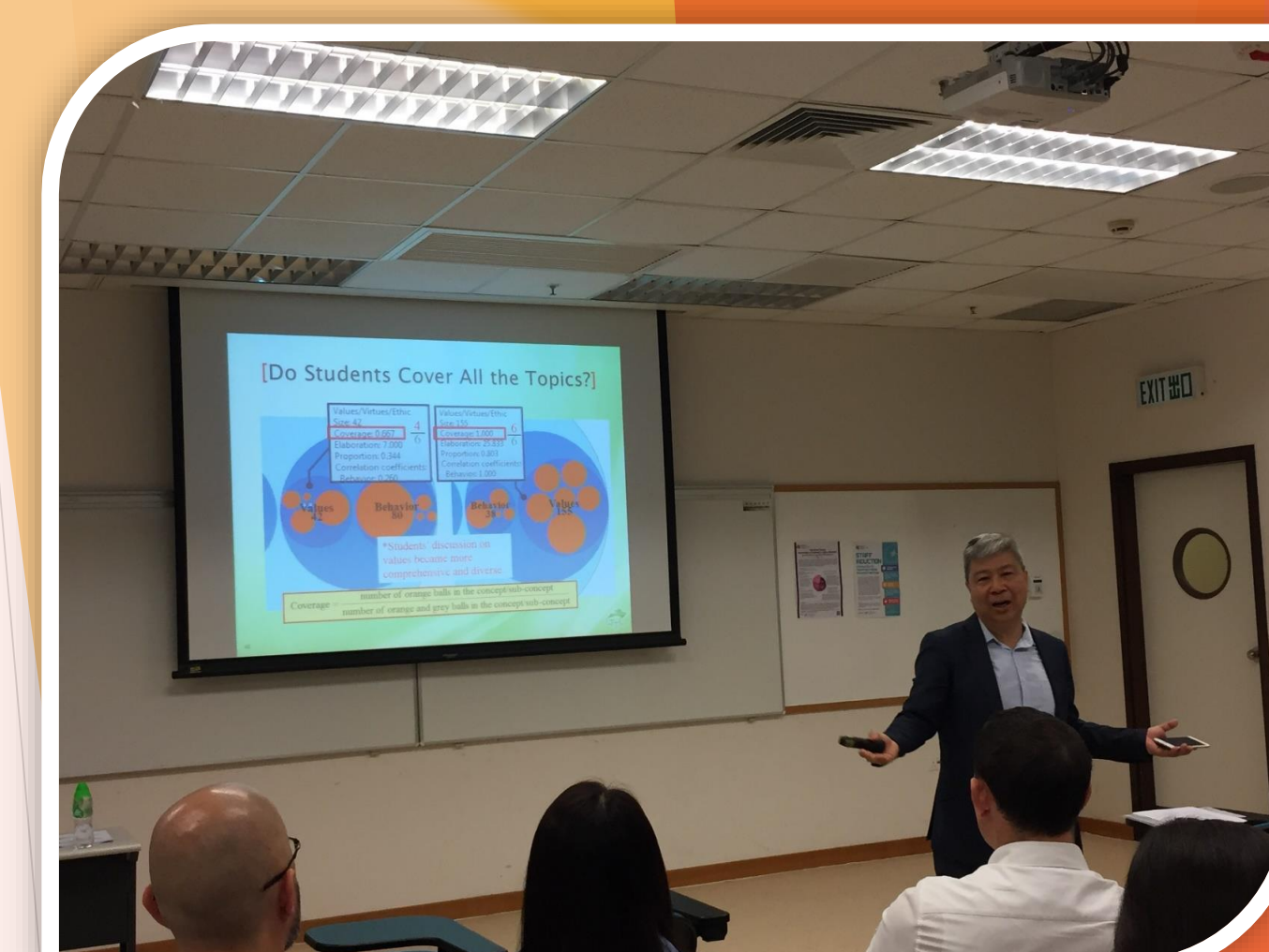


# BILINGUAL TEXT-MINING for GROUP REFLECTION



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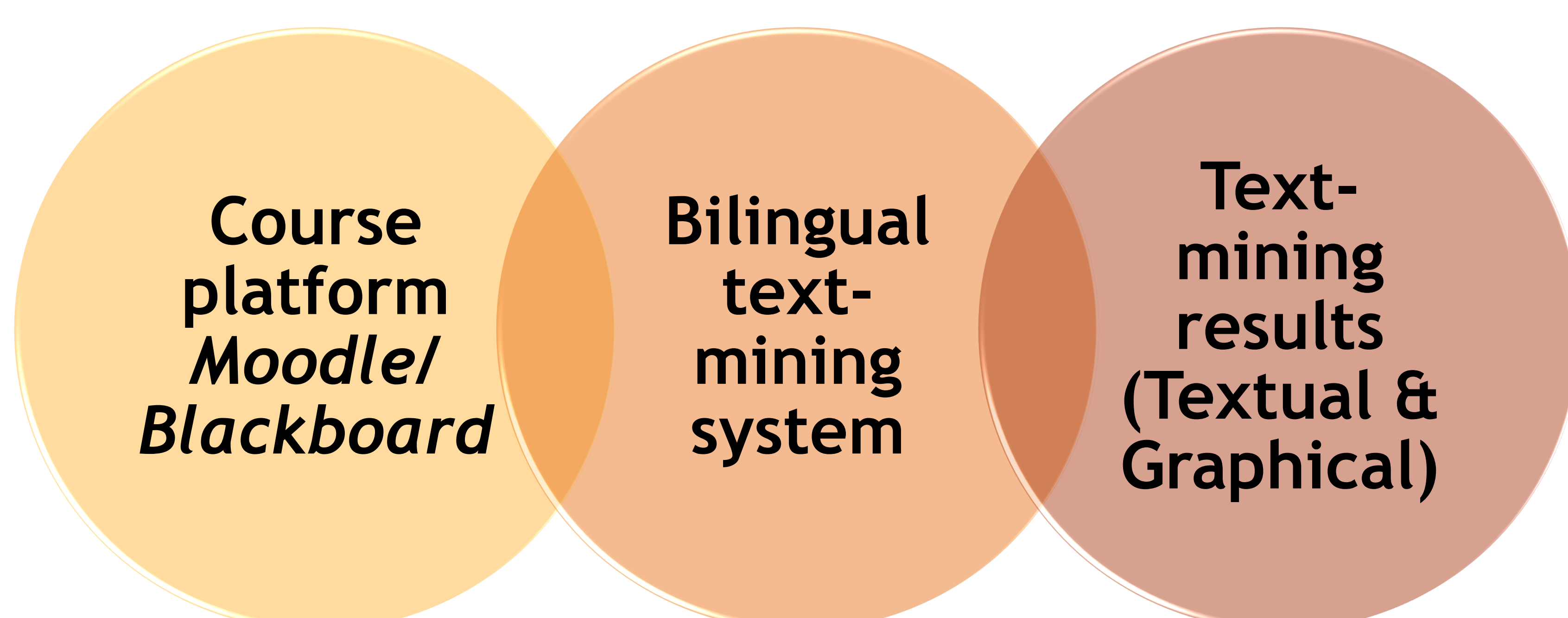
The Education University of Hong Kong

## Introduction of the Bilingual Text-Mining System

The bilingual text-mining system is developed and implemented to address the educational goal in the 21st century for learners' active, constructive and interactive learning of domain knowledge in technology-enhanced environments. The system adopts the bilingual text-mining technique for analyzing learner-generated text on the learning management systems. It incorporates a bilingual taxonomy of domain-specific keywords for an automatic identification and counting of matching keywords in learner-generated text, and provides hierarchical visualization for an informative and interactive display of counting results of matching keywords.

The use of the bilingual text-mining system was integrated into the delivery of 50 courses across four local universities (EdUHK, CUHK, HKBU & LU) in 2016 & 2017, involving a total of 4,784 students and 34 teachers.

