# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREWORD</td>
<td>2</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>GOALS AND OBJECTIVES</td>
<td>5</td>
</tr>
<tr>
<td>THE PHILIPPINE NORMAL UNIVERSITY RESEARCH AGENDA PROCESS FRAMEWORK</td>
<td>6</td>
</tr>
<tr>
<td>PNU RESEARCH AGENDA (PNU-RA) 2013-2015</td>
<td>15</td>
</tr>
<tr>
<td>SUGGESTED TOPICS FOR RESEARCH</td>
<td>17</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>21</td>
</tr>
<tr>
<td>PNU URA DEVELOPMENT PLAN OF ACTIVITIES</td>
<td>22</td>
</tr>
<tr>
<td>CONTRIBUTORS</td>
<td>23</td>
</tr>
</tbody>
</table>
FOREWORD

A university does not only produce graduates, it also creates knowledge. To this effect, research has been among the major outputs of a university, and the quality of its researches speaks for its quality. Hence, PNU’s commitment to academic excellence is now matched with serious research thrusts to respond not only to its mandate as the country’s National Center for Teacher Education (NCTE) but also to the global challenges in teacher education.

The PNU Research Agenda (PNU-RA) defines PNU’s research directions and serves as blueprint for all its research undertakings. Through this, it is hoped that PNU will produce innovative, cutting-edge and forward-looking researches that are nationally relevant and will truly provide users a better understanding of existing and emerging local and international issues in teacher education. PNU’s research agenda also seek to contribute to the advancement of teacher education as an academic discipline through scientific inquiry.

I congratulate the persons involved in the development of this important document. PNU is thankful to all its stakeholders who shared their valuable time and inputs during series of consultations conducted to craft the PNU-RA.

ESTER B. OGENA, Ph.D.
President
Introduction

Universities are expected to generate new knowledge. In the new knowledge economy, this task, while traditionally and essentially is a function of institutions of higher learning, is increasingly more emphasized because new knowledge providers are emerging and challenging universities' role in creating, producing, and translating knowledge. It becomes imperative then for Philippine Normal University to transition itself as a research-oriented teacher education university to strategically position PNU in functioning as the National Center for Teacher Education. Vital to PNU’s role as NCTE is the mapping out of puzzle areas in teacher education and translating these into research agenda which will underlie PNU’s research initiatives.

The first PNU Research Agenda (first known as University Research Agenda or URA) was crafted in 2004. The URA was crafted through a series of processes which started with a stakeholders' forum with the theme: “Networking: The Continuing Search for Useful Knowledge.” The participants to this forum were stakeholders that included legislators and high-ranking officials of both public and private educational agencies. The output was a listing of research topics which were classified, reviewed, and finally put together to constitute the first URA. The classification of the topics was based on the five dimensions of teacher education, namely: 1) context; 2) input; 3) process; 4) effect; and 5) impact.

In keeping with the challenges to ensure quality education, the URA was reviewed and revised in 2008. The revisions included the following: 1) addition of Policy Research topics on Teacher Education and Higher Education, and Development Research; and 2) the inclusion of a brief description of each area for clarity and comprehensibility. The revised URA was disseminated to the academic community which in turn suggested additional topics. These suggested topics were incorporated and the final copy of the URA for 2008-2010 was published in print form and disseminated to all stakeholders through the Revised Research Manual released in June 2009.

The designation of PNU as the National Center for Teacher Education (NCTE) in 2009 by virtue of Republic Act 9647and its becoming a Higher Education Regional Research Center (HERRC) just recently
through the efforts of the incumbent president, Dr. Ester B. Ogena, make it imperative for PNU to revisit the URA to make it more responsive to the NCTE mandate of PNU, specifically to: conduct researches, case studies and other appropriate methodologies to enhance curriculum and training designs for teacher training, teacher education, and continuing professional education of teachers and academic supervisors.

The PNU as NCTE is mandated by the law to create an Education Policy Research and Development Office which shall:

a) Establish and maintain a database of education policies and significant issues facing the country’s education system, as well as the education systems of other countries, especially in the Asia Pacific Region;

b) Create and test different models of teacher education, address key factors in successful teacher education programs, and determine which model would best achieve the country’s education goals;

c) Provide a systematic dissemination of research outputs on teacher education to make them readily available to end users such as teachers and academic supervisors;

d) Share research expertise and competence in education research with other Teacher Education Institutions throughout the country, provided that the research funding of other state universities and colleges shall in no way be affected by the provisions of the Republic Act No. 9647;

e) Advise the country’s policy makers and decision makers in planning, implementing and evaluating reforms in teacher education including the licensing of professional teachers;

f) Assist in the assessment of government programs on education. As such, PNU may be required by any agency to comment on/or make recommendations regarding the different policies and programs on education; and

g) Conduct periodic studies in aid of crafting responsive policies and programs on education.
Clearly, the provisions suggest that the PNU is not the sole beneficiary of its research efforts. All other Teacher Education Institutions (TEIs) will also benefit as they will be provided with database of education policies, information on significant issues facing the country’s education system, and different models of teacher education which will be used as guide in achieving successful teacher education programs in their own institutions. The TEIs will also benefit from the research expertise and competence in education research of PNU.

