



PR – Math and Science Partnership (PR-MSP)

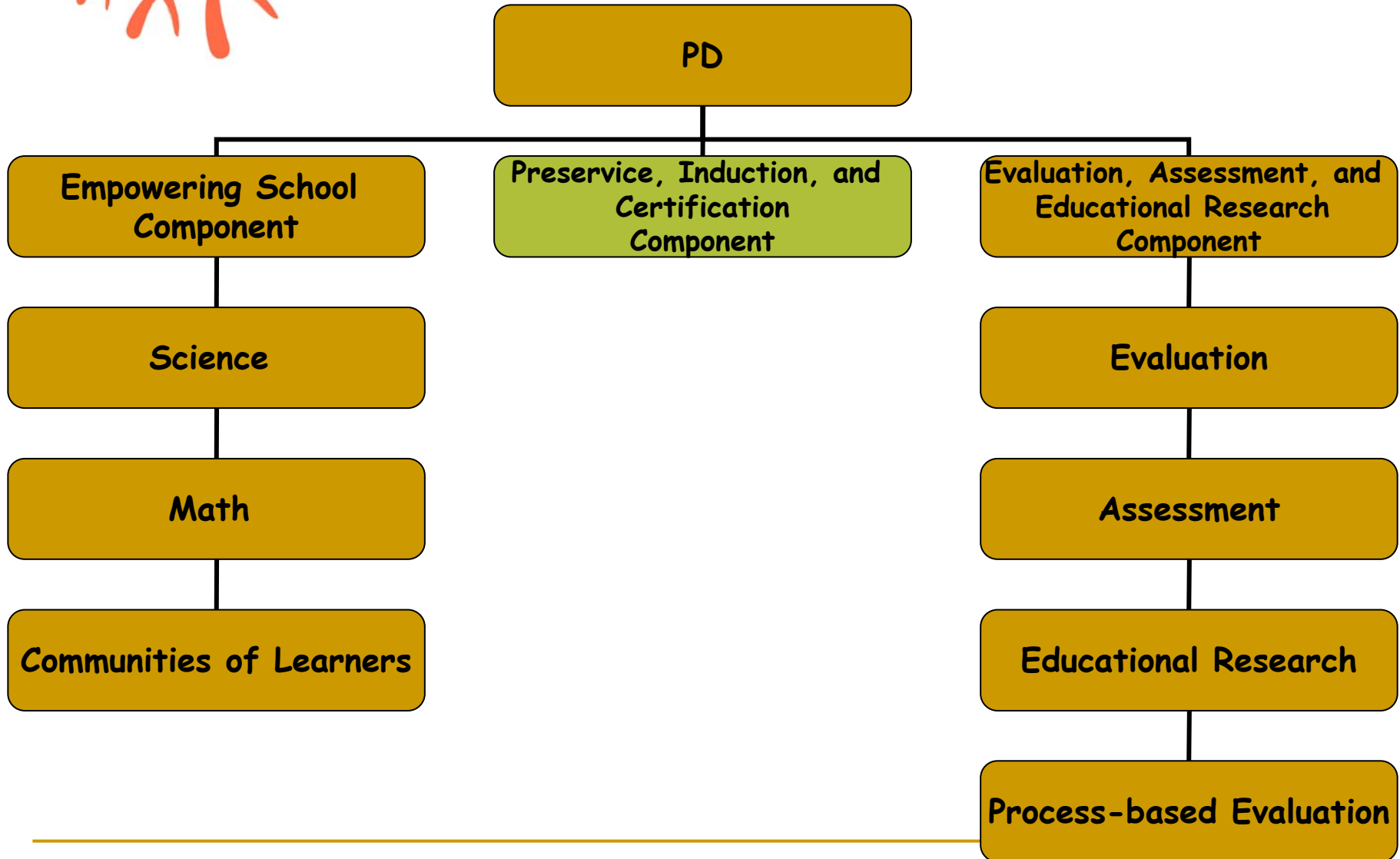
Alianza para el Aprendizaje de Ciencias y
Matemáticas (AIACiMa)

**Component II: Future Teachers,
Induction, & Certification (TIC)**

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Organizational structure





Component II: Overview

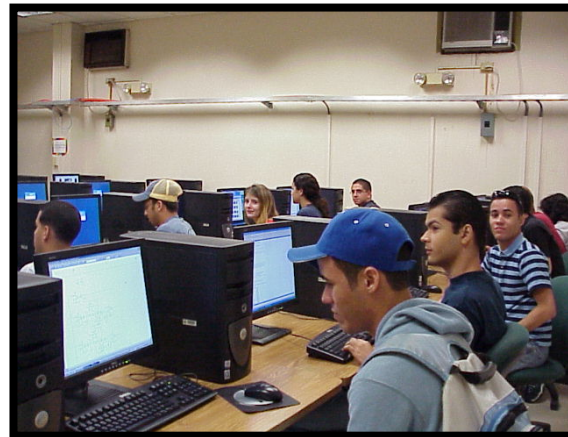
- Goal: To increase and sustain the quality of K-12 math and science teachers through a professional development continuum
 - Address future teacher preparation and in-service M&S teacher enhancement and certification needs to ensure that all K-12 schools have highly qualified teachers prepared to provide students with challenging and rigorous learning experiences, through close articulation and coordination between the PRDE and the university partners.
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Preservice





