# Physics Education Research in Vietnam

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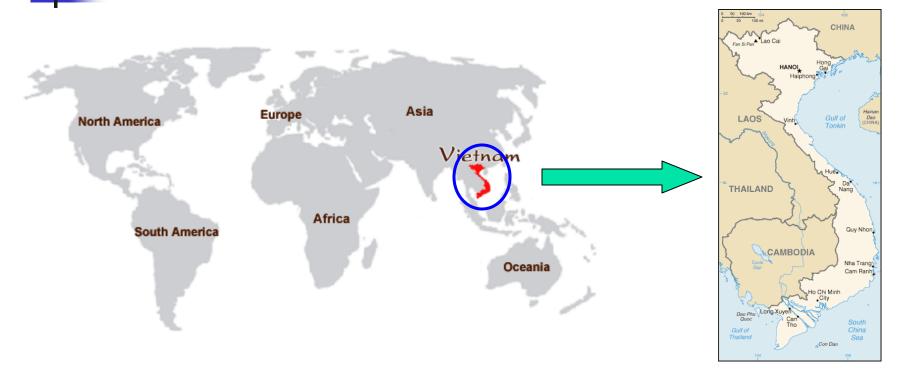
Physics Education Research Group Kansas State University





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Vietnam is a country in the South East Asia

## Geography



- Surface area: 128,527 sq mi (65th)
- Population: 87 million (13th)
- Official language: Vietnamese
- National literacy rate: ~ 95%
- ~ 25 million students K-College
- ~ 1.3 million teachers



### Physics Education in Vietnam

- All students learn Physics from the 6<sup>th</sup> grade to the 12<sup>th</sup> grade
- Conceptual Physics in middle school
- Algebra-based Physics in high school
- Calculus-based Physics in college
- Physics is one of the required subjects in the admission exam to many colleges



## Physics Education in Vietnam

- Traditional classrooms, lectures
  - students passively receive knowledge from teacher
- Content-focused teaching
- Teaching towards the exams
  - Students are good at memorizing facts and solving textbook problems, but are lack of conceptual understanding and solving real world problems



### Physics Education Research in Vietnam

- PER is not well-known among physics teachers and researchers in Vietnam
- Most of the PER studies focus on
  - using technology in physics classrooms
  - creating assessment tools
  - active learning models such as problem-based learning, project-based learning, ...
- These studies do not help improve the quality of physics teaching.





#### PER at HCMC University of Pedagogy

- The Physics Department at Ho Chi Minh City University of Pedagogy (HCMUP) is one of the largest physics departments in the country on physics teacher training
- We would like to raise awareness of future physics teachers on PER as a key to improve physics teaching.
- However, we do not have faculty members with PER specialty.





#### PER at HCMC University of Pedagogy

- We are seeking cooperation with PER groups around the world for
  - training our faculty members and graduate students with specialty in PER
    - cooperative training programs
  - joined projects in PER
  - visiting scholars exchange





#### **Contact information**

If you are interested in knowing more about PER in Vietnam and potential cooperation in PER with the Physics Department at HCMUP, please contact:

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## Thank You