The PNU-RA 2013-2015 is a blueprint for tangible and sustainable research initiatives the PNU will take in the next three years to advance the teacher education in the Philippines toward international competitiveness.

Goal and Objectives

The designation of PNU as NCTE necessitates urgent reforms and transformation within the University for the PNU to fulfill its mandate and to respond to challenges and demands of varying scales and complexities. Holistic reforms within the University are imperative to upgrade the quality of competitiveness of teacher education in the country as implied in the NCTE law (Ogena, 2012). One of the University’s goals is to strengthen the culture of research among faculty, staff, students and other key players of the University. Thus, the PNU’s Strategic Development Plan 2012-2022 outlines the specific research objectives on which the development of the PNU-RA is anchored. The research objectives are as follows:

1. Conduct high impact researches that will improve the quality of the educational system particularly teacher education in the country and the world.

2. Develop innovative ideas in education that will give PNU an international distinction.

3. Share expertise and competence in educational research to the community of learners and/or scholars.

4. Provide data to the Department of Education (DepEd) and the Commission on Higher Education (CHED) as input in designing curricular programs in basic education and teacher education.
5. Take the leadership role in the development of unifying teacher education research agenda among teacher education institutions.

6. Provide policy makers with empirical research data to serve as bases of formulation of the country’s education legislative agenda.

7. Disseminate all timely research inputs systematically in all modalities (print, non-print) to all its stakeholders.

8. Establish and maintain a database of international and national educational policies and other significant data related to education in the Philippines, the Asia Pacific region and beyond.

9. Set the research directions of all levels across different disciplines in the University system.

10. Provide appropriate allocation of fund and other related resources to ensure efficient and timely implementation of research projects anchored on the PNU-RA specifically the University-based researches (project-based researches).

11. Provide research incentives to faculty whose outstanding research skills and exemplary research outputs provide significant contribution to teacher education and merit to the University.

The PNU-RA Process Framework

A process framework based on the Input-Thruput-Output-Outcome model was used to facilitate the development of the PNU Research Agenda. The figure below explains three vital questions that framed the development of the PNU-RA using the process framework. First, questions on antecedents - the variables and conditions that shape, direct, or dictate the nature of teacher education processes and contexts. These specifically refer to input and contexts/drivers. INPUT TO TEACHER EDUCATION examines the relationship between the antecedent conditions and the process of teacher education; the available resources and conditions that determine program options. CONTEXT OF TEACHER EDUCATION refers to socio-cultural, technological, economic, environmental, and political (STEEP) conditions and trends driving the desire for change, defining the kind of change, and determining the purpose of change to be pursued in teacher education.
Second, questions on processes, the **THRU-PUT OF TEACHER EDUCATION** which directly or indirectly shapes the nature of teacher education or any factor associated with the intervention of a teacher education program, both pre-service and in-service. It also includes the systems that are in place to develop, implement, manage, evaluate, and improve the programs.

Finally, questions on output and outcomes - **OUTPUT OF TEACHER EDUCATION** generally cover contributions of teacher education research to the quality of teacher education institutions and basic education through policy recommendations and development of future programs. It also includes the impact of teacher education to community development and continuing development of teachers. **OUTCOME OF TEACHER EDUCATION** includes expected outcomes of teacher education vis-à-vis the conditions and demands of present society that shape or direct the nature of teacher education process. It revolves around teacher education competitiveness as indicated by the performance of teachers, students, programs, and the institution itself.

These three vital questions serve as frames with which the research areas and the research questions are defined. The thread that links all these together is the imperative of competitiveness. For PNU to remain competitive – to be sought for answers to questions in teacher education, the University has to implement its research agenda at the moment where its research commands the optimum value to the University’s stakeholders.
Part of the process framework is the identified national context shaping higher education efforts in the country. This is anchored on the Philippine Development Plan (PDP 2011-2016 and the Millennium Development Goals (MDGs) which both aim to reduce if not totally eradicate poverty and to lay the foundations for sustainable human development. To address this, the Philippine Higher Education has for its mission: a) productivity and competitiveness with good graduates; b) intensified research for technological innovation; and c) improved quality of life of the Filipinos and responsiveness to societal needs.

To help accomplish the national development goals, the National Higher Education sets research agenda gearing toward the generation of knowledge and technologies needed for international, national, and regional higher development; policy formulation; developing innovative programs in cutting edge higher education fields and advancing the frontiers of knowledge in the various disciplines. Promoting teacher education as the primary mission of PNU also aligns the PNU Research Agenda with the goals and objectives of NHERA-2 (National Higher Education Research Agenda). PNU-RA suggests key research areas or themes to provide justification to teacher education research as a public investment and why research is needed in teacher education.

