/cruise) and the Resource Center for Distance Education (CREAD in Spanish) to address candidate concerns regarding resources for planning and preparing for their teaching practice classes. CRUISE received substantial external funding from conducting professional development for PRDE teachers in 2013 that has served to sponsor TPP educational research and acquiring classroom technology. CRUISE continues to submit research and professional development proposals and to provide candidates with technology resources that they can use during their teaching practice including laptops, projectors, iPods and SwivlsTM . CREAD (http://cread9.wixsite.com/creaduprm) provides technology assistance and appropriate tools so future teachers can create and use electronic educational modules during their teaching practices and their demonstration classes.

As well as providing more education technology facilities and equipment, the TPP requires teacher candidates to create and maintain a web-based Electronic Portfolio in their methodology and teaching practice courses as well as the "Use of the Micro-computer in the Classroom" course. The latter course, EDPE 3129, requires teacher candidates to create and post a complete lesson in their blog that addresses a standard in their teaching specialty and includes a test as an assessment strategy [see 1.5.1 for assignment rubric and data].
In addition, the TPP has conducted technology integration skills workshops targeting candidates in methodology and teaching practice courses. The TPP is monitoring technology use in methodology and practicum courses to determine if teacher candidate educational technology use and skills improve during the 2016-17 academic year.
The PRDE distributed the new PR Core Content Standards in 2014. The PR Core Content Standards are college and career-ready standards based on Common Core. The Science Standards were aligned with NGSS. Lesson plan requirements, instruments, and rubrics in TPP courses were revised to align with the new PR Core Content Standards. In fall 2014 the TPP faculty decided to change the Classroom Observation Rubric to align with the 2013 InTASC standards, the revised PRDE Professional Standards as well as with the indicators in the 2014 PR Core Content Standards and new PRDE lesson planning guidelines (Carta Curricular 6-2014-2015). After reviewing several instruments and rubrics, the TPP translated and adapted the Utah Valley University School of Education's "Continuum of Instructional Practice" with their permission. That was the beginning of the new "Observation Instrument for Teaching Practice Improvement" replacing the former "Classroom Observation Instrument". The translation from English to Spanish was followed by a back translation from Spanish to English, and then it was distributed to clinical faculty and cooperating teachers in each licensure specialty for content validity. A questionnaire was e-mailed to clinical faculty, cooperating teachers, and school directors to collect suggestions and recommendations about the new instrument. Clinical faculty met to align the instrument to the various standards and to UPRM student learning outcomes. After a pilot test during the 2014-15-fall semester, changes were made to clarify the language clarification. During the 2014-15 spring semester, all the TPP specialty areas used the "Observation Instrument for Teaching Practice Improvement". The new 28-item instrument was universally acclaimed as an improvement over the 72 and 78-item predecessors. The instrument has improved teacher candidate feedback in quantity and quality for all TPP specialty areas. Two years of disaggregated data have shown there are differences in item scoring by area that require discussion and follow up. A clinical faculty "Data Day Retreat" is scheduled for fall 2016 and this issue will be given high priority in order to improve candidate-learning outcomes.

The TPP, the AgED, and licensure area content departments use candidate transcript data including: content and education courses previously taken, grades obtained, overall GPA, and specialized GPA to plan course offerings tailored to each licensure area. The same data are used to counsel students during enrollment. Candidate transcript data allow education and content departments to identify course offerings needed. The courses needed by teacher candidates and the course demand by non-candidates are taken into account for allocating teaching resources. In this regard, early identification of Methodology and the Practice Teaching students is critical in order to recruit the needed adjunct university and clinical faculty.

The departments and faculty regularly use candidate faculty evaluation for decision-making. Student evaluations are taken into account at UPRM for teaching assignments, tenure, and promotion. Faculty use student teaching evaluations to monitor and improve their classroom performance. The departments use aggregated evaluation data to plan faculty (university and clinical) professional development every semester. Candidate evaluations of cooperating teachers are a major factor in subsequent teaching practice placements.

The TPP and the AgED use field and clinical experience supervisory data such as Teaching Practice Center (school site) attendance hours and UPRM teacher preparation seminar and workshop attendance to assure both candidates and clinical faculty meet their responsibilities. Teaching practice grades take school, seminar, and workshop attendance into account.

Candidate statistics and demographics such as content programs, year of curricular sequence enrollment, academic status, number enrolled, retention, and teacher certification exam results are used to complete annual institutional reports that affect the allocation of funds. In the 2015-2016 spring semester, there were 117 teacher candidates and potential teacher candidates with 18 credits or more in Education courses from 39 UPRM undergraduate programs, 10 graduate programs, and 2 non-degree programs.

2. Based on the analysis of specialty licensure area data, how have individual licensure areas used data for change?

The classroom observation and teacher certification exam data collected showed that UPRM candidates had developed sufficient knowledge, skills, and dispositions to be effective in the classroom. However, comparing the data across specialty licensure areas revealed a weakness in communications skill development among non-language teacher candidates. The analysis of Teacher Candidate Work Sample results showed the same disparity in communication skills across specialty licensure areas. Subsequent discussion brought out that whereas language teacher candidates are routinely required to revise written assignments throughout their academic career, non-language teacher candidates rarely have similar requirements or opportunities. Decision: require all potential teacher candidates to revise poorly written education foundation course assignments and refer candidates needing additional help to the College of Arts & Sciences Writing Center with their written course assignments. The expected summary passing rate is 93% for UPRM candidates in 2016 (pending revision by UPRM and CollegeBoard®).
Historically, the highest score on 1 to 4 of the five Puerto Rico Specialization Teacher Certification exams has been made by a UPRM teacher candidate each year. In March 2016, UPRM teacher candidates made the highest scores on the Mathematics, English, and Spanish Specialization Exams. Last year two UPRM teacher candidates tied for the top score on the Mathematics Specialization exam. Given that UPRM teacher candidates account for 5 - 20% of the test takers for any one specialization exam, this attests to the breadth and depth of UPRM teacher candidate preparation in licensure area content.
With a 100% passing rate on Puerto Rico's science teacher specialization exam six of the past seven years, UPRM's science teacher candidates have clearly been well prepared. In Puerto Rico's high schools, the science teachers are responsible for laboratory safety as well as other aspects of school safety. Given this particular responsibility, the TPP offers a series of modules for future science teachers in the Theory and Methodology of Science Teaching course.

The UPRM Spanish teacher candidates have compiled a 100% passing rate on Puerto Rico's Spanish teacher specialization exam five of the past seven years including the highest score in 2016. With only 11 candidates over the past three years and an average margin of 40 points above the minimum passing score on the general high school teacher exam have revealed no particular deficiencies. The areas of concern for UPRM Spanish teacher candidates are two of the three that apply to all UPRM candidates: how to develop critical thinking among students and using educational technology.

Over the years, UPRM English teacher candidates have also performed well (90% passing rate) on Puerto Rico's English teacher specialization exam. However, an analysis of English teacher candidates' classroom performances raised concerns about the unique requirements of teaching English to Puerto Rico's native Spanish speakers. In 2011-12, the Perspectives on Teaching English as a Second Language (INGL 5010) became a co-requisite for the Teaching English Methodology course.

The success rates for UPRM candidates on the English teacher certification exam has not changed significantly, from the year 2014 to 2016, twenty-seven of twenty-nine candidates passed the exam on the first attempt, two passed on the second attempt, and two failed on a single attempt. One of those two failures was a UPRM candidate who graduated prior to 2010. The change was made to better prepare candidates to address the needs of Puerto Rico's students and of mainland students for whom English is a second language, an area of increasing demand.

UPRM mathematics teacher candidates have also performed very well on Puerto Rico's mathematics teacher specialization exam making the top score seven of the past seven years and 90% approving the exam every year. It was a comparison of the mathematics content required by the UPRM Math Education program with that recommended for teachers by the National Council of Teachers of Mathematics that led to significant program changes. The 139 credit, virtual double major in mathematics and education was revised to include Discrete Mathematics, Mathematics History, the Use of Microcomputers in the Classroom, the Use of Technology in Teaching Mathematics, and the Seminar on the Nature and Needs of Exceptional Children (see http://math.uprm.edu/academic/programs/bachelor-math.html for complete program). Further analysis revealed that some math teacher candidates enrolled in their Teaching Practice before completing a course in Geometry. The TPP now requires 18 credits in specific math courses including Geometry before enrolling in the mathematics methodology course.

UPRM social studies teacher candidates were performing poorly on Puerto Rico's social studies teacher specialization exam with less than 70% approving the exam from 2010 to 2013. A transcript analysis revealed that successful candidates had taken specific courses that unsuccessful candidates had not. Based on this analysis, the UPRM Social Sciences Department and the TPP established specific content courses in each of the five social science bachelor's programs to require for enrolling in the social sciences methodology course. In 2014, the approval rate for UPRM social science candidates jumped to 89%. In fact, over the past three years 47 of 56 (84%) UPRM social science and history teacher candidates have passed their certification exam. During that time three UPRM social science teacher alumni took the exam a total of 7 times giving the appearance of lower success rates. The TPP will continue analyzing the results.

There is no specialization exam for Physical Education licensure. However candidates must practice teaching in both high school and elementary school and pass both high school and elementary professional teacher certification exams. To prepare for the unique challenges of teaching Physical Education, since 2014 UPRM candidates develop a biomechanics skill analysis project (EDFI 4106), take two courses in Motor Learning (EDFI 4005 and EDFI 4179) before enrolling in the Physical Education methodology course.