Accomplishments: Preservice

- Collaboration with DEPR in reform of state licensure requirements
 - Core partners reviewed the proposed Teacher Certification and analyzed its impact on preservice teacher preparation and recertification of in-service teachers
 - March 2004
- Identified and disseminated teacher certification initiatives to comply with NO CHILD LEFT BEHIND mandates, and facilitated PRMSP teachers participation
 - Rio Piedras
 - Cayey



Summer Research Activities





Accomplishments: Preservice

- Preservice teachers participated in Summer Research activities
 - Twenty-eight future teachers worked with 19 researchers during this summer.
 - Mayagüez - 6
 - Rio Piedras - 11
 - Cayey - 10
 - Humacao - 1
 - An activity for all participants to present their research projects has been scheduled for August 28, 2004



Accomplishments: Capstone Courses

- Development of capstone courses in core institutions
 - Rosa Betancourt presented the development and implementation of the UPR-RP capstone course to the professors of the three other core institutions that will develop capstone courses.
 - May 28, 2004
 - Mayagüez
 - Tito Montalvo - Biotechnology
 - Cayey
 - Ricardo Chiesa - Ecosystems and energy
 - Humacao -
 - Ana del Llano - Marine Biology
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Component II: Certification





Accomplishments: Certification

- Newly certified Mathematics & Science Teachers
 - UPR - Mayagüez
 - 49
 - UPR - HUmacao
 - 10
 - UPR - Cayey
 - 9 mathematics





Mentor Teacher Course





Accomplishments: Certification

- Cooperating/Mentor Teachers
 - PRMSP and PRDE/IPDT identified master teachers from participating schools that need to be certified as cooperating/mentor teachers (March-May, 2004)
 - Mayagüez - 11
 - Humacao - 48
 - Rio Piedras, Cayey, and Humacao will plan and offer a content specific certification course for cooperating/mentor teachers (Cooperating Teachers Institute) starting August 2004
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Component II:
Induction





Accomplishments: Induction

- Novice and newly certified teachers were identified (up to May 2004)
 - Mayagüez - 8
 - Humacao - 4
 - Rio Piedras - 14
 - Cayey - 4
- A survey was distributed to lead teachers on August, 14, 2004





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Component II: Plan 2004 - 2005



Proposed activities 2004 – 2005 : Preservice

- Future teachers will be paired with trainers to assist in follow - up professional development workshops beginning September 2004
 - Rio Piedras - 30
 - Humacao - 15
 - Cayey - 15
 - Mayagüez - 30



Proposed activities 2004 – 2005 : Preservice

- Continue the summer scientific research experiences for future with M&S researchers.
 - Preservice teachers interested in Summer Research submit applications by March 2005
 - Future teachers will spend 8 weeks in June-July in a research laboratory. They will be required to make an oral presentation of their work.
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Proposed activities 2004 – 2005: Preservice

- Integration of technology into coursework
 - A questionnaire will be developed in collaboration with the Evaluation Team to assess the effectiveness of the integration of the technology into key courses required for future M&S teachers
 - Administration and analysis of Integration of Technology Questionnaire
 - Preservice teachers will complete student teaching practicum with PRMSP certified cooperating/mentor teachers
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Proposed activities 2004 – 2005: Preservice

- Preservice teachers will participate in activities that will allow them to conceptualize, develop, and implement curricular units that exemplify effective use of technology to achieve conceptual understanding of M&S.
 - Texas Instruments workshops
 - NASA workshops - January 14 - 16 2005
 - Future teachers will develop professional portfolios in collaboration with the PRMSP Assessment Component.
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Proposed activities 2004 – 2005: Capstone Courses

- Capstone courses will be created by M&S faculty from each partner university with the collaboration of Lead and Resource Teachers from PRMSP schools and Regional M&S Resource Centers
 - Capstone courses will be submitted to the appropriate academic offices at Core Institutions to be offered as new courses in August '05
 - Teams of M&S education and natural science faculty will be in charge of implementing the capstone courses to model collaboration among the disciplines
 - Preservice teachers will be encouraged to take capstone courses
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Proposed activities 2004 – 2005: Certification

- PRMSP will identify and facilitate the participation of teachers in certification initiatives
- The accomplishments of teachers involved in PRMSP's activities will be disseminated through the MSP Learning Network



Proposed activities 2004 -2005: Induction

- Continue to identify novice and newly certified teachers in participating schools
 - August - September 2004
- Assess professional development needs of novice and newly certified teachers
 - August - October 2004
- Identify mentor teachers and assign them to new teachers
 - August - October 2004
- Develop induction plans by mentors and new teachers
- Develop support activities for both new and mentor teachers in collaboration with DEPR STEP program
- Encourage teachers to use the M&S Resource Centers