The PNU-RA is responsive to the K to 12 program of the government. It includes topics that are geared toward the conduct of researches that address issues on problems related to the implementation of such program e.g. development of new teacher education curriculum, identification of effective teaching approaches in preparing pre-service teachers, and creation of programs to train in-service teachers, development of instructional materials, funding and infrastructures, support systems provided by the government, among others. All these researches are directed toward the fulfillment of the PNU’s mandate and assisting the Department of Education (DepEd) establish and maintain of a complete, adequate, and integrated system of basic education relevant to the goals of national development.

The harmonization of standards compels all universities in the world to strive for international ranking. The majority of ranking systems which determine the quality of universities in the world reveals research performance and influence through publications of research articles with high quality as measured by H-index and impact through citations from ISI.
journals. The relevance of international recognition through the academic ranking of world universities positions research not only in the Philippines but also in the international arena. In response to this, the PNU, to be competitive, must do innovation-oriented type of research. PNU as NCTE will create the future of teacher education through innovative research, projecting the image of the University distinctly as the best teacher education institution in Asia.

**The PNU Research Agenda Framework**

The discussion induced by the process framework generated a wealth of data that point to innovation as the anchor on which research initiatives by the University will be deduced. PNU as NCTE requires the University to be the innovation hub of teacher education research. The figure below illustrates the PNU Research Agenda framework with innovation as anchor identifying eight (8) research themes.

![PNU-RA Framework](image)

Table 1 shows the eight themes with the corresponding description of the PNU Research Agenda.
### Table 1. PNU-RA Framework

<table>
<thead>
<tr>
<th>RESEARCH THEMES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy Studies</strong></td>
<td>Research on applying social scientific findings to the solution of educational issues and problems. Includes research on the various dimensions of policy formulation, implementation, monitoring and evaluation focusing on financing teacher education, economics of education, governance and management of teacher education, policies in teacher training, systems standards in teacher education institutions, systems structure, and procedures in the delivery of basic education.</td>
</tr>
<tr>
<td><strong>Multidisciplinary/ Pure Research</strong></td>
<td>Research focused on one problem or issue involving several disciplines in teacher education. Includes curricular studies, assessment of programs, delivery of teaching-learning process, and pedagogical content knowledge.</td>
</tr>
<tr>
<td><strong>Local Responsiveness</strong></td>
<td>Research on different areas of teacher education responding to the needs and problems of the local community and industry. Includes studies on indigenous peoples/cultural communities, multicultural education, curriculum localization, green technology, technology and livelihood education, and school-community partnership.</td>
</tr>
<tr>
<td><strong>Translational Research</strong></td>
<td>Research on translating educational theories into teaching-learning practice. Includes field studies, constructing pedagogical/instructional models, curriculum models, teacher education models, instructional delivery models, student financing models, change, development and transformation research, and university-community-industry partnership.</td>
</tr>
<tr>
<td><strong>Internationalization</strong></td>
<td>Research on international rankings and global benchmarking. Includes quality assurance systems, qualification standards, products that will attract international audience, cultural diversities, and international linkages.</td>
</tr>
</tbody>
</table>
### RESEARCH THEMES

<table>
<thead>
<tr>
<th>RESEARCH THEMES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Development</strong></td>
<td><strong>Research on quality product (material and human resources) solutions to national and global educational issues and demands</strong></td>
</tr>
<tr>
<td></td>
<td>Includes instructional materials and instrument development, educational resources development, competence and capacities of teachers and learners, and technological knowledge products.</td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
<td><strong>Research on the value of environmental sustainability, continuing growth and forward thinking</strong></td>
</tr>
<tr>
<td></td>
<td>Includes the physical environment, information and communications technology, equipment/infrastructure requirements, management system, and organizational culture.</td>
</tr>
<tr>
<td><strong>New and Emerging Areas in Teacher Education</strong></td>
<td><strong>Research on emerging trends, values and norms in educational systems</strong></td>
</tr>
</tbody>
</table>

The PNU Research Agenda offers a strategic spectrum of innovation-oriented research areas that scholars, practitioners, and graduate and undergraduate students in the field of teacher education will focus on their research work to project the future of teacher education in the country and to be internationally recognized teacher Education University in Asia as envisioned by 2022. The following objectives will be pursued:

1. Improve the product of teacher education (pre-service and in-service).
2. Advance teacher education in the country for international competitiveness.
3. Generate new knowledge in teacher education to meet the current and future demands of the knowledge economy for national development and international acceptance.
4. Increase PNU's research productivity to transition the university as a research-oriented teacher education university.
The implementation of the PNU-RA will hopefully contribute to defining, broadening, and deepening the anatomy of teacher education as a scientific field of inquiry.

Table 2 below shows the categories of research areas that emanate from the entire process of teacher education from different perspectives of multi-stakeholders’ which shape the INNOVATION research themes for the PNU-RA 2013-2015.