During practice teaching prior to 2014, supervisors and cooperating teachers alike found that teacher candidate technology use during teaching practice was limited and weak in terms of instructional effectiveness. Since UPRM teacher candidates had performed relatively well with respect to the use of technology on the basic teacher certification battery (PCMAS - see 1.1.4), this was attributed in large part to the limited availability of computers, projectors, internet connections, and educational technology in the teaching practice center classrooms. Even though such limitations are a common problem in the Puerto Rico public school system, UPRM teacher candidates need to develop skills in the use of educational technology as well as the disposition to learn how to use technology as it develops to respond to student learning needs. One of the ways the UPRM Teacher Preparation Program has addressed the development of educational technology skills by its teacher candidates is by requiring them to create and maintain a web-based Electronic Portfolio in the methodology and teaching practice courses as well as the "Use of the Micro-computer in the Classroom" course. The latter course, EDPE 3129, requires teacher candidates to create and post a complete lesson in their blog that addresses a standard in their teaching specialty and includes a test as an assessment strategy (see 1.5.X for assignment rubric). With respect to the lack of technology in teaching practice centers, the TTP has acquired laptops, projectors, Swivls™ and iPods. These are loaned to candidates to record classes during their teaching practice. The TTP is conducting technology integration skills workshops targeting candidates in methodology and teaching practice courses. The Resource for Research and Educational

University Center (CRUISE) and the Resource Center for Online Education (CREAD) have partnered to acquire educational equipment and to train assistants to help teacher candidates prepare technology enhanced lessons since 2015. The TPP is monitoring technology use to determine if teacher candidate educational technology use and skills improve during the 2016-17 academic year.

3. For Program Review with Feedback only: How does the specialty licensure area data align with and provide evidence for meeting the state-selected standards?

The Puerto Rico Teacher Certification Specialization exam (PCMAS) results are an important source of specialty licensure area data. Specialization exams are required for licensure to teach Science, English, Spanish, Social Studies/History and Mathematics. The content of these specialization exams is based on an analysis of the curricular requirements at Puerto Rico's higher education institutions and the definition of a competent teacher in the material to be taught as expressed in official PRDE documents (translated from the Boletín Especialidad PCMAS -https://latam.collegeboard.org/slides/slide/boletin-especialidades-pcmas-7). The CollegeBoard® Bulletin includes an outline of the topics to be addressed in each specialization exam. In 2015, the Puerto Rico Department of Education worked jointly with CollegeBoard® to re-conceptualize and revise the Teacher Certification Exams so that the exams would serve the needs of Puerto Rico's PK-12 students and to evaluate all of the competences that a teacher candidate must develop to be effective in the classroom (see 1.1.4b). By design, the PCMAS is consistent with the Puerto Rico Professional Standards for Teachers (PR-PST see http://www.de.gobierno.pr/files/Estandares_Profesionales_de_los_Maestros_de_Puerto_Rico_2008.pdf or 1.1.1c for translation). Hence exam results provide the UPRM TPP with direct measures of how well its teacher candidates are meeting the PR-PST. Each of the specialization exam results provides score breakdowns in 3 to 6 sub-areas that allow the UPRM TPP to detect content and pedagogical topics that may need attention in a particular licensure area.

The UPRM TPP's shared values and beliefs framework is consistent with the Puerto Rico Department of Education professional standards, as well as with institutional Student Learning Outcomes, national standards (CAEP), and performance standards (InTASC 2013). Based on current teaching-learning theory, validated neuroscience learning research, and wisdom of practice; the UPRM TPP established ten teacher candidate proficiencies that align with the standards mentioned [see alignments in 1.1.1a and 1.1.1b]. In order to assure that its candidates develop the knowledge, the skills, and the dispositions to be effective teachers in the PR school system; UPRM TPP teacher candidates' development of these ten proficiencies is measured throughout the program particularly at transition points (see URPM TPP Assessment System Procedures guide in 5.1.1) with key course grades and key rubrics. Two key rubrics are the Observation Instrument for Teaching Practice Improvement and the Teacher Candidate Work Sample. These rubrics address all ten UPRM TPP proficiencies and consequently the eleven standards in the PR-PST. Every education course goal and objective is aligned to the ten candidate proficiencies which in turn are aligned to PR-PST as well as all the aforementioned set of institutional and national standards. Each education course addresses one or more of the ten UPRM TPP proficiencies (see http://uprm.edu/p/eppcaep/syllabi for syllabi details).

Data derived from PCMAS results, Classroom Observation instruments, electronic portfolios, content course credits and grades are disaggregated by licensure area and analyzed against the candidate proficiencies to determine what aspects need attention. The results of this analysis are compared with aggregated teacher candidate data derived from TCWS, education course instruments, and education course grades to uncover patterns as well as possible courses of action to address areas of concern.

4. For National Recognition only: How are SPA reports that are not Nationally Recognized being addressed?

N/A

State Review Only: Upload State Program Reports here.

Standard 2: Clinical Partnership and Practice

   i. Evidence/data/tables (Upload each item of evidence under the appropriate components of the standard.)

  1 2.1 Clinical Partnership and Practice - Partners Co-construct Mutually Beneficial P-12 Partnership

      2.1.1 Law 129

      2.1.2. PRDE Policy Letter 2-2012-2013

      2.1.3 PRDE Monthly Meetings with TPPs

2.1 Partners co-construct mutually beneficial P-12 partnerships

2   2.2 Partners Co-select, Prepare, Evaluate, Support, and Retain High-quality Clinical Educators

    🖑 2.2.1 Candidate Placements and Cooperative Teachers

    🖑 2.2.2 TPP UPRM Description and Transition Points 2016-17 Undergraduate Catalog

    🖑 2.2.3 Official Placement Letters School Directors and CT - examples

    🖑 2.2.3a Conceptual Framework Specific Evidences

    🖑 2.2.4 Meetings with Cooperative Teachers, Directors and Supervisors to Evaluate the Observation Rubric

2.2 Partners co-select, prepare, evaluate, support, and retain high-quality clinical educators

3   2.3 Partners Design High-quality Clinical Experiences

    🖑 2.3.1 Best Highly Qualified Cooperative Teachers

    🖑 2.3.2 Best Faculty and Clinical Experience Supervisors

2.3 Partners design high-quality clinical experiences

*   ii. Analysis of evidence (through comparison, benchmarking, trend interpretation, etc.) that makes the case that the standard is met

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Clinical partners co-construct mutually beneficial P-12 school and community arrangements, including technology-based collaborations in six different ways:
1) All clinical collaborations are governed by the Puerto Rico Department of Education (PRDE) through dispositions in Law 129 of 2016 (2.1.1) and Policy Letter 2-2012-2013 (2.1.2) which regulate the operation of Educational Practice Experience Centers (EPEC) in Puerto Rico.
2) PRDE through the Educational Clinical Experience Program invites the Teacher Preparation Program (TPP) Directors or Clinical Experience Coordinators of each higher education institution to monthly meetings to discuss matters related to clinical experience for decision making and agreements (2.1.3).
3) Candidate placements and selection of cooperating teachers (CT) for each EPEC are discussed every semester (2.2.1).
4) Official placement letters are sent to School Directors and CT at the EPEC where candidates will carry out their clinical practice (2.2.3 & 2.2.3a).
5) Technology based collaboration: the CT Certification Course for new highly qualified CT has been offered online two times (http://uprm.edu/p/eppcaep/cooperating_teacher_course); the course syllabus was prepared by TPP Directors and Clinical Experience Coordinators (http://uprm.edu/cms/index.php?a=file&fid=14042).
6) Superintendents, TPP Directors, CT and Clinical Experience Supervisors (CES) met at UPRM to evaluate the Observation Rubrics and the TPP Conceptual Framework (CF) (2.2.4).

Clinical partners share responsibility for continuous improvement of candidate preparation by choosing the best highly qualified CT at the practice centers and the best faculty and CES in the TPP (2.3.1 & 2.3.2). Mutually agreeable expectations for candidate entry, preparation and exit are established in the PRDE Regulations for Teacher Certification 2012 http://uprm.edu/p/eppcaep/prde_regulations_for_teacher_certifications. To ensure theory and practice are linked, maintain coherence across clinical and academic components of preparation, candidates must follow the Transition Points in the 2016-2017 UPRM Undergraduate Catalog (2.2.2) which establish candidate qualifications, course sequences and grade point averages required for certification.

Clinical experience entry, progression and completion requirements are published and explained in the CF (http://uprm.edu/p/eppcaep/uprm_tpp_conceptual_frame) and in TPP brochures (see http://uprm.edu/p/eppcaep/brochures_ppm). Accountability for retaining CT and CES are demonstrated through several instruments (http://uprm.edu/p/eppcaep/ppmes_evaluation) which are continuously assessed and updated. TPP uses results of multiple indicators and appropriate technology-based applications to establish, maintain, and refine criteria for selection, performance evaluation, continuous improvement, and retention of clinical educators in all clinical placement settings. Data is discussed with TPP faculty and CES and used for decision making (see http://uprm.edu/p/eppcaep/meetings_and_committees) and to assess or modify clinical experiences of teaching practices; all TPP CES meet at least twice a semester to discuss details of candidate performance, train in technology and discuss new normative documents published by PRDE. To become certified as a CT, teachers should take a 45-hour course which expires every 5 years. To

recertify, CT take a 15 hour course. All courses are offered by the TPP with an ongoing agenda prepared by the PRDE in collaboration with TPP Directors of all higher education institutions. The course is offered by both institutional attendance and on-line mode (http://uprm.edu/p/eppcaep/cooperating_teacher_course).

