

Trirat Rattanadech 2008: Conceptual Development of Cellular Respiration in Grade 10 by Inquiry Method. Master of Arts in Teaching, Major Field: Teaching Science, Department of Education. Thesis Advisor: Miss Sumalee Kanjanachatee, Ed.D. 135 pages.

The purposes of this study were to examine conceptual development of students on cellular respiration, and to find out suitable teaching techniques of inquiry method to develop students' cellular respiration concepts. A group of study in this research chosen from a classroom of 11 male and 31 female students at large public school in Krabi Province, second semester of 2006. The research tools were: inquiry method – teaching plan on cellular respiration, and data collection – the test of students' concepts on cellular respiration and students' weekly diaries/journals. Later, data were analyzed through comparing groups of concepts before and after teaching through inquiry method and analysis of teaching techniques in inquiry method to develop students' concept on cellular respiration of students' journals which were written weekly.

The results indicated that students' concepts on cellular respiration were developed after the students had been taught through inquiry method. They had greater correct concept both in total and some whereas member of those with concept and no concepts decreased. Furthermore, teaching techniques which developed students' concepts were those having students collaboratively carry out the search of finding out the answer themselves, training to think critically, comparing concept according to their daily experiences, and the technique of asking them questions to encourage them exchanging opinions before teaching

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Student's signature

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Thesis Advisor's signature

