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Implementation

Purpose of the PTEPA Rubric

To characterize physics teacher education programs in order to provide guidance for self-improvement and enable comparisons among programs.

Course Level: What kinds of courses is it appropriate for?

Upper-level, Intermediate, and Intro college

Content: What does it test?

Interactive teaching (Institutional commitment, leadership and collaboration, recruitment, knowledge and skills for teaching physics, mentoring community and professional support, program assessment)

Timing: How long should I give students to take it?

60-120 minutes

Example Questions

Example of PTEPA Rubric items and levels for Component 3C: Early Teaching Experiences for Recruiting Teacher Candidates (within Standard 3: Recruitment).

Example of PTEPA Rubric items and levels for Component 4B: Pedagogy Courses and Curriculum (within Standard 4: Knowledge and Skills for Teaching Physics).

Access: Where do I get the test?
Downloadable PDF and interactive Excel versions of the PTEPA Rubric are available at: https://www.phystec.org/thriving/

Versions and Variations: Which version of the test should I use?
The most recent version of the PTEPA Rubric, released in 2018, is version 2.0.

Administering: How do I give the test?
The PTEPA Rubric is intended to be used primarily as a self-study instrument of physics teacher education programs. It is best completed by a program team, in consultation with key stakeholders, to get the most accurate program ratings and best interpretation of results.

Scoring: How do I calculate my students’ scores?
To visualize your PTEPA Rubric results, use the Interactive (Excel) version of the PTEPA Rubric, available at http://phystec.org/thriving.

Clusters: Does this test include clusters of questions by topic?
There are 6 standards on the PTEPA Rubric, used to look at 6 different aspects of your teacher education program. These standards are: 1) institutional support, 2) leadership and collaboration, 3) recruitment, 4) knowledge and skills for teaching physics, 5) mentoring, community and professional support, 6) program assessment.

Typical Results: What scores are usually achieved?
There are no typical scores on the PTEPA, as it is meant to be used for self-study to show you the strengths and weaknesses of your program. To see typical results for high-producing physics teacher education programs, see the full report, A Study of Thriving Physics Teacher Education Programs.

Interpretation: How do I interpret my students' score in light of typical results?
Use the PTEPA Rubric results to support continuous improvement by communicating results to stakeholders and using them to drive a program action plan.

Resources

Where can I learn more about this test?

The developer's website contains much more information about the Thriving Programs Study and the Physics Teacher Education Program Analysis Rubric.

The PTEPA Rubric Developer’s Website includes:

- User’s Guide
- PDF and Excel versions of the PTEPA Rubric
- Full Report: A Study of Thriving Physics Teacher Education Programs

Translations: Where can I find translations of this test in other languages?

Background

Similar Tests

There are no rubrics similar to the PTEPA Rubric.
Research: What research has been done to create and validate the test?

Research Validation: Silver

This is the second highest level of research validation, corresponding to at least 5 of the validation categories below.

- Based on research into student thinking
- Studied using student interviews
- Studied using expert review
- ( ) Studied using appropriate statistical analysis
- ( ) Research conducted at multiple institutions
- ( ) Research conducted by multiple research groups
- ( ) Peer-reviewed publication

Research Overview

Through extensive engagement with theory, analysis of existing instruments, review of relevant studies, and direct observations of thriving programs, independent researchers and PhysTEC staff collaborated on the development of the PTEPA Rubric. The researchers conducted in-depth visits to eight thriving physics teacher education programs. Program visits were conducted either in-person or virtually, and each visit involved interviews with a wide variety of stakeholders, including program leaders, administrators, teachers, staff, and students. Analysis of the data from thriving programs contributed strongly to the development of the rubric, provided initial validation, and supported research findings. Review by nationally recognized experts in physics teacher education as well as extensive alignment with literature and accreditation processes established substantive validity, content validity, and face validity. During the development and validation process, the PTEPA Rubric was iteratively improved through over 20 versions to better reflect the practices and structures of diverse thriving physics teacher education programs.

Developer: Who developed this test?

Stephanie V. Chasteen, Rachel E. Scherr, Monica Plisch, and the PhysTEC Project

References