### Table 2. PNU RESEARCH AGENDA MATRIX

<table>
<thead>
<tr>
<th>INNOVATIONS THEMES</th>
<th>TEACHER EDUCATION PROCESS</th>
<th>INPUT</th>
<th>THRU-PUT</th>
<th>OUTPUT</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy studies</strong></td>
<td>Student Admissions Policies</td>
<td>System of Monitoring and Evaluation</td>
<td>Policy Analysis Research</td>
<td>Indicators of National Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher Education Students’ Recruitment, Selection, Retention</td>
<td>Faculty and Staff Development</td>
<td>Systems Review of Policies in Teacher Education Institutions</td>
<td>Impact of Teacher Education on National Development</td>
<td></td>
</tr>
<tr>
<td><strong>Multidisciplinary studies and pure research</strong></td>
<td>Curriculum Studies/Disciplinary Content</td>
<td>Pedagogical Content Knowledge (PCK)</td>
<td>Technological Pedagogical Content Knowledge</td>
<td>Policies in Teacher Training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedagogical Approaches/Method and Strategies</td>
<td>Delivery Models of Teaching</td>
<td>Alternative Learning System</td>
<td>Assessment of teaching-learning</td>
<td></td>
</tr>
<tr>
<td>THEMES</td>
<td>INPUT</td>
<td>THRU-PUT</td>
<td>OUTPUT</td>
<td>OUTCOME</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Local responsiveness</td>
<td>Curriculum Localization</td>
<td>Impact of Teacher Education in Community Development</td>
<td>Indicators of Regional Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural/Multicultural Studies</td>
<td>Impact of Teacher Education to Regional Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green and Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technology and Livelihood</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translational research</td>
<td>Teachers' Field Study Experiences</td>
<td>Impact Study</td>
<td>Change, Development and Transformation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>University-Community-Industry Partnership</td>
<td>Teacher Education Model Building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internationalization</td>
<td>Qualifications of Faculty in Teacher Education Institutions</td>
<td>Licensure/Professional Examinations Performance</td>
<td>Benchmarking/Comparative Studies (with other TEIs/countries)</td>
<td>Index of Teacher Education Competitiveness by Discipline</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Institutional Accreditation Standards</td>
<td></td>
<td></td>
<td>Drivers of Teacher Education Competitiveness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Certifications Standards and International Ranking System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product development</td>
<td>Teacher Qualities</td>
<td>Instructional Materials Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teaching Philosophy, Beliefs and Values</td>
<td>Instrument Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technological Pedagogical Content Knowledge</td>
<td>Technological Pedagogical Content Knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students’ Achievement</td>
<td>Students’ Achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic and Co-curricular Activities for Students</td>
<td>Academic and Co-curricular Activities for Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuing Education of In-Service Teachers</td>
<td>Continuing Education of In-Service Teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## TEACHER EDUCATION PROCESS

<table>
<thead>
<tr>
<th>INPUT</th>
<th>THRU-PUT</th>
<th>OUTPUT</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems Standards (Productivity, Efficiency and Effectiveness)</td>
<td></td>
<td></td>
<td>Sustainability of Competitiveness</td>
</tr>
<tr>
<td>Administrative Management System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Educational Facilities to Facilitate Learning (library resources, laboratories such as speech laboratories)</td>
<td>Utilization of Equipment and Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Environment/Conducive Workspace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Management and Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New and Emerging areas in teacher education</td>
<td>East Asian Pedagogies New ecologies of learning</td>
<td>Cognitive and Brain-Based research</td>
<td>Emerging values and norms in educational system</td>
</tr>
</tbody>
</table>