Through funding provided by external funds projects, TPP has provided continuous improvement and professional development courses to CT on effective planning for teaching through the use of standards (Standards in Practice (SiP), proof plans in online Web Tools), classroom management (Teach like to Champion, AFoRMAR) and use of IT technology (http://www.upr.edu/twt/). The TPP and Agriculture Education (EDAG) work in different ways with the PRDE to design clinical experiences of sufficient depth, breadth, diversity, coherence, and duration to ensure the candidates demonstrate their developing effectiveness and positive impact on all students learning and development. At the beginning of each school semester, TPP and EDAG Directors visit the educational regions and meet with the Special Assistant of the Secretary of Education of each district to discuss the assignment of candidates into EPEC along with the selection of possible CT who will monitor them (2.2.3). Before clinical experiences, TPP candidates carry out classroom observations in elementary and secondary level schools. Schools in elementary and intermediate levels are usually located in rural areas. Secondary schools are usually located in urban areas. All secondary schools receive students from various socio-economic backgrounds and from diverse geographical areas, either rural or urban. This allows teaching candidates to come in contact with a greater diverse student population. Candidates from the Physical Education Program, Fine Arts, and Theatre majors can choose whether to carry out their clinical experience at the elementary level (P-K-5th) or at secondary level. Candidates from other specializations are assigned to either the elementary-intermediate level (6th, 7th, and 8th) or secondary level (9th to 12th). From 2013 to 2016, with the authorization of PRDE, TPP placed candidates in approximately 43 EPECs, of which 29 are located in urban zones and 14 in rural zone (http://uprm.edu/p/eppcaep/clinical_practice_centers). EDAG places agriculture candidates in approximately 36 EPECs, of which 19 are in the rural area and 17 in the urban area.

Candidates are required to attend a week-long seminar (20 hours) prior to working at their assigned EPECs. During this week, technology skills and behavioral issues are explored and discussed. During the clinical experience, CES and candidates meet weekly in order to provide support with class planning, assessment, strategies, techniques, supplies and technological assistance. Since candidates evaluate seminars offered each semester, they may recommend new topics for the following semester (http://uprm.edu/p/eppcaep/ppmes_evaluation). Candidates are required 30 hours of classroom observation at either public or private schools before they reach their EPEC designation. Fifteen hours of observation and collaboration are required at a special education classroom (page 33 in http://uprm.edu/p/eppcaep/clinical_experience_manual). An additional 15 classroom observation hours in methodology course of the candidate's content area are required. This 15-hour experience allows candidates to become acquainted with the EPEC where they will probably complete their clinical experience. Candidates may choose another school to complete their clinical requirements. A total of 300hours must be clocked during the clinical experience, i.e. 4 hours a day, 5 days a week. Candidates are also required to attend a weekly meeting with their CES which can be 1to 3 hours long.

CES are required to carry out 6 visits to the assigned EPEC during the semester. During the first visit, the CES meets the School Director, candidates are introduced, and they become acquainted with the CT, all other follow up visits are planned, the teaching practice objectives are discussed, evaluation instruments (1.1.2) and regulations are reviewed. Candidates are present at this meeting as well as in all subsequent meetings. The candidate's CES and CT exchange contact information: email addresses and cell phone numbers. There is constant communication between the two and this allows for adequate feedback regarding content matters, skills, or dispositions either in person or online; CT sign the CES's timesheet after each classroom visit (page 33 in http://uprm.edu/p/eppcaep/clinical_experience_manual).

Multiple clinical experience performance based assessments are used to demonstrate candidate development of the knowledge, skills, and professional dispositions that are associated with a positive impact on the learning and development of all P-12 students. The candidate observation instrument is periodically updated and aligned with InTASC Standards, CAEP Standards and PRDE Professional Standards (pages 48-68 in 5.1.1) which the CES and CT use for 3 formative evaluations each. After each assessment, the CES and CT discuss the results with the candidate. Other

assessments are a reflective essay on candidate's teaching philosophy, the E-portfolio (which is worked throughout several courses) includes the Teacher Work Sample which showcases their lesson plans, teaching unit, evaluations and several samples of student work. A detailed description of the assessment at different key points is explained in the UPRM TPP Assessment System (5.1.1).

Standard 3: Candidate Quality, Recruitment and Selectivity

i. Evidence/data/tables (Upload each item of evidence under the appropriate components of the standard.)

1   3.1 Recruits and Supports High-quality and Diverse Candidate Pool

    3.1.1 Minimum Admission Index UPRM

    3.1.2 Agencies Recruiting TPP Candidates

3.1 Recruits and supports high-quality and diverse candidate pool

2   3.2 Sets Selective Admission Requirements

    3.2.1 TPP Candidate GPA by Education Program 2013-2016

    3.2.2 Admission Program Progression by Transition Point

    3.2.3 Key CEEB Admission Scores for all UPRM Potential Candidates 2013-2016

3.2 Sets selective admission requirements

3   3.3 Monitors Attributes and Dispositions Beyond Academic Ability

    3.3.1 Entry Interview - Inicial Instrument

    3.3.3a TPP Entry Interview Revised - Final Instrument

3.3 Monitors attributes and dispositions beyond academic ability

4   3.4 Creates and Monitors Candidate Progress

    3.4.1 TPP Candidate Invitation to Orientation Letter

    3.4.2 TPP Candidates 2nd Progression Point Evaluation Before Enrolling in Methodology

    3.4.4 TPP Clinical Experience Supervisors Meetings

3.4 Creates and monitors candidate progress

5   3.5 Candidate Positive Impacts on P-12 Students

    3.5.1 UPRM PCMAS Report and Tables

3.5 Candidate positive impacts on P-12 students

6   3.6 Candidates Understand the Expectation of the Profession

    3.6.1 PCMAS Survey Teaching Preparation and Teaching Experience

3.6 Candidates understand the expectation of the profession

*   ii. Analysis of evidence (through comparison, benchmarking, trend interpretation, etc.) that makes the case that the standard is met

The Teacher Preparation Program (TPP) recruits diverse candidates through four major activities where it orients students from the diverse schools (public and private) and colleges (Arts & Sciences, Business Administration, Agriculture and Engineering) to enter the curricular sequences or alternative routes. Candidates possess diverse academic interests and come from diverse socio-economic environments. The departments of Agricultural Education (EDAG), Math Education and Physical Education traditionally recruit through the University of Puerto Rico Mayaguez (UPRM) Admission's Office hence candidates must comply with the minimum admission index (IMA in Spanish) established for each department (3.1.1). UPRM Academic Senate approves the IMA which is subject to revision every year.
Recruitment Activities:
1) The Annual UPRM Open House on campus; UPR hosts its annual UPR EXPO where eleven campuses expose their diverse academic offers for all public and private high schools island wide to recruit the best students (http://uprm.edu/p/eppcaep/open_house__other_activities). TPP takes part in both activities and provides information to potential candidates to entice admissions; TPP brochures are handed out for the various TPP areas of specialization. Occasionally, candidates who are in the Future Teacher Association (FTA) collaborate by speaking with the future students.
2) Through first-year student orientations where TPP admission information is offered both in writing and orally both English and Spanish (http://uprm.edu/p/eppcaep/brochures_ppm).

3) Through the Foundations of Education which UPRM students can take as a free or recommended elective towards their Socio-Humanistic electives. Potential candidates are given the brochure and invited to visit the department for a more personalized orientation.

4) Diverse academic counselors at the various departments that offer updated information of the TPP. Once students have declared their intention of taking additional courses in education, they are interviewed and advised to formally apply through the Registrar's Office for their admission to TPP. The application and student academic record is evaluated to verify the Grade Point Average (GPA) entry requirement; TPP proceeds to accept their application and schedules a teaching disposition interview. Our candidates come from diverse departments such as: Plastic Arts, Biology, Micro Biology, Physics, Chemistry, Mathematics, Psychology, Sociology, Political Sciences, Humanities, History, Spanish, English, Agriculture, Chemical Engineering, Electrical Engineering and Industrial Engineering; all of which account for diverse forms of thinking and interests parting from their initial career selection. Students admitted to TPP during 2013-14 up to 2015-16 academic years were from 53 out of 78 towns in Puerto Rico. Forty 48%were from western; 13.5% from northern; 14% from southern; 1.5% come from the eastern part, the most distant from Mayaguez; and 24% from the central mountainous region, which is the poorest in economic terms (http://uprm.edu/p/eppcaep/map_of_candidates_origin). TPP candidates reflect diverse demographic socioeconomic origins, similar to those of students from PK-12 in Puerto Rico. The TPP and EDAG directors receive monthly orientations regarding the national and local teacher recruitment needs with officials from the Institute for the Professional Development for Educators at the Puerto Rico Department of Education (PRDE) and the Educational Clinical Experience Program. TPP also receives recruitment offers from various school districts, private and public schools in Puerto Rico and the United States. During 2014-2015, we received an average of 40 applications to cover teaching positions in the following areas of specialization: Theatre (2), Spanish (6), English (7), Math (7), Science (6), Chemistry (3), Physics (3), Physical Education (3), History (2), Social Studies (1) and Environmental Sciences (1). We also received invitations to participate in 3 job fairs, one from the state of Pennsylvania, one from Dallas, Texas and one from Portland, Maine (3.1.2). The PRDE publishes on their website http://intraedu.dde.pr/empleos/default.aspx all teaching openings open for different areas of specialization. Each region has a website for special recruitment regarding areas of urgent hiring needs in PR. When PRDE publishes an announcement, TPP sends this information out in an e-mail to TPP alumni through a database of e-mails which is expanded every semester to include recent graduates who completed the requirements for their teaching license. PRDE establishes in their Regulations for Teacher Certification (2012) the requirements for the regular teaching license: It specifies that from 2012-2013 to 2015-2016, candidates have to approve the fundamental courses, are required to pass the Teacher Certification Examination (PCMAS) and must comply with a concentration and general GPA of 2.80 of a 4.0 scale. Parting from 2016-2017, the minimum required GPA will increase to 3.0 of a 4.0 scale (http://uprm.edu/p/eppcaep/prde_regulations_for_teacher_certifications). UPRM establishes an entry GPA which responds to the demand and supply of each academic year. For the curricular sequence and alternate route, TPP establishes the entry index to the program according to the requirements established PRDE, therefore TPP candidates who entered from 2012-2013 until 2015-2016 had a general GPA of 2.80 of a scale of 4.0 in their concentration. However, our statistics show the entry index for specialization in professional courses and the exit GPA is higher than 2.8 (3.2.1). TPP ensures the average GPA of its accepted cohort of candidates meets or exceeds the CAEP minimum of 3.0 throughout several progression points in the program (3.2.2). The 2013-2014 cohort of 84 candidates had an admission index average of 3.64; a specialization index of 3.50, a professional index of 3.61 and the cohort completed their bachelors with a general GPA of 3.19. The 2014-2015 cohort of 70 candidates had an average admission index of 3.74, a specialization of 3.67, a professional index of 3.70 and completed their bachelor's degree with a general GPA of 3.38. The 2015-2016 cohort of 63 had an average admission index of 3.66, a specialization index of 3.69, and a professional index of 3.67 and they completed their bachelor's degree with a general GPA of 3.25. Regarding the group average performance on nationally normed ability /achievement assessments, in PR, TPP candidates take the College Entrance Examination Board (CEEB). Admission to UPRM is very competitive; indices are based on a combination of high school GPA and CEEB Verbal and Mathematical Reasoning scores. According to the recently completed MSCHE report, the average UPRM admission index is roughly 20 points higher than the average UPR admission index. The median score on the CEEB Verbal and Mathematical Reasoning has varied from 409 to 449 and from 399 to 430 over the past three years (October and February exam dates). There were at least 27,000 exam takers on each of the dates used for comparison. Scores in the 450-499 range were in the 60th to 70th percentile range on these exams (3.2.3). The great majority of teacher candidates

admitted to UPRM program scored well above the national norm on standardized college admission exams.

