

Teachers' geometrical competencies are very critical to the effective teaching of the subject. This study focused on the van Hiele Levels of geometric thinking reached by Ghanaian pre-service teachers before leaving for their Student Internship Programme (Teaching Practice) at the basic schools. In all, 300 second year pre-service teachers from 4 Colleges of Education were involved in this study. These pre-service teachers were given the van Hiele Geometry Test adapted from the 'Cognitive Development and Achievement in Secondary School Geometry Test' items during their second year, first semester. The results showed that 16.33% of pre-service teachers attained van Hiele Level 0 (i.e. the Pre-recognition Level or Level for those who have not yet attained any van Hiele Level), 27% of pre-service teachers attained Level 1, 32% attained Level 2 while 17.67% of pre-service teachers attained Level 3. However, only 6% and 1% of Pre-service Teachers attained Levels 4 and 5 respectively. These results show that majority (75.33%) of pre-service teachers' van Hiele Levels are lower than that expected of their future Junior High School 3 learners. This suggests that most of the pre-service teachers' geometry knowledge is not sufficient to teach at basic schools. Keywords: Van Hiele Levels, Geometric Thinking, College of Education Geometry, Pre-service Teachers, Ghana