The research categories are clustered into key research areas that crafted the major themes for the PNU Research Agenda. Table 3 shows the key research areas of PNU-RA 2013-2015.
<table>
<thead>
<tr>
<th>RESEARCH THEME</th>
<th>KEY RESEARCH AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy Studies</strong></td>
<td>• Qualifications Standards</td>
</tr>
<tr>
<td></td>
<td>• Students’ Recruitment, Selection and Retention</td>
</tr>
<tr>
<td></td>
<td>• Economics of Education</td>
</tr>
<tr>
<td></td>
<td>• Teacher Training Policies</td>
</tr>
<tr>
<td></td>
<td>• Systems Standards in Teacher Education/Basic Education</td>
</tr>
<tr>
<td></td>
<td>• Legislative Agenda in Education</td>
</tr>
<tr>
<td></td>
<td>• Governance</td>
</tr>
<tr>
<td></td>
<td>• Administrative Management System</td>
</tr>
<tr>
<td><strong>Multidisciplinary Studies and Pure Research</strong></td>
<td>• Curricular Studies</td>
</tr>
<tr>
<td></td>
<td>• Teaching Philosophy, Beliefs and Values</td>
</tr>
<tr>
<td></td>
<td>• Teacher Qualities</td>
</tr>
<tr>
<td></td>
<td>• Pedagogical Content Knowledge/Methods of Teaching</td>
</tr>
<tr>
<td></td>
<td>• Delivery Models of Teaching</td>
</tr>
<tr>
<td></td>
<td>• Assessment of Teacher Education/Basic Education Programs</td>
</tr>
<tr>
<td></td>
<td>• Assessment of Learning</td>
</tr>
<tr>
<td><strong>Local Responsiveness</strong></td>
<td>• Cultural/Multicultural Studies</td>
</tr>
<tr>
<td></td>
<td>• Indigenous Education</td>
</tr>
<tr>
<td></td>
<td>• Curriculum Localization</td>
</tr>
<tr>
<td></td>
<td>• Green Technology</td>
</tr>
<tr>
<td></td>
<td>• Technology and Livelihood Education</td>
</tr>
<tr>
<td></td>
<td>• School-Community-Industry Partnership</td>
</tr>
<tr>
<td><strong>Translational Research</strong></td>
<td>• Field Studies</td>
</tr>
<tr>
<td></td>
<td>• Model Building</td>
</tr>
<tr>
<td></td>
<td>• Change, Development and Transformation Studies</td>
</tr>
<tr>
<td></td>
<td>• School-Community Partnership</td>
</tr>
<tr>
<td></td>
<td>• School-Industry Partnership</td>
</tr>
<tr>
<td><strong>Internationalization</strong></td>
<td>• Benchmarking/Comparative Studies</td>
</tr>
<tr>
<td></td>
<td>• Quality Assurance Systems</td>
</tr>
<tr>
<td></td>
<td>• Cultural Diversities</td>
</tr>
<tr>
<td></td>
<td>• International Linkages</td>
</tr>
<tr>
<td></td>
<td>• International Scholarships and Exchange Programs</td>
</tr>
<tr>
<td></td>
<td>• Transnational Education</td>
</tr>
</tbody>
</table>
The PNU Research Agenda defines an array of relevant areas in the field of teacher education research. The research areas may not be exhaustive since generation of knowledge is limitless. From the generated themes, research topics are also suggested to guide or provide direction to the faculty, staff, and both the graduate and the undergraduate students in the conduct of teacher education researches. Table 4 describes research topics for each of the themes. The list is neither prescriptive nor exhaustive.

<table>
<thead>
<tr>
<th>RESEARCH THEME</th>
<th>KEY RESEARCH AREAS</th>
</tr>
</thead>
</table>
| Product Development | • Learning Resource Package Development  
                     • Instrument Development  
                     • Technological/Livelihood Education Products  
                     • Educational Inventions  
                     • Teacher Competence and Capacities  
                     • ICT Utilization and Integration in Teacher Education |
| Sustainability | • Environment and Climate Change  
                • Information and Communications Technology  
                • Equipment/Infrastructure  
                • Knowledge Management System  
                • Organizational Culture  
                • Financial and Auditing Operations |
| New and Emerging Areas in Teacher Education | • Cognitive and Brain-Based Research  
                                           • East-Asian Pedagogies  
                                           • New Ecologies of Learning  
                                           • Emerging Values and Norms in Educational Systems |
Table 4. SAMPLE RESEARCH TOPICS

<table>
<thead>
<tr>
<th>RESEARCH THEME</th>
<th>RESEARCH TOPICS</th>
</tr>
</thead>
</table>
| Policy Studies   | • Analysis of the NCBTS, its responsiveness to the needs of the future teachers  
|                  | • Hiring, promotion and retention of faculty (Performance appraisal system)  
|                  | • Admission policy on foreign students  
|                  | • Administrators profile  
|                  | • Performance appraisal system  
|                  | • Admission process  
|                  | • Non-teaching staff profile  
|                  | • Supply and demand for teachers  
|                  | • Maximizing investments in teacher preparation in the Philippines  
|                  | • Supply and requirements for future teachers in the Philippines  
|                  | • Analysis of the family income profile of students, cost-structure of the university and other economic indicators as basis of the development of a socialized tuition fee system  
|                  | • Policy formation on the standardized and intellectualized use of Filipino in a university  
|                  | • Creation of new school policies and intervention programs against smoking by determining the TEI stakeholders’ knowledge, attitudes and practices on smoking and its related policies  
|                  | • Teaching and learning beliefs and experiences in relation to large class: basis for policy making  
|                  | • Development of an aptitude test for BS/AB graduates for teaching English in the high school level  
|                  | • Development of exit examination for future teachers; an internal quality assurance system in teacher education programs  
|                  | • Financial and organizational costs  
|                  | • Appropriate and fair teaching assignments (faculty loading)  
|                  | • Rewards and incentives systems  
|                  | • Mentoring and support  
|                  | • Professionalization of service  
|                  | • Amendments to RA 4670 (Magna Carta for Teachers)  
|                  | • DepEd and CHED policies affecting Teacher Education  
|                  | • Institutionalizing continuing education  
|                  | • Systems review of policies in teacher education institutions  
|                  | • Policies in teacher training  
|                  | • System structures and procedures in the delivery of basic education  
|                  | • Developing teacher education Framework for K to 12  
|                  | • National policies and curriculum for lifelong learning  
|                  | • Developing a ranking system for teacher education programs  
|                  | • Improvement in admission policies  
|                  | • Wash back effect of LET results on teacher education curriculum  
|                  | • Licensure examination competencies  