TPP establishes and monitors attributes and dispositions beyond academic ability that candidates must demonstrate at admissions and during the program. In the past, TPP carried out an informal interviews exploring potential candidate teaching dispositions. However, beginning the first semester of the 2016-2017 academic year, an instrument will be used which was constructed by the education programs to determine what candidate attributes and dispositions students in their first year understand are important in the development of their careers. Upon the review of the literature, 21 dispositions were selected, which according to Johnson & Reman (2007) are the most important in the professional development of a candidate or teacher, all of which were aligned with InTASC in the validation process. In the pilot study, 20 first-year candidates answered a series of questions and through their answers, a sense of what their teaching dispositions are and what would they bring to their teaching once they become educators is palpable. The analysis of the open-ended questions was done through coding, establishing categories and subcategories which were obtained from the answers to the questions. To analyze the dispositions, the answers were categorized and the frequencies of the ranking counted. (Hernandez Sampieri, 1998, p. 289-307). To validate the content of the instrument, 20 students in the first education course were asked to rank the dispositions from the most important to the least important and then explain their selection. This education course is taken by students at UPRM as a socio-humanistic elective which is offered to all colleges, therefore securing a wide range of participants regarding academic preference (3.3.1). After validating the instrument, the recommendations were taken into consideration and the dispositions were reduced to 8. A professor from psychology, specialist in educational psychology validated the content of the instrument followed by a professor of Spanish and one from TPP who checked the writing and spelling in Spanish. These professionals recommendations were integrated into the document (3.3.1a). The modified questionnaire was administered a second time to the same pilot group for a measure of stability to calculate reliability (Creswell, 2009, p. 145-170; Fowler, 2009, p. 110-112; Hernández Sampiere, 1998, p. 234-244). In both instances, most (34%) of the first-year candidates chose professionalism as the most important disposition a candidate or regular teacher must possess. On the other hand, they selected community of learners (66%) as the least important disposition. This semester, PRDE issued Policy Letter 12-2016-2017 (http://uprm.edu/p/eppcaep/policy_letter_professional_learning_communities) where they mandate that all schools establish Professional Learning Communities (MECPA). The main objective of MECPA is to improve teachers' educational practices and increase collaborative leadership as a means to improve student achievement by using data analysis and continuous reflection (p. 4). In order to monitor our TPP candidates' teaching dispositions, we will administer this survey to candidates at three different points: 1) in their first year 2) during their methodology course; and 3) at the end of their clinical practice. This will provide the opportunity to observe candidates' progression and if there has been a change in their teaching dispositions. Questionnaires will be placed in their files. TPP continuously observe candidates' dispositions in all of the candidate's classes. During the clinical experience observation, the CES is keen to note in the observation instrument if these dispositions are present in the candidates' performance (http://uprm.edu/p/eppcaep/observation_instrument_for_teaching_practice_impro). TPP has created criteria for program progression and monitors candidate advancement from admissions through completion. These moments are clearly outlined in the TPP Conceptual Framework (CF) and at what points they are monitored and candidate progression is observed (pages 45-50 in http://uprm.edu/p/eppcaep/uprm_tpp_conceptual_frame). First, potential candidates must comply with admission's certain criteria, i.e., they should have a general and specialization GPA of 2.80 up to 2015-2016; and beginning fall of 2016-2017, a general and specialization GPA of 3.0. After the potential candidate is positively evaluated, they are invited to TPP for a meeting, interview and orientation regarding curriculum. (3.4.1). The second progression point is observed after the candidate has approved 15 credits in foundation courses with a GPA of 3.00 and above. Candidates then request the methodology course of their area of specialization which is either approved or denied based on the evaluation of the candidate's performance (3.4.2). In methodology, candidates construct lesson plans, demonstrate a class using technology and follow the standards and expectations required for each area of specialization and grade level according to the PRDE which focuses on College-and-Career-Ready Standards. (www.pr.ed.gov Puerto Rico Standards). All candidates prepare an electronic portfolio where they evidence their progress. Through this e-portfolio, candidates ascertain they know and use the contextual factors of their EPEC to correctly plan and carry out an inclusive class (1.2.2). The candidate is required a minimum of 15 hours of observations and reflections at a clinical experience center to observe a cooperating teacher perform

teaching/learning experiences related to the candidates' area of specialization (http://uprm.edu/p/eppcaep/clinical_experience_manual). After the candidate passes the methodology course, there is a third evaluation of the candidate's record to ensure the candidate has upheld a general and concentration GPA of 3.00 or higher. If so, the candidate is registered in the clinical practice course. The fourth progression point is observed when the candidate performs the clinical experience and attends the Educational Practice Experience Center (EPEC) 4 hours every day, 5 days a week where they carry out a daily class while observed by the CT and aide the CT during the other three remaining hours. The CES will visit 6 times during the semester to monitor and carry out formative and summative evaluations; and the CT will monitor daily and carry out formative and summative evaluations as well (http://uprm.edu/p/eppcaep/observation_instrument_for_teaching_practice_impro). Both the CT and CES may evaluate candidates at the same time or do it separately. Candidates support their progress through their e-portfolio and through the careful construction of learning objectives, formative assessment, test construction and adequate use of technology as a teaching tool. On the e-portfolio candidates present their tabulations and analysis to illustrate student progress and to make teaching decisions regarding re-teaching to continue forward with the next learning cycle. At the end of this experience, candidates present a written reflection where they self-assess their clinical practice in the TCWS (1.2.2). CES meet twice a semester to share information related to candidates' performance (3.4.3).

Before TPP recommends any completing candidate for licensure or certification, it documents the candidate has reached a high standard for content knowledge in the fields where certification is sought and can teach effectively with positive impacts on P-12 student learning and development. Both TPP and EDAG must determine which candidates are qualified to take the State Teacher Examination (PCMAS) which is offered during March. Every January, the records of candidates who have completed their clinical practice or are currently enrolled in the clinical practice and have informed TPP of their interest in taking the State Examination are evaluated. No candidate may take PCMAS without the prior approval by the TPP or EDAG Directors. PCMAS in Puerto Rico is administered by College Board and is usually offered on the last week of March. The results are received 45 working days after the exam is administered, generally mid-May, and at that time as well, candidates self-assess themselves and evaluate TPP. Upon receipt, TPP immediately identifies candidates and the parts they did not pass in PCMAS. Meetings with the academic departments involved are held to discuss, make decisions and plan a course of action to correct or mitigate the deficiencies identified. In the last years, Social Studies was an area of difficult passing rate because candidates come from various programs within the Social Sciences department like psychology, sociology, economics, politics or history and not all shared the same curriculum. Through constant communication, the Department of History opened special courses for students who are not History majors which increased the passing rate in this area (3.5.1). Every year, several candidates obtain the highest scores in the PCMAS, especially in English and Math. Candidates with the highest passing rate are fast hired by private and public schools. During the last three academic years, TPP has had over 50 invitations for recruitment, many from school districts in the United States (3.1.4). Before TPP recommends any completing candidate for licensure or certification, it documents understanding of the expectations of the profession, including codes of ethics, professional standards of practice, and relevant laws and policies. TPP deems obligatory its methodology and clinical experience courses where as well the PRDE professional standards and InTASC standards are discussed and apply. The TPP observation instrument used in the clinical practice is aligned with the PRDE Professional Standards and InTASC standards. Additional codes of ethics are required in the methodology science course before candidates carry out their clinical practice. Candidates read and answer modules through the NEOLMS Operating System and the results are discussed in class. Professionalism and ethics is also discussed throughout the Philosophical Foundations of Education courses since ethics is one of the principle components. Feedback from the PCMAS Survey Question about Teaching Preparation and Teaching Experience over the past three years show that 89% or more rated they are ready to be a teacher; 93% or more rated their teaching experience positive and 86% rated their academic preparation as excellent or more than adequate (3.6.1).

Standard 4: Program Impact

i. Evidence/data/tables (Upload each item of evidence under the appropriate components of the standard.)

1 4.1 Completer Impact on Student Growth & Learning

  4.1.1 PRDE Presentation adn Letter of Teacher Effectiveness Pilot Study

4.1 Completer impact on student growth and learning

4.2 Completer effectiveness via observations and/or student surveys

4.3 Employer satisfaction

4.4 Completer satisfaction

* ii. Analysis of evidence (through comparison, benchmarking, trend interpretation, etc.) that makes the case that the standard is met

In June 2016, the Puerto Rico Department of Education (PRDE) discussed their 2015-2016 teacher effectiveness pilot study and their plans to scale up the study with a group of UPR Teacher Preparation Program representatives [4.1.1]. The pilot study tested the evaluation instruments and methodology with 20% of the PRDE teaching force. The 2016-2017 scaled up study promises to collect direct measures of student learning and development addressing diverse subjects and grades with P-12 impact and growth data. Despite personal and formal requests [4.1.2], the UPRM TPP has yet to receive a copy of the federal report based on that study. At the time of submitting the UPRM Self Study the PRDE has not finished the proposed full-scale study. The UPRM TPP will use whatever information from the pilot study or the subsequent scale up that the PRDE makes available.

