Heterogeneous speech prediction using LDA classifiers

Abstract

Classroom speech intelligibility has become one of the main concerns in schools and other learning institutions development nowadays. This is because the qualities of student's perceptions towards teacher are essentials in learning development. Measures have been introduced by the acoustical association to tackle the speech intelligibility problems in the classroom such as room renovations. Room's acoustics standards have been introduced in several countries but still the questions on whether the standards fits on every classroom in different countries are still arise. Studies have also shown that most of the researches that have been conducted were only focusing on the conventional type classroom which depends only on the teacher's vocal power. This paper will formulate the measurement protocol on measuring the speech intelligibility in the sound reinforced (multiple speaker) classroom. Finally it was found that the speech intelligibility in the sound reinforced classroom is better than the conventional classroom by using Linear Discriminant Analysis.