<table>
<thead>
<tr>
<th>RESEARCH THEME</th>
<th>RESEARCH TOPICS</th>
</tr>
</thead>
</table>
| Multidisciplinary Studies and Pure Research | - Defining teacher qualities  
- Values orientation of pre-service teachers  
- Commitment to teaching  
- Development of socio-culturally sensitive/nationalistic teachers  
- Language-related attitudes and beliefs  
- Language proficiency/skills (verbal and written communication skills) of teachers as input to teacher qualification standards for hiring  
- Research aptitude of teachers  
- Analysis of the teacher education curriculum to be responsive to the needs of future teachers  
- Innovative teaching approaches/methods/strategies in teaching the discipline  
- Teacher and student interaction with focus on effective ways of teaching the future teachers  
- Distance learning  
- Mobile teachers  
- Multi-grade instruction  
- National study of the novice teachers’ development and mathematical knowledge for teaching  
- The Filipino learner: cognitive, social, emotional, moral, and physical attributes  
- LET as predictor of teaching performance: case of graduates across disciplines  
- Development of teaching-learning model for developing future teachers’ 21st century competencies and skills  
- Assessment and evaluation of learning outcomes  
- Traditional and authentic non-traditional assessment tools and rating systems  
- Teacher-made tests  
- Standard assessment tools for basic subjects  
- Conflict management and risk analysis  
- Professional life skills of teachers after training  
- Research capabilities of TEIs  
- Research competence of teachers (pre-service and in-service)  
- Moral intelligence of teachers  
- Exploring Rizal’s education philosophy toward a Filipino on education  
- Facilitating early literacy development  
- Comparison of the Literature student-teachers’ cognition and practices before and after practice teaching  
- Exploring Filipino teacher education students’ conception of teaching and learning  
- Practices in teaching to children using MTB-MLE |
<table>
<thead>
<tr>
<th>RESEARCH THEME</th>
<th>RESEARCH TOPICS</th>
</tr>
</thead>
</table>
| Multidisciplinary Studies and Pure Research | - Beginning teachers standards (BetS) framework  
- Framework for enhancement of LET and its systems environment  
- Teacher development needs study  
- Differentiated national competency-based teacher standards (D-NCBTS)  
- Enhanced performance appraisal systems for teachers (E-PAST)  
- Assessment for teacher academic renewal (AITAR)  
- Teacher educators typology  
- Differentiated national competency based standards for teacher educators (D-NCBSTE)  
- Development of an instructional model for effective pedagogical approaches for nurturing teacher leaders in teacher education institutions                                                                 |
| Local Responsiveness                    | - Curriculum localization/multicultural curriculum  
- Readiness of the teacher education curriculum in implementing mother-tongue based teaching  
- Alternative learning styles/local ways of doing  
- Use of indigenous products and resources  
- Understanding local history  
- Cultural beliefs, rituals and values  
- Livelihood education in local communities  
- Cross-cultural community-based learning  
- Baseline data for the conservation of priority species of indigenous trees  
- Status of indigenous peoples education as basis for designing multicultural education  
- Developing indigenous-based instructional model for literacy programs  
- Ethnobotanical study of indigenous plants used by local people  
- Arrangement of selected songs of indigenous people \                                                                 |
| Translational Research                 | - Teaching teachers of other fields how to teach  
- Exploring models for Erasmus Mundus in pre-service education  
- Home study program  
- Open university/high school program  
- Teacher training models  
- Integrative mode of teaching  
- Parent-teacher partnership model to quality education  
- Education-related variables needed for business and industry |
<table>
<thead>
<tr>
<th>RESEARCH THEME</th>
<th>RESEARCH TOPICS</th>
</tr>
</thead>
</table>
| Internationalization | • Certification standards and international ranking system  
• Benchmarking continuing education programs  
• Teacher education accreditation standards  
• Internal evaluation of accreditation process  
• Tracer study or career development of alumni abroad  
• Demands of employers overseas for teacher qualities and competence  
• Professional life skills of teachers after trainings  
• Comparative studies between the teaching practices in our country and those in neighboring countries  
• Harmonizing the standards of the K-12 curriculum across ASEAN countries  
• Developing standards in teacher education curriculum and educational research  
• Assessment of the level of internationalization of TEIs in the Philippines  
• Accreditation system of teacher education programs in selected countries  
• Competitive edge of migrant Filipino teachers in selected countries  
• Constructing the ASEAN image through educational curriculum of selected 3NS and TEIs among members of ASEAN |
| Product Development | • Modules development for student (example, in far-flung areas of the country and mother tongue-based multilingual education materials)  
• Instructional materials for disciplinal content and pedagogical content knowledge  
• Instruments to measure educational constructs across disciplines (for example, instruments to measure literacy levels)  
• Use of ICT in teaching the discipline  
• Use of ICT in developing educational resources  
• Capability of staff to use ICT  
• Extent of ICT use in data/knowledge management system  
• K to 12 instructional materials development  
• Learning packages (example, learning packages in music, arts, and humanities)  
• Creation of institutional nutrition program, formulation of policies, and creation of materials to promote good nutrition  
• Instructional resource of pedagogical innovations in professional education (PIPE)  
• Development and validation of instructional materials for teaching MTB-MLE  
• Chemistry micro lab kit  
• Physics micro-scale laboratory kit  
• Development and validation of culturally-sensitive curriculum material evaluation tool |
## RESEARCH THEME