In the absence of state data regarding teacher effectiveness, the UPRM TPP has developed a Mixed Methods Research Plan [4.1.3] to collect the type of information needed to analyze the program's strengths and weaknesses in terms of the impact of the in-service teachers. The Mixed Methods Research Plan will use qualitative and quantitative methodology to answer a list of central research questions addressing aspects of alumni performance quality as it pertains to national InTASC and state PRDE professional standards. Data will be collected from key school stakeholders that comprise the UPRM alumni-teaching environment: the alumnus, the alumnus' students, and the alumnus' immediate supervisor.

The case study will address seven principal research questions:
1. What is the impact of UPRM TPP preparation on alumni's P-12 students learning and development?
2. How does UPRM TPP alumni classroom instruction align with professional standards such as InTASC and PRDE Teacher Professional Standards?
3. How satisfied are UPRM TPP alumni with the relevance and effectiveness of their preparation?
4. How satisfied are the employers with the relevance and effectiveness of UPRM TPP alumni and their preparation?
5. How satisfied are K-12 students with the classroom instruction they receive from UPRM alumni teachers?
6. What impact are UPRM alumni teachers having on the academic development of their P-12 students?
7. Do P-12 students perceive their UPRM alumni teachers as fair, ethical, challenging, and helpful?

The qualitative case study methodology part of the plan will use multiple means to collect information from 8 to 10 alumni cases as a way to explore process tracing that links causes and outcomes while allowing data triangulation. The qualitative data will provide opportunities to formulate hypothesis and generate new questions to study alumni classroom effectiveness with respect to applying the skills, knowledge, and dispositions that the UPRM TPP programs sought to provide.

The Danielson Framework Teacher Observation Rubric [in 4.1.3 pages 20-50] and the Alumni [4.4.1] and Employer Interview [4.3.1] protocols will be piloted with the participants as part of the case study. These instruments and protocols were selected for their proven validity and reliability in teacher evaluation projects like the MET study and will be adapted for future research. The Flowers and Hancock's Alumni Interview Protocol will be adapted for employer interviews to maintain consistency in the questions needed for triangulation.

UPRM TTP faculty members will be trained to conduct interviews and classroom observations that are as free as possible from bias and to assure inter-rater reliability. The classroom observations will be correlated with alumni self-reports and student achievement measures versus learning goals.
As a means to complement the information gathered through case studies, two TPP created surveys (alumni and employer) will be used both with the case study population and a larger population. The surveys were created using pertinent information collected from previous surveys, but redesigned to align more closely with InTASC and PRDE professional standards, as well as CAEP standards. Both surveys were presented to the UPRM CAEP Steering Committee to verify content validity and alignment with professional and CAEP standards. Recommendations gleaned from CAEP's webinars about using surveys were also considered for both. After incorporating the recommendations from committee members regarding format and content accuracy, pilot tests were conducted to verify the clarity of multiple choice items and open questions.

Validated item versions of the elementary and secondary Tripod Student Surveys [4.2.2] will be used to gather data from alumni students, depending on the grade level taught by the alumnus. At least two different groups of the alumni teacher's students will be asked to complete a Tripod Student Survey. The validity and reliability of the Tripod Student Surveys are documented in Asking Students about Teaching: Student Perception Surveys and Their Implementation, MET Project Policy and Practice Brief by the Bill & Melinda Gates Foundation, 2012.

To maximize the utility of information from small samples in case studies an "information - oriented selection" approach with a maximum variation of cases is recommended in order to augment the possibilities of obtaining information about the significance of various circumstances for process tracing and outcomes. Following this recommendation, the Plan will include four schools that have at least 2 alumni teachers each. The schools selected will vary in the following aspects 1) zone: urban, rural; 2) type: public, private; and 3) level: elementary school, middle school, high school. The alumni teachers in the study will represent the majority of the UPRM licensure areas: Agricultural Education, Art, Biology, General Science, Business Education, Physical Education, Spanish, Social Studies, Physics, History, English, Mathematics, and Chemistry. A range of 8 to 10 teachers will be the target.
At least two different groups of each alumni teacher's students will be included in the study as well as their school directors to produce a more comprehensive view of the alumni school ecosystem and to triangulate data.

The TPP created alumni survey will be e-mailed to all UPRM TPP alumni completing teaching practice over the five years prior to the last (2012-2016). In Puerto Rico, candidates who take and pass the teacher certification exams in early March are certified by the Puerto Rico Department of Education in November, are then allowed to apply for teaching positions in January, and may be hired for the following school year some fourteen months after graduating. Hence few, if any, UPRM TPP alumni completing teaching practice in the previous academic year will have a teaching position with the PRDE.

The first round of employer surveys will be e-mailed to school directors at UPRM Teacher Preparation Practice centers. A second round of employer surveys will be e-mailed to directors at schools identified in responses from working alumni. The surveys will be administered using the Qualtrics© online survey system. If survey response rates are less than 20%, survey copies will be printed, delivered in persona.

The direct measures in the aforementioned approach will include observing the alumni in the classroom and an alumni prepared analysis of student learning using pre-post teacher created tests aligned to content standards. The indirect measures will include alumni interviews and surveys; interviews and surveys of alumni immediate supervisors (school directors); and alumni student surveys. All the instruments and protocols have been prepared in both English and Spanish so that

participants may use the version of their preference.

A three-day workshop retreat will be held during the 2016-2017 fall semester to train faculty to use the ATWS rubrics, surveys, observation instruments, and interview protocols in a professional manner. The Chalk and Wire® online data collection system will be used to record data and to generate reports from the ATWS rubric, the Danielson's Observation Rubric, and the Flowers & Hancock's interview rubrics. The Qualtrics® online survey system will be used to collect and organize data gathered from the Tripod Student Survey, the employer, and alumni TPP surveys as well as to generate reports from same.

The Mixed Method Research Plan outlined above has been submitted to the UPRM IRB. The Plan includes participant and parental consent forms for all parties.

Information obtained from direct observations, teaching-learning artifacts and teacher self-reports as well as data from alumni students and employers will be compared, correlated, and triangulated to form a comprehensive picture of the teachers' effectiveness with respect to student learning. The proposed analysis will include comparisons among alumni in diverse licensure areas as well as by school type. With the proposed mixed methods data collection and subsequent analysis the UPRM TPP anticipates ascertaining how its recent alumni are impacting their students learning and growth. The proposed plan will help the UPRM TPP identify the strengths and weaknesses of the teachers it prepares within their school ecosystem. Identifying these strengths and weaknesses will permit the UPRM TPP to direct future efforts at better preparing its candidates to meet student academic development needs in Puerto Rico's classrooms.

The research process itself will undergo periodic formative evaluation to make adjustments that maintain the consistent data and data cycles needed for continuous program improvement over the next seven years. The UPRM TPP will share and discuss the collected information with faculty and stakeholders. Annual faculty data days and Assessor Committee meetings will be held to present the data with an initial analysis in order to make data driven decisions to optimize the program. Suggestions and comments from research participants will be given deliberate attention in the data analysis, faculty data days, and in planning improvements.

The in-depth look at alumni performance provided by the proposed research, taking into consideration their school ecosystem, is expected to produce and foster future educational research. The proposed research should prove fruitful territory for UPRM to contribute to the knowledge base of higher education reforms. The results of the mixed methods study will be published in peer-reviewed journals, presented in professional education conferences, and shared with interested parties on the http://uprm.edu/eppcaep webpage.

The UPRM TPP conducted pilot studies on employer and completer satisfaction surveys in May 2015. The data obtained from both studies served to suggest changes in the structure, instructions and purpose, items unambiguity, language clarity, and a better alignment with the national (InTASC) and state standards (PRDE-TPS). Specific questions on promotion, retention and specialty area were added to the revised and improved surveys [4.3.1]. The changes in the revised versions are directed at improving their validity and reliability as well as allowing the disaggregation by specialty area. Despite multiple emails to school directors to encourage response, the past Employer Satisfaction Survey had a very low response rate, only three school directors answered it [4.3.3]. The collected data was insufficient to make valid generalizations. The results were used primarily to pilot the survey structure and questions and to test the Qualtrics© online data collection process. However analysis of the data collected as well as interpretations for future actions are presented in detail in 4.3.3 and 4.4.3.

Standard 5: Provider Quality, Continuous Improvement and Capacity

i. Evidence/data/tables (Upload each item of evidence under the appropriate components of the standard.)

1   5.1 Effective Quality Assurance System that Monitors Progress Using Multiple Measures

    📎 5.1.1 UPRM Teacher Preparation Assessment System Procedures 2015

5.1 Effective quality assurance system that monitors progress using multiple measures

2   5.2 Quality Assurance System Relies on Measures Yielding Reliable, Valid, and Actionable Data

📎 5.2.1 Classroom Observation Instrument Design and Use

📎 5.2.1a Qualtrics Data Classroom Observation Instrument Validation

5.2 Quality assurance system relies on measures yielding reliable, valid, and actionable data.

* ii. Analysis of evidence (through comparison, benchmarking, trend interpretation, etc.) that makes the case that the standard is met

The UPRM Teacher Preparation Assessment System Procedures 2016 (5.1.1) serves as the guide in which the TPP describes unit endeavors to assess its operational processes. The guide, created in 2009 and revised periodically, is how the UPRM TPP assures a systematic quality engagement in a continuous improvement process that is sustainable and evidence-based with the primary goal of increasing teacher candidate and completer effectiveness in the classroom as reflected in Standards 1 through 4. The guide describes in detail how the TPP collects data (5.1.1 page 8) and uses inquiry to establish program priorities, enhance program components, and test innovations in order to improve learning and development among P-12 students impacted by UPRM TPP prepared teachers.

