

Preparing EAP (ESL) Students for College Success by Integrating Math Concepts in the EAP Curriculum

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Challenges



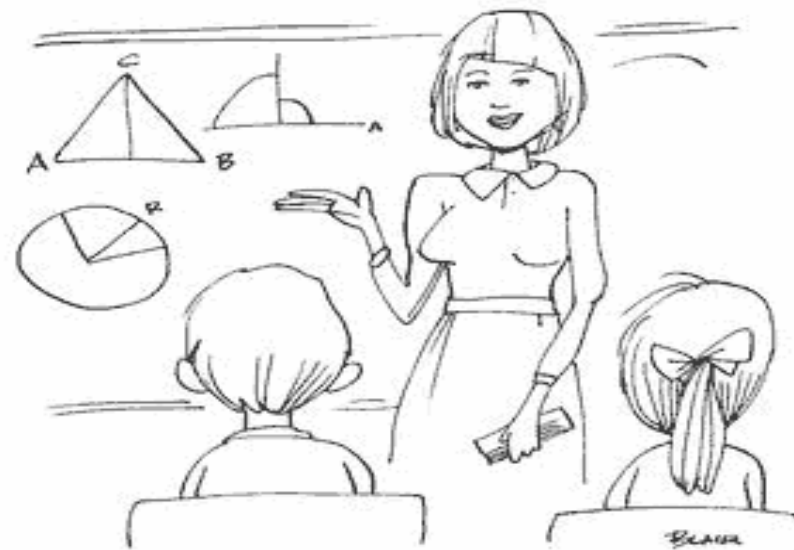
A growing number of non-native speakers, mainly Hispanics, are entering our college system.

- ❏ At the same time, the job market is increasingly demanding highly literate and mathematically capable graduates.
- ❏ ESL students face a particular challenge in this respect.
- ❏ 57% of ESL students on our campus need to enroll in college preparatory classes upon completing the ESL program.
- ❏ In addition, failure to complete the college's math requirements has been named as a major reason for student attrition.



Math is considered the “universal language.”

However, students too often regard math as a subject that is detached from their every-day life.



"THESE PROBLEMS MAY SEEM DIFFICULT
AND BORING NOW, BUT JUST REMEMBER,
YOU'RE LEARNING A SKILL YOU'LL PROBABLY
NEVER USE AGAIN."



According to Keith Buchanan and Mary Helman, instructors can help “bridge gaps in literacy students’ math knowledge, expand their communicative competence in English, and ultimately prepare them for success in future math coursework” (Reforming

Mathematics Instruction for ESL Literacy Students, 1997).

English
Language



Mathematics

Goal





To help ESL students succeed in their college career by building connections between math and language instruction.

Plan of Action

 Use the math professor as a guest lecturer in the EAP (ESL) classroom at regular intervals.

 Continue to design pair work and group activities based upon students' daily experiences that involve numeracy.

 Create opportunities to hear math language and to speak and write mathematically.

 Increase student knowledge of math related vocabulary.



Boost students' confidence in their own mathematical ability.

Design an assessment tool to determine students' attitude toward the subject (and perhaps math knowledge) to group students heterogeneously; thus allowing students to help each other.