## Three components



## Pedagogical potentials

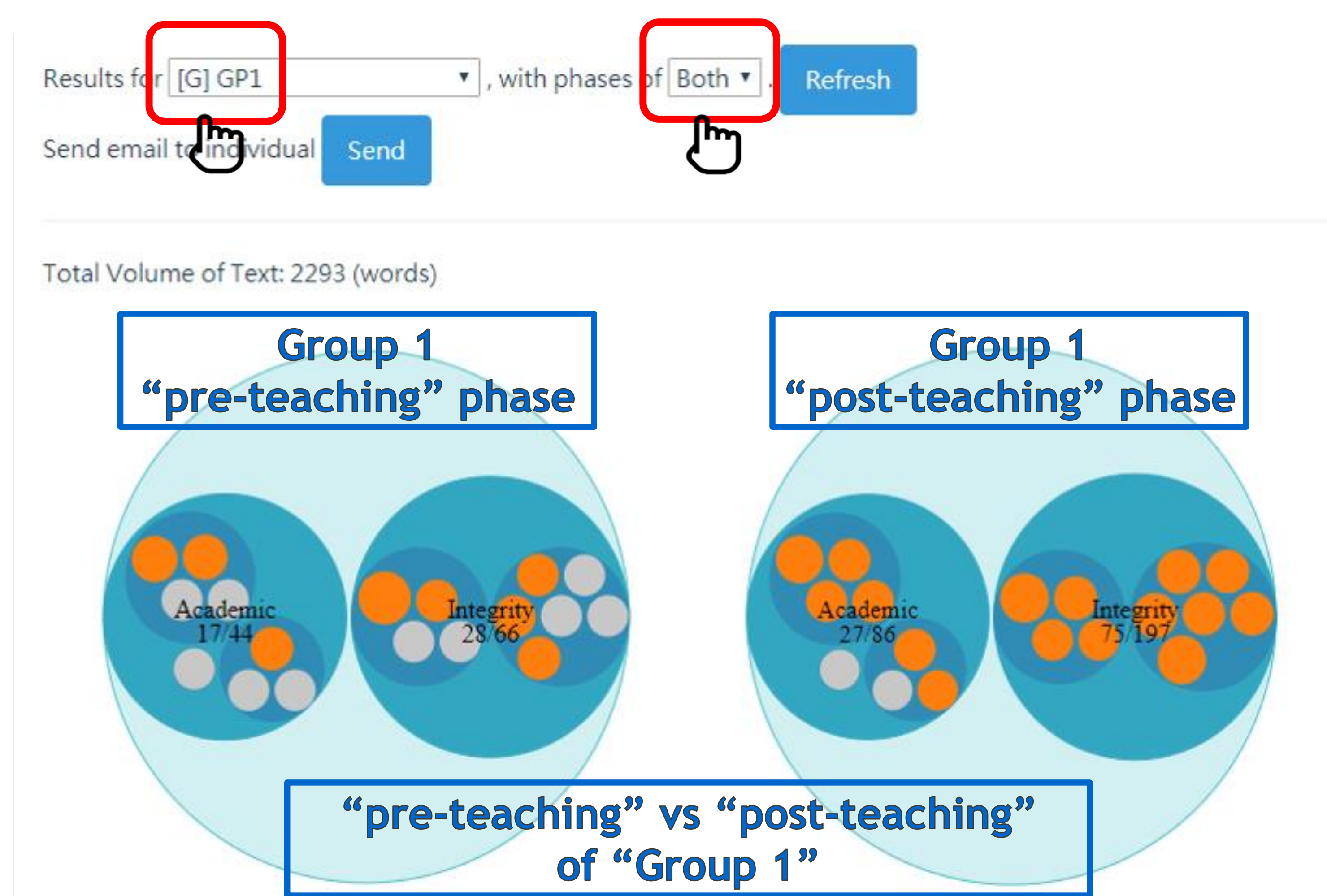
### For Learners

- The text-mining results serve as prompt and relevant feedback on the progress and weaknesses of their learning.

