Improving Students' Oral Skills through a Cooperative Learning Approach

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It is obvious that the need for English in the Sri Lankan society is growing in a variety of different directions every day. Yet, although English is regularly taught in all schools from the nursery to the tertiary levels, the learners suffer from a great lack of fluency in their oral communication. They are generally competent in their cognitive skills but weak in their communicative skills. In that context, this paper deals with issues and problems faced by secondary level students in mastering the oral skills in English and to investigate the effectiveness of Cooperative Learning (CL) strategy. The main aim of the study was to determine how cooperative learning is an effective approach to develop and enhance the speaking skills. In order to analyze the hypotheses developed in this concern, a quantitative survey and a qualitative survey are used along with a questionnaire as an instrument for obtaining data from a group of 50 students from five schools of the Kahatagasdigiliya Educational Division. According to the results, it was discovered that the majority of the students cannot speak English properly, as they suffer from a sense of insecurity caused by several language deficiencies. But through cooperative learning, students interact and express themselves more to their peers or classmates. The approach served also as a venue for reluctant and fearful students which enable to intensify their self-esteem. Therefore, in conclusion, the paper suggests a cooperative learning strategy to promote oral skills.

Keywords: *Cooperative Language Strategy, Speaking Skill, Fluency, Communication*

ENVIRONMENTAL MICROBIAL COMMUNITIES FOR EFFICIENT CELLULOSE DEGRADATION

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Cellulolysis is a synergistic process between microorganisms in the natural environment. They act as a community in degrading cellulose, and thereby increasing soil fertility. If these efficient communities could be isolated from the environment, there may be a potential of using them in industries such as biofuel production, paper & pulp, agriculture etc. where cellulose degradation is one of the key factors. The objective of the current study was to isolate microbial communities with efficient cellulolytic capabilities exhibiting high total cellulase activities in comparison to a cellulolytic monoculture, *Trichoderma viridae*. Three different cellulase production media were used for isolation of communities. Upon submerged cultivation of each community, the total cellulase activities were determined. In total, 5 fungal communities, 8 bacterial communities and 8 fungal –bacterial communities were isolated from soil with a high degree of cellulose degradation. The fugal communities were more efficient than bacterial communities in cellulase production with the highest total cellulase activity of being 0.79 FPU/ml for the best community. This was significantly higher than the total cellulase activity of *T. viridae* which was 0.495 FPU/ml. The bacterial communities gave a total cellulase activity below 0.03 FPU/ml level, the highest being 0.028 FPU/ml. The cellulase activities of fungal -bacterial communities were not significantly different from each other, and was negligible compared to *T. viridae*. The study showed that cellulase enzyme from fungal communities can be utilized for efficient hydrolysis of cellulose. Molecular biological identification of the fungal components present in each community is warranted for future applications.

Key words: *cellulase, cellulase activity, cellulolytic microbial communities*