UPRM institutional policy requires every department, program, and organization to develop a strategic plan for improvement which includes professional accreditation when applicable. The UPRM TPPs began unit and program assessment system in 2006 in preparation for NCATE precondition submission. Data were collected and analyzed prior to that point, just not as part of a systematic assessment process. Since its inception, the assessment system has undergone modifications, refinements, and customizations. The unit and program assessment system was envisioned as and is treated as a dynamic, formative process (5.1.1 pages 6-11). Annually the assessment committee (5.1.1 page 5) reviews the instruments, analyzes collected data and the system itself to improve the program, the data collection and analysis, and the assessment process using available technology to increase efficiency. The assessment system is based on the UPRM TPP Conceptual Framework (2.2.3).

The Conceptual Framework is consistent with UPRM Student Learning Outcomes, Puerto Rico Professional Standards for Teachers, CAEP standards, and Interstate Teacher Assessment and Support Consortium Model Core Teaching Standards and Learning Progressions for Teachers (2013) (2.2.3 pages 22-43). It sets forth ten core teacher proficiencies that represent expectations for all UPRM candidates. These proficiencies are based on current teaching/learning theory, neuroscience learning research, and accepted wisdom of practice to assure that candidates develop the knowledge, skills, and dispositions required to be effective teachers in Puerto Rico and mainland school systems (2.2.3 pages 10-21).

Candidates
When candidates apply to any teacher preparation program at UPRM, they are required to go through a screening process that allows the program to follow their performance. Candidates that successfully meet screening criteria and are admitted subsequently pass through a series of transition points (5.1.1 pages 14-38) that provides the UPRM TPPs multiple assessments to evaluate, inform, and modify operational effectiveness:
1. Transition Point #1: Entrance to the Teacher Preparation Program - UPRM sets a minimum admission IGS* for each program according to its capacity (faculty and facilities). Students who enter the Agricultural Education, Physical Education Teaching, or Mathematical Education programs must meet the minimum admission IGS. Students admitted to other UPRM programs must approve 6 credits of Foundations of Education courses with a minimum 2.50 GPA and complete an individual or group dispositions interview satisfactorily to be admitted to a curricular sequence for teachers. Note: a curricular sequence for teachers is in effect a second major (30 credits) and each of the 13 available sequences is specialty specific.
2. Transition Point #2: Enrollment in Theory and Methodology Course - overall grade point average of 3.0 or better and 18 credits or more in major with 3.0 GPA in that major; all the Foundations of Education courses (15 credits) approved with a minimum 3.0 GPA; and a score of 80% or higher on Educational Philosophy Project Progression Interview rubric.
3. Transition Point #3: Admission to Teaching Practice - overall grade point average of 3.0 or better and 21 credits or more in major with 3.0 GPA in that major and the corresponding Methodology course approved with a B or better.
4. Transition Point #4: Program Completion- Approve the Teaching Practice course with a B or better; score 80% or higher on the final Classroom Observation Instrument for Teaching Practice evaluation; score 80% or higher on the Electronic Portfolio with Teacher Candidate Work Sample rubric; and attend exit group interview.

Completers
After program completion the UPRM TPPs conduct follow-up surveys of its program completers and their employers; and analyzes the annual PCMAS Survey and Teacher Certification Tests (PCMAS - College Board) results. The TPPs will conduct a Mixed Method Program Impact study annually beginning in the fall of 2016.

TPP
The principal places where the unit operation data is collected and used (5.1.1 page 38) are in the Agricultural Education Department (AgEd), the TPP office, the Division of Extension and Professional Studies (DECEP), the Office of Institutional Research and Planning (OIIP) and the Information Technologies Center (ITC). The AgEd and TPP Directors collect operational data to plan course offerings, assign teaching duties, and coordinate clinical practice. The directors and their academic advisors use candidate performance data to guide candidates through their teacher preparation program or sequence. The directors also handle faculty evaluations and follow up surveys. The Teacher Education Assessment Board reviews all of the available data relevant to the quality of the teacher preparation program. The Dean of Academic Affairs coordinates the discussion of the Teacher Education Assessment Board's findings with the pertinent faculties, departments, and personnel including the Arts & Sciences faculty, the TPP Permanent Committee, and the Teacher Education Executive Committee.

Every year, diverse faculty committees and boards review the assessment artifacts and instruments in order to modify the same to respond to emerging needs and actual use in light of the data, the feedback from the field, and ongoing research. The guiding principle behind collecting, aggregating, and analyzing data is to make decisions that lead to better-prepared candidates, more effective programs, and improved unit performance.
The TPPs regularly and systematically uses data to evaluate program efficacy and to initiate changes (5.1.1 pages 39-41) that includes, among others; identify needed course offerings, plan course offerings, counsel students during enrollment, and encourage students to take initial education courses as free or recommended electives. The students' course grades and specific course assessments are analyzed to monitor and improve their learning.
UPRM TPPs use a variety of assessments and evaluations to gather feedback and suggestions in order to improve operations, programs, courses, and services. Teacher candidates offer feedback each semester on instructor performance through the campus-wide Student Opinion Survey (Cuestionario de Opinión Estudiantil-COE). The COE covers general academia, teaching, service, research, and creative work that facilitates student learning. At URPM COE results are taken into account for teaching assignments, for tenure, and for promotion. The departments use aggregated COE data to plan faculty professional development.

Both the TPP and the AgEd directors receive and review COE results each semester. The directors review and discuss each faculty member results in a personal goal setting conference with that member. This conference receives special attention if the results denote a significant need for improvement. When a director spots areas for improvement repeated over time, he or she arranges targeted professional development activities with the UPRM Professional Development Center (CEP). Each teacher candidate fills out an end-of-program evaluation after completing the teaching practice course. The form asks candidates about the quality of the program, the advising, the field experiences, and the connection with the conceptual framework. The form includes open-ended questions about the teacher preparation program and requests suggestions for improvements. End-of-program evaluation results are aggregated by program and discussed in faculty meetings to identify improvements needed in courses, in faculty performances, in administrative processes and/or in physical facilities. Candidate evaluations of cooperating teachers are a major factor in subsequent school placements. Alumni surveys, admission and retention data, and the Teacher Certification Test scores (PCMAS) as well as PCMAS survey results are used across the UPRM TPPs to assess program effectiveness and evaluate operations in order to improve both (5.1.1 pages 37-38).

In summary, the UPRM TPPs monitor candidate quality and progress through four transition points with cumulative GPAs, GPAs in education courses, GPAs in major, Educational Philosophy Project Progression Interview rubric, Classroom Observation Instrument for Teaching Practice evaluations, and e-Portfolios with TCWS. The End of Program survey, the annual PCMAS Survey, and the Puerto Rico Teacher Certification Tests provide qualitative and quantitative data that the TPPs analyze to

measure the quality of their completers and their programs. The TPPs will conduct a Mixed Method Program Impact study annually beginning in the fall of 2016 to acquire more information about completer impact on P-12 students.

The UPRM TPPs' quality assurance system embraces national, professional and state standards and expectations, and the legal requirements of the teaching profession as well as reflects its own vision and conceptual framework. UPRM TPPs work as a team to make their programs better and continue to prepare the most effective teachers on the island.

Quality Assessment measures: Relevant, Verifiable, Representative, Cumulative and Actionable Cumulative GPAs are the university norm for measuring student progress. The education course and major GPAs are relevant, cumulative, and as requisites for methodology and teaching practice, clearly actionable. The Classroom Observation Instrument for Teaching Practice evaluation and the e-Portfolio with TCWS were designed and are used to assure that candidates develop and demonstrate all the skills and knowledge needed to teach effectively. The construction and reliability of the Classroom Observation Instrument for Teaching Practice is explained in 5.2.1. The construction and reliability of the e-Portfolio with TCWS is covered on page 11 of 5.1.1. The College Board® develops the PCMAS survey and the Puerto Teacher Certification Exams in response to Puerto Rico Department of Education requirements and uses the standard statistical measures to assure their validity and reliability.

Continuous Improvement: Systematic and Purposeful
Cumulative education course and major GPAs are relevant, cumulative, and as requisites for methodology and teaching practice, clearly actionable. The Classroom Observation Instrument for Teaching Practice evaluation and the e-Portfolio with TCWS were designed and are used to assure that candidates develop and demonstrate all the skills and knowledge needed to teach effectively. The construction and reliability of the Classroom Observation Instrument for Teaching Practice is explained in 5.2.1. The construction and reliability of the e-Portfolio with TCWS is covered on page 11 of 5.1.1. The College Board® develops the PCMAS survey and the Puerto Teacher Certification Exams in response to Puerto Rico Department of Education requirements and uses the standard statistical measures to assure their validity and reliability. The TPP directors use Student Opinion Survey results to monitor and guide professor teaching effectiveness (5.1.1. page 49). The TPP aggregates the End-of-Program Survey responses to identify needed course, faculty performance, administrative process and/or physical facilities improvements. The Mixed Methods Research Plan will collect more information about the quality of completer performance in terms of national InTASC and state professional standards (PR-PST) (4.1.3 page 5). The Plan will use seven data collection instruments (4.1.3 pages 10-11). Current and proposed data collection is both systematic and purposeful.

Completer Impact:
The PRDE collected teacher performance evaluation data on a sample population last year for the first time which it has yet to share with UPRM. The UPRM Mixed Methods Research Plan was designed to collect information directly about the quality of its completers' performance in terms of national InTASC and state professional standards (PR-PST) (4.1.3 page 5). The Plan will use seven data collection instruments (4.1.3 pages 10-11). The TPP will use collected data and PRDE teacher performance evaluation data, if made available, to make decisions about current and future courses and programs (standard 4, 5.1.1 page 37, and 4.1.3 page 13).