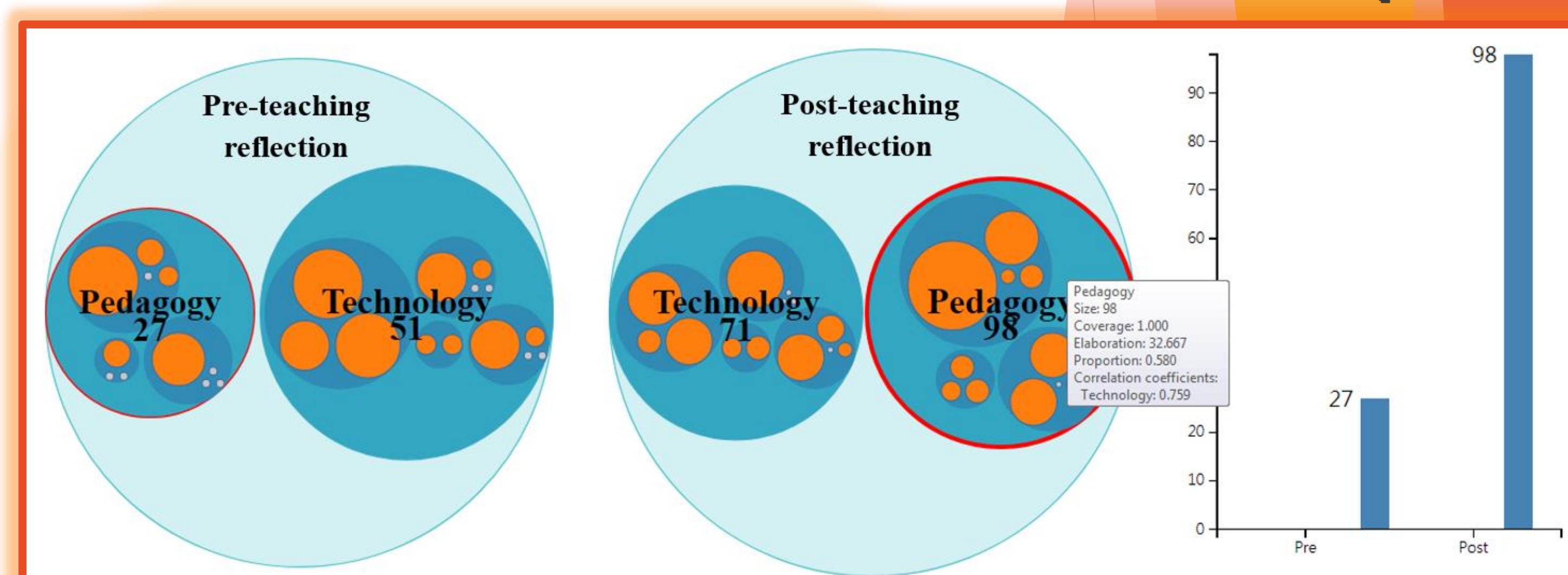
### For Teachers

- The text-mining results support an efficient and evident understanding of the overall teaching effectiveness, to enhance pedagogical decisions for learning mediations in their teaching.

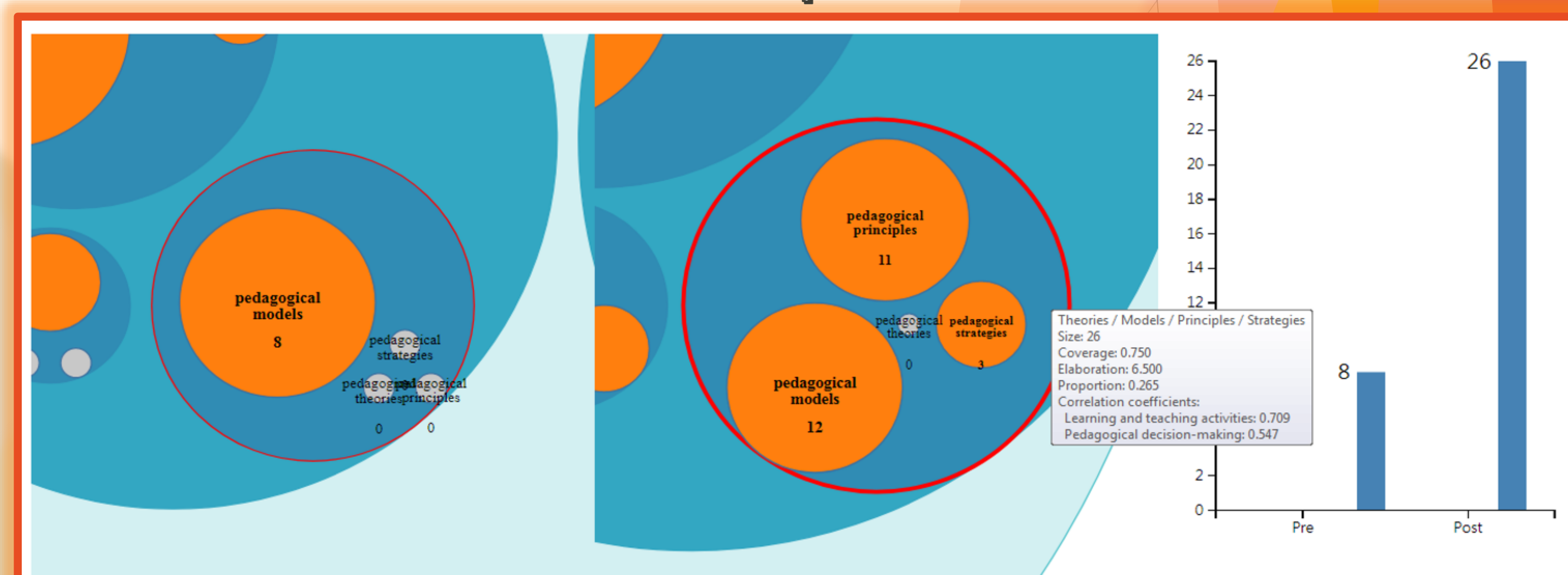
## Showing the Comparison Data “Group/Class”



## Mouse-over Circles to See the Pre-/Post- Comparison



## Zoom-in to See the Sub-topics



•The system allows teachers to automatically generate zoom-able diagrams to visualize the text-mining results on analyzing the reflection texts of each student group.

•Members of the student group “GP1” can view the zoom-able diagrams of text-mining results on analyzing their group’s reflection texts in both “pre-teaching” and “post-teaching” phases within one viewing panel.

Automatic Email Notification

“Send” button

The email content includes 3 web links of text-mining result:

- Overall class
- Individual student
- Student group