### RESEARCH TOPICS

<table>
<thead>
<tr>
<th>Theme</th>
<th>Topics</th>
</tr>
</thead>
</table>
| **Product Development**                    | • Development of tutorial courseware on selected topics in mathematics, science and language  
                                   | • Systems software development for national database center for education |
| **Sustainability**                         | • Empowerment of school managers/leaders                               |
|                                           | • Educational leadership of school managers and institutional management |
|                                           | • Research mentoring and continuing education of teachers              |
|                                           | • Environmental and climate change studies with educational implication |
| **New and Emerging Areas in Teacher Education** | • Emerging subject areas in basic education affecting teacher education curricula (i.e. K to 12)  
                                       | • Meta-cognitive strategies and brain-based research                    |
|                                           | • Conflict management style of teacher education students; basis for development of a conflict management system design |
|                                           | • Development of a model for senior high school (grades 11-12) teacher education track program |

### References


Websites:

- [www.deped.gov.ph](http://www.deped.gov.ph)
- [www.neda.gov.ph](http://www.neda.gov.ph)
**PNU-RA DEVELOPMENT PLAN OF ACTIVITIES**

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 21, 2011</td>
<td>Workshop to review and update the PNU Research Agenda (PNU-RA)</td>
</tr>
<tr>
<td>September 14, 2012</td>
<td>Multi-Stakeholders’ Forum on Revisiting the PNU Research Agenda (PNU-RA)</td>
</tr>
<tr>
<td>September 2012</td>
<td>Consolidation of Output by CREDE Documenters</td>
</tr>
<tr>
<td>October 2012</td>
<td>Redrafting of PNU-RA (1st draft)</td>
</tr>
<tr>
<td>October 2012</td>
<td>Deliberation of PNU-RA Output by CREDE Faculty and Staff</td>
</tr>
<tr>
<td>October 2012</td>
<td>College Workshops on PNU-RA led by Research Coordinators for Feedback</td>
</tr>
<tr>
<td>December 5, 2012</td>
<td>Presentation of URA to Agusan Campus Research Workshop for Feedback</td>
</tr>
<tr>
<td>January 2012</td>
<td>Writing of PNU-RA (2nd draft)</td>
</tr>
<tr>
<td>February 2013</td>
<td>Presentation of PNU-RA for Approval of the Research Council</td>
</tr>
<tr>
<td>April 2013</td>
<td>Focus Group Discussion on PNU-RA with the VPPRE and the University President</td>
</tr>
<tr>
<td>April 18, 2013</td>
<td>Revision of PNU-RA by CREDE (3rd draft)</td>
</tr>
<tr>
<td>May 18, 2013</td>
<td>Validation of PNU-RA by Selected Faculty Experts</td>
</tr>
<tr>
<td>May 21, 2013</td>
<td>Refinement of PNU-RA (4th draft)</td>
</tr>
<tr>
<td>May 30, 2013</td>
<td>Consultation with VPPRE and the University President</td>
</tr>
<tr>
<td>June 2013</td>
<td>Presentation to External Validators (SUCs Research Management Training)</td>
</tr>
<tr>
<td>July 2013</td>
<td>Final Editing of PNU-RA (5th draft)</td>
</tr>
<tr>
<td>August 9</td>
<td>Presentation of the PNU-RA for approval of the Research and Extension Services Coordinating Committee</td>
</tr>
<tr>
<td>September 2013</td>
<td>Presentation and approval of the Administrative Council</td>
</tr>
<tr>
<td>September 18, 2013</td>
<td>Presentation to BOR for approval</td>
</tr>
<tr>
<td>December 12, 2013</td>
<td>BOR approval of the University Research Agenda (BOR Resolution U-2010 s.2013)</td>
</tr>
</tbody>
</table>
CONTRIBUTORS

THE RESEARCH COUNCIL (Old Structure)

Dr. Ester B. Ogena
Chair

Dr. Evangeline F. Golla
Vice-Chair

MEMBERS

Vice President for Academics
Dr. Adelaida C. Gines

Vice President for Administration, Finance and Development
Dr. Rebecca C. Nueva España

College Deans

Dr. Zenaida Q. Reyes
College of Arts and Social Sciences

Dr. Larry A. Gabao
College of Education

Dr. Ma.Antoinette C. Montealegre
College of Languages, Linguistics and Literature

Dr. Rosemarievic Villena-Diaz
College of Science

Campus Executive Directors

Dr. Elena A. Navas
Isabela Campus

Dr. Maritess C. Geronimo
Cadiz Campus

Dr. Adelyne C. Abrea
Agusan Campus

Prof. Edgardo S. Villasenor
Lopez-Quezon Campus

Center for Research and Development in Education
Dr. Wilma S. Reyes
UNIVERSITY RESEARCH AND EXTENSION SERVICES COMMITTEE
(New Structure)