Stakeholder/partner involvement
School partners, Teaching Practice Centers and the PRDE, are involved by the law and policy letter regulating Educational Practice Experience Centers (2.1.1, 2.1.2), monthly meetings to discuss matters related to clinical experience (2.1.3). Candidate placements and cooperating teacher selection is by agreement every semester (2.2.1, 2.2.3). The TPP offers the Cooperating Teacher Certification course (http://uprm.edu/p/eppcaep/cooperating_teacher_course), the syllabus of which was jointly prepared (http://uprm.edu/cms/index.php?a=file&fid=14042). Superintendents, practice center directors, and TPP and school clinical experience supervisors met to evaluate the revised Classroom Observation Rubric and the TPP Conceptual Framework (http://uprm.edu/p/eppcaep/uprm_tpp_conceptual_frame).
Teacher candidates evaluate TPP professors in the COI, clinical practice supervisors (http://uprm.edu/p/eppcaep/ppmes_evaluation), cooperating teachers (http://uprm.edu/p/eppcaep/co-op_teacher_evaluation), and the program (http://uprm.edu/p/eppcaep/end_of_program_survey).

The Mixed Methods Research Plan will use qualitative and quantitative methodologies to address a list of central research questions about the quality of UPRM TPP alumni performance in terms of national InTASC and state professional standards (PR-PST). Data will be collected from the key stakeholders in the UPRM alumni teaching environment: the UPRM alumnus, the alumnus' P-12 students, and the alumnus' immediate supervisor.

In summary, the UPRM TPPs' quality assurance system embraces national, professional and state standards and expectations, and the legal requirements of the teaching profession as well as reflects its own vision and conceptual framework. The evidence shows that UPRM TPPs work with the stakeholders to make programs better and continue to prepare the most effective teachers on the island.

III. Cross-cutting themes

a. Statement of integration of diversity
* i. Analysis of evidence that demonstrates diversity integration

Diversity is addressed by TPP at UPRM through the alignment of all course syllabi, rubrics, and evaluation instruments across 5 sets of standards: InTASC Standard 2: Learner and Learning; UPRM TPP Candidate Proficiencies 9: Demonstrate sensitivity to diversity; ISTE Standard 4b: Address the diverse needs of all learners; and PR-PST Standard 5: Diversity and Special Needs, and CAEP Standards 1, 2, and 3 (1.1.1b).

UPRM's mission states we provide candidates with the skills and sensibility needed to effectively address and solve current challenges and to exemplify the values and attitudes that should prevail in a democratic society that treasures and respects diversity (1.1.8, UPRM Strategic Plan, page 5). The unit's mission is to serve society by preparing professional educators who are subject matter specialists with dispositions of social, cultural, humanistic sensibilities and ethical values, who also possess competence, skills and general knowledge, all of which will allow them to be highly effective teachers. Proficiency #9 of the Ten Core UPRM TPP teacher candidate proficiencies is also aligned: Sensitivity to diversity - Recognize, understand, and value a diversity of learning styles, intelligences, and talents as well as the diversity of social, economic, and cultural experiences (1.1.1a).

Candidates demonstrate skills and commitment that provide all P-12 students access to rigorous college and career ready standards (Standard 1 narrative). The PRDE revised its grade level Academic Standards and Expectations to be College and Career Ready (1.4.2). Candidates use this normative document in conjunction with the Curricular Framework, Curricular Maps, and policy letters for the creation of lesson plans and unit plans. UPRM TPP candidates demonstrate they have the skills and dispositions required to address diverse learners. Candidates hold high scores in the State Licensure exam; passing rates and scores of UPRM candidates are higher compared to the rest of Puerto Rico (1.1.3). Regarding deep understanding of the learner and learning; content; instructional practice; and professional responsibility, candidates come from various academic areas across the university and from different socio economic households (1.4.3). Courses like the Nature and Needs of Exceptional Children, methodology and clinical practice (http://uprm.edu/p/eppcaep/syllabi) allow for multiple opportunities to observe different classes, grade levels, proficiency levels at different practice centers (http://uprm.edu/p/eppcaep/map_of_practice_centers); the TCWS allows candidates to research the contextual factors of each school (1.4.4). In the methodology course, five professors are collaborating in a national project where candidates practice on line in a cyber classroom with issues of diversity, simSchool (1.5.3, 1.5.3.a).

Candidates demonstrate their clinical experiences prepare them to work with all students. Efforts are made to train and retain highly qualified Cooperating Teachers from both private and public schools and from different towns in Puerto Rico. Clinical Experience Supervisors come from different academic areas and received their college degrees from different countries (Table 4, Clinical Educator Qualification Table). TCWS scores for aligning plans, instruction, and assessment with PR Academic Standards corroborate UPRM candidates can effectively apply content and pedagogical knowledge to support learning at the appropriate grade level (1.4.1); candidates observe and plan the accommodations, adaptations, and special strategies to prepare exceptional children(1.4.4).

Candidates demonstrate TPP is committed to outreach efforts to recruit a more able and diverse candidate pool (3.1) through four recruiting efforts carried out every year to ensure diversity of candidates from public and private schools, different towns of Puerto Rico, different academic areas (Standard 3 Narrative); the minimum admission index was established for each department (3.1.2), and UPRM candidates' admission index is higher compared to the average UPR admission index (3.2.3). Candidates are exposed to 22 different Outreach Educational Programs at UPRM (http://uprm.edu/p/eppcaep/more_info_on_outreach_programs).

b. Statement of integration of technology

* i. Analysis of evidence that demonstrates technology integration

From admission until the last course UPRM teacher candidates use technology to learn; and as they progress to design, implement, and assess the learning of P-12 students.

The UPRM TPP uses the university data base and student digital files to ensure candidate quality, recruitment, and selectivity (standard 3). The UPRM TPP uses electronic communication, online and paper surveys, and web pages as well as personal contact to maintain a strong relationship with clinical practice partners; both cooperative teachers and teacher practice center directors (standard 2).

The Puerto Rico Professional Standards for Teachers (PR-PST) and Puerto Rico Academic Standards (1.3.2b) view technology integration and digital learning as critical for 21st century education and for preparing educators. In accord with that view as well as in response to other state requirements, the URPM TPP integrates technology as both learning mode and goal. The TPP goals include: "the program seeks to foster that the candidate develops cognitive, affective, psychomotor, research, technological and communication skills." As "users of technology" teacher candidates are prepared to "seamlessly integrate multimedia in learning environments as instructional and management tools to enhance learning" for all P-12 students.

As they integrate technology into designing and implementing learning experiences and assessing student learning (standard 1), candidates are asked to develop an e-Portfolio through multiple courses across the curriculum. They learn the technical skills to create an e-Portfolio in the Using Microcomputers in the Classroom course (EDPE 3129), initiate the e-Portfolio with assessments and rubrics in the Evaluation course, add lesson plans and a teaching philosophy in methodology, and finally add a complete TCWS in the teaching practice course and revise the teaching philosophy in light of that experience. Throughout these learning opportunities (1.5.4), candidates develop and demonstrate the International Standards of Technology in Education technology skills. UPRM teacher candidates: 1) Facilitate and inspire student learning and creativity, 2) Design and develop digital age learning experiences and assessments, 3) Model digital age work and leaning, 4) Promote and model digital citizenship and responsibility, and 5) Engage in professional growth and leadership.

The UPRM TPP is moving away from static unidirectional webpages to deliver digital content and towards engaging data base lessons that use multimedia, collaborative and social learning, fast feedback, and authentic assessments. There are several LMS in use across the UPR system. The UPRM TPP is using the NEO LMS (https://decepuprm.neolms.com/) and the flexibility of their packaging makes it a good candidate for the single LMS that the UPR system will choose to support.

TPP candidates have the opportunity to experience virtual education in technology enhanced face-to-face, hybrid, and online courses. TPP professors model the technology integration that virtual schools are using around the world. Virtual classrooms include "video lectures", "screen cast tutorials", "digital paper information", "online discussion and forums", and "online quizzes and tests". Using the NEO LMS, a professor or program can analyze and use candidate performance data. In collaboration with the UPRM TPP, the campus has developed the Distance Education Resource Center (CREAD) to provide technical support for faculty incorporating technology into their courses. Trained CREAD personnel help faculty plan and develop digital material to be used in face-to-face, hybrid, or online courses. In EDPE 3129, students learn, practice, and use technology-enhanced instructional and pedagogical strategies to develop appropriate learning experiences that address the diverse learning needs of P-12 students. In other courses candidates develop the skills to engage in social learning through online communities, develop their own multimedia materials for their future students, create and use a blog as a course web page, and use online forms for online assessment. One example is the AVirMAT project in which future teachers from multiple disciplines work

collaboratively to develop educational videos that enhance the introductory university mathematics curriculum (https://www.youtube.com/channel/UCa3CcDqEEC6v_mXuJzjMp3g).

IV. Areas for Improvement (AFIs) from previous accreditation decisions, if any

a. Statement of progress in support of removing the AFI(s)

There were no areas for improvement in the previous NCATE 2010 accreditation.

b. Overview of evidence in support of removing the AFI(s)

No Evidence found.

c. Holistic summary statement (through comparison, benchmarking, trend interpretation, etc.) that provides a narrative explication for how the evidence collection, taken as a whole, demonstrates that area(s) for improvement are corrected.

There were no areas for improvement in the previous NCATE 2010 accreditation.

V. Selected Improvement Plan

a. Provide a description of the selected area for improvement and a rationale for selection.

The UPRM TPP has selected the evaluation of completer preparation impact on P-12 student learning and development growth as its target area for improvement. Since 2006, the UPRM TPP has systematically collected information about the quality of its teacher candidates, but has not conducted studies in program completer classrooms to measure their effectiveness as teachers. The UPRM TPP needs to acquire valid, reliable data in order to optimize its preparation of future teachers in terms of enabling them to foster P-12 student learning and growth. The National Research Council (2010, Evidence 4.1.3) collected evidence about the quality of teacher preparation, recognizing that although teacher education is necessary for ensuring the quality of the teaching force, it is neither the only condition nor a sufficient one. With this in mind, the Council acknowledged many gaps still exist in the research regarding teacher education and its effect on student learning.