Dr. Ester B. Ogena
Chairperson

Dr. Rebecca C. Nueva España
Dr. Larry A. Gabao
Co-Chairs

Dr. Zenaida Q. Reyes
Dr. Wilma S. Reyes
Dr. Marilyn U. Balagtas
Prof. Rachel R. Ortega
Members

EXTERNAL VALIDATORS
SUCs Participants in the Flagship Course on Research Management

PNU-RA TECHNICAL WORKING GROUP

Dr. Wilma S. Reyes
Professor

Dr. Edna Luz R. Abulon
Prof. Lucilla R. Fetalvero
Prof. Ma. Victoria C. Hermosisima
Dr. Maria Carmela T. Mancao
Prof. Adonis P. David
Dr. Antriman V. Orleans

PNU-RA WRITERS
Prof. Lucilla R. Fetalvero
Prof. Ramer V. Oxiño
Dr. Wilma S. Reyes
Prof. Rita Bumanglag-Ruscoe
Prof. Felicia I. Yeban

COVER DESIGN ARTIST
Prof. June R. Dumanhug

LAYOUT DESIGN/PRINTING
Mr. Guillermo Raul G. Fernandez

ADMINISTRATIVE STAFF
Ms. Maribel G. Gerundio

STUDENT ASSISTANT
Ms. Michelle B. Aquino
MULTI-STAKEHOLDERS’ FORUM
Theme: Revisiting the University Research Agenda

PARTICIPANTS

PNU Officials
Dr. Ester B. Ogena
Dr. Adelaida C. Gines
Dr. Evangeline F. Golla
Dr. Rebecca C. Nueva España
Dr. Zenaida Q. Reyes
Dr. Danilo K. Villena
Dr. Ma. Antoinette C. Montealegre
Dr. Rosemarievic Villena-Diaz
Dr. Aurora B. Fulgencio
Dr. Leticia V. Catris
Dr. Bettina Philomena M. Sedilla
Dr. Marilyn U. Balagtas
Dr. Gladys C. Nivera
Dr. Glenda A. de Lara
Dr. Corazon P. Sigua
Prof. Ruth A. Alido
Prof. John P. Natividad
Prof. Fortunato G. Vendivel Jr.
Prof. Ma. Elvira A. Asuan
Prof. Ma. Lourdes S. Agustin
Prof. Lordinio A. Vergara
Dr. Teresita T. Rungduin

PNU Faculty
Dr. Anita M. Navarro
Prof. Antonio G. Dacanay
Prof. Donna Marie B. de Mesa
Dr. Cecilia M. Mendiola
Prof. Josephine M. Calamlam
Prof. Maville Alastre-Dizon
Prof. Felicia I. Yeban
Prof. Rita Bumanglag-Ruscoe
Prof. Marilou M. Ubiña
Dr. Rosarito T. Suatengco

Prof. Ronald Allan S. Mabunga
Prof. Adonis P. David
Dr. Enrico B. Garcia
Prof. Minda C. Valencia
Dr. Erminda C. Fortes
Prof. Merry Ruth M. Gutierrez
Prof. Maria Ruth M. Regalado
Dr. Diony V. Varela
Dr. Larry A. Gabao

PNU Administrative Staff
Ms. Zyralie A. Lotivio
Ms. Florence G. Allejos
MS. Jenny C. Malitao
Ms. Phoebe Loise Garcia
Ms. Gina D. Cruz
Mr. Joseph G. Luceño

PNU-SG
Mr. Aunell Rose Angcos
Mr. Michael Esposo
Ms. Geraldine Grace Garcia

PNU-LOPEZ
Dr. Roel Avila

UPLB
Dr. Myrna Rodriguez

WVSU
Dr. Vicente Handa

NRCP/FEATI
Dr. Rogelio Panlasigui
MMSU
Dr. Artemio Seatriz

NEDA
Ms. Susan Carandang

PBEd
Ms. Diane Fajardo

SEI
Dr. Filma Brawner

PNHS
Sis Iluminada Coronel

CHED
Ms. Lutgarda Ramos

SEAMEO INNOTECH
Dr. Mary Sylvette Gunigundo

UNESCO
Dr. Zenaida Domingo

Senate of the Philippines
Dr. Fe Hidalgo

COMMITTEE MEMBERS

Overall Chair
Dr. Wilma S. Reyes

Facilitators
Dr. Marilyn U. Balagtas
Prof. Lucilla R. Fetalvero
Dr. Maria Carmela T. Mancao
Prof. Ma. Victoria C. Hermosisima

Documentors
Prof. Ramer V. Oxiño
Dr. Edna Luz R. Abulon
Ms. Phoebe Loise Garcia

Staff
Mrs. Basilia C. Cadang
Mrs. Maribel G. Gerundio
Ms. Joyce M. Erfe