As part of its most important conclusions the Research Council emphasized that "the simplest and most effective way to produce a clearer picture would be to focus research on the aspects of preparation that have the highest potential for effects on outcomes for students. Existing research provides some guidance on three aspects of teacher preparation that are likely to have the strongest effects: content knowledge, field experience, and the quality of teacher candidates." (for reference 4.1.3) To date the UPRM TPP has measured its teacher candidates in those three areas by the breadth and depth of their content knowledge preparation, their clinical experience, and the quality of their teaching. The Puerto Rico Department of Education requires 18 credits in specialization area courses. UPRM candidates complete their preparation programs with an average that ranges from 30 (physics) to 80 content credits (agriculture) and of those, 16 to 52 upper level credits, depending on the licensure area. That is 67% to 300% more than what is required in content courses by traditional teacher preparation programs in Puerto Rico. Teacher certification exam (PCMAS) results and candidate GPAs clearly show the high quality of the UPRM TPP completers (see Standard 1). All elements of the field and clinical experience as stated in NCATE Standard 3: Field Experience and Clinical Practice, were evaluated as "Target" by the NCATE Board of Examiners during their 2010 accreditation visit. Teacher candidate classroom observations and evaluations by cooperating teachers and university supervisors provide more evidence of UPRM TPP teacher candidate quality during their teaching practice (see Standard 1). However, the TPP has never measured how its alumni, once in service, impact their P-12 students. The Program Impact Mixed Methods Research Plan (4.1.3) is intended to gather information that will measure that impact.

In 2015-16, the Puerto Rico Department of Education (PRDE) piloted a teacher effectiveness instrument on 20% of their teaching force. The announced plans are to scale the study up during the 2016-17 academic year. (4.1.1) Even though a 20+ member committee representing 5 UPR TPPs requested the PRDE pilot results, by letter (4.1.2) and in person, we have yet to receive any information or even a copy of the federal report based on the pilot. To date the PRDE has not finished the full-scale study. Needing valid, reliable data about the impact that its graduates are having in their classrooms in order to analyze its strengths and weaknesses, the UPRM TPP has decided to conduct its own study. The TPP will share and discuss the collected information with faculty and stakeholders. Annual faculty data days and Assessor Committee meetings will be celebrated to present the data and an initial analysis to bring about data driven decisions to optimize the program.

* b. Identify goals and objectives aligned with the selected area for improvement

The objectives of the project for self-evaluation and optimization of the UPRM TPP are to:
1) measure alumni effectiveness in their classrooms;
2) evaluate and adapt alternative methods for collecting information regarding alumni impact and program effectiveness;
3) review information collected about recent alumni teachers;
4) use information gathered to evaluate strengths and weaknesses of the program in terms of the effectiveness of its alumni teachers;
5) use collected data to identify gaps between the profile of the teacher candidate and subsequent alumni teacher classroom performance;
6) refine and improve systematic data collection and analysis.

To attain these objectives, the Mixed Method Research will address seven principal research questions that will shed light on the impact of teacher preparation on P-12 student learning and development growth as the area for improvement:
1. What is the impact of UPRM TPP preparation on alumni's P-12 students learning and development?
2. How does UPRM TPP alumni classroom instruction align with professional standards such as InTASC and PRDE Teacher Professional Standards?
3. How satisfied are UPRM TPP alumni with the relevance and effectiveness of their preparation?
4. How satisfied are the employers with the relevance and effectiveness UPRM TPP alumni and their preparation?
5. How satisfied are K-12 students with the classroom instruction they receive from UPRM alumni teachers?
6. What impact are UPRM alumni teachers having on the academic development of their P-12 students?
7. Do P-12 students perceive their UPRM alumni teachers as fair, ethical, challenging, and helpful?

* c. Describe the specific strategies and interventions to be implemented in the Selected Improvement Plan along with a timeline for implementation

The Mixed Methods Research Plan will use qualitative and quantitative methodologies to address the research questions about the quality of UPRM TPP alumni performance in terms of national InTASC and state PRDE professional standards. Data will be collected from key school stakeholders that comprise the UPRM alumni teaching environment: the alumnus, the alumnus' students, and the alumnus' immediate supervisor.

The qualitative case study methodology part of the plan will use multiple means to collect information from and about 8 to 10 alumni teachers as a way to explore process tracing that links causes and outcomes while allowing data triangulation. The qualitative data will provide opportunities to formulate hypothesis and generate new questions about the classroom effectiveness of alumni with respect to applying the skills, knowledge, and dispositions that the UPRM TPP programs sought to provide.

The Danielson Framework Teacher Observation Rubric (4.2.1) and the Alumni and Employer Interview protocols will be piloted with participants as part of the case study. These instruments and protocols were selected in part for their validity and reliability as demonstrated in teacher evaluation projects such as the MET study and will be adapted as needed for future research. The Flowers and Hancock's Alumni Interview Protocol will be adapted for employer interviews.

UPRM TPP faculty members will be trained to conduct interviews and classroom observations to assure inter-rater reliability and to be as free as possible from bias. The classroom observations will be correlated with alumni self-reports and measures of student achievement versus learning goals.

As a means to complement the information gathered through case studies, two TPP created surveys (alumni and employer) will be used both with the case study population and a larger population. The alumni and employer surveys were created using pertinent information collected from previous surveys, but redesigning them to align more closely with InTASC (2013) and PRDE professional standards, as well as CAEP standards.

Validated item versions of the elementary and secondary Tripod Student Surveys will be used to gather data from alumni students, depending on the grade level taught by the alumnus. At least two different groups of each alumni teacher's students will be asked to complete a Tripod Student

Survey. The validity and reliability of the Tripod Student Surveys are documented in Asking Students about Teaching: Student Perception Surveys and Their Implementation, MET Project Policy and Practice Brief by the Bill & Melinda Gates Foundation, 2012*.

The Plan will include four schools that have at least two alumni teachers each. The schools selected will vary in the following aspects 1) zone: urban, rural; 2) type: public, private; and 3) level: elementary school, middle school, high school. The alumni teachers in the study will represent the majority of the UPRM licensure areas: Agricultural Education, Art, Biology, General Science, Business Education, Physical Education, Spanish, Social Studies, Physics, History, English, Mathematics, and Chemistry. A range of 8 to 10 teachers will be the target.

At least two different groups of each alumni teacher's students will be included in the study as well as their school directors to produce a more comprehensive view of the alumni school ecosystem and to triangulate the data.

The TPP created alumni survey will be e-mailed to all UPRM TPP alumni completing teaching practice over the four years prior to the last (2012-2015).

The first round of employer surveys will be e-mailed to school directors at UPRM TPP centers. A second round of employer surveys will be e-mailed to directors at schools identified in responses from working alumni. The surveys will be administered with the Qualtrics© online survey system.

*See information of the MET project in http://www.metproject.org/downloads/Asking_Students_Practitioner_Brief.pdf.

* d. Present a complete description of the assessment plan that details how each goal or objective is to be assessed

See page 4 of SI uploaded plan attached - Table 1. Assessment Plan - Goal alignment to assessment instrument with CAEP Standard 4 element by study participant.

Information obtained from direct observations, teaching-learning artifacts and teacher self-reports as well as data from alumni students and employers will be compared, correlated, and triangulated to form a comprehensive picture of the teachers' effectiveness with respect to student learning. The proposed analysis will include comparisons among alumni in diverse licensure areas as well as by school type. With the proposed mixed methods data collection and subsequent analysis the UPRM TPP anticipates ascertaining how its recent alumni are impacting their students learning and growth. The proposed plan will help the UPRM TPP identify the strengths and weaknesses of the teachers it has prepared within their school ecosystem. Identifying these strengths and weaknesses will permit the UPRM TPP to direct future efforts at better preparing its candidates to meet student academic development needs in Puerto Rico's classrooms.

During the implementation in 2016-17, the research process itself will undergo periodic formative evaluation to make adjustments that maintain data and data cycle consistency for continuous program improvement over the next seven years. The UPRM TPP will share and discuss the collected information with faculty and stakeholders. Annual faculty data days and Assessor Committee meetings will be held to present the data with an initial analysis in order to make data driven decisions to optimize the program. Suggestions and comments from research participants will be given deliberate attention in the data analysis and in planning improvements.

The in-depth look at alumni performance provided by the proposed research, taking into consideration their school ecosystem is expected to produce and foster future educational research. The proposed research should prove fruitful territory for UPRM to contribute to the knowledge base of higher education reforms. The results of the mixed methods study will be published in peer reviewed journals, presented in professional education conferences, and shared with interested parties on the http://uprm.edu/eppcaep webpage.

* e. Describe the resources available to implement the plan. This includes staffing and faculty cost (time, salary, or reassignment time), budgeting impacts such as travel or training costs, expertise, and other resources

The budget includes $68,386.33 for compensation and release time for 8 faculty members. The budget for three student assistants is $8,700.00 and $10,000 for administrative personnel compensation. The budget for marginal benefits for the above personnel is $8,516.54. The budget for training costs including lodging and food is $21,681.53. The budget for resources, materials and equipment is $6,500.00. The budget also includes $1,500.00 for participant stipends. The total budget for the first year 2016-17 comes to a grand total of $125,284.40.

If preferred, please upload entire SI plan as an attachment here.

UPRM TPP Selected Improvement Plan

See Attachment panel below.

Selected Improvement Plan Evidence
No Evidence found.

State Standard(s) Evidence

Evidence/data/tables (Upload each item of evidence under the appropriate components of the standard and answer any questions provided by the state.)
No Evidence found.

Please click "Next"

This is the end of the Self-study Report. You may log out at any time and come back to continue; your report will be saved.

When you are ready to submit the report click "Next" below. This will take you to the submit button on the next page. Once you click on "Submit" you will not be able to make changes to the report and evidence.