

AN EXPLORATION OF CIRCLE GEOMETRY BASED ON ANIMATED NICOLET FILMS AT WYNBERG SECONDARY SCHOOL

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CAPS has brought Circle Geometry back into the core Mathematics Curriculum (in particular, Grade 11). The various theorems and proofs connected with this content bring opportunity for investigation, conjecture, formulations of conjectures, (logical, systematic) argumentation and informal-to-formal proof. The approach is based on short animated films developed and produced by Jean Nicolet, a Swiss school teacher who explored geometrical ideas through black and white silent animated films from 1944 until his death in 1966. This presentation reports on an exploration of the approach with 50 learners at one of the SDU's GrassLow Park Project schools, Wynberg Senior Secondary School (on 26 February 2014). The GrassLow Park Project focuses on teacher development in mathematics content, with classroom support, across senior phase grades, but with extension above and below this phase.

DISCUSSION ON NICOLET AND CIRCLE GEOMETRY

An initial (10-minute) activity will be introduced to the participants. This will form the basis for discussion of the approach. Apparatus will include a pair of intersecting lines on transparency and tracing paper; these will be used in combination with short movie clips (animations) and apps for further demo purposes. In this very brief presentation, most of the high school circle geometry will be surveyed. Practical classroom suggestions and sample learner work, comments, etc. will also be shared with the audience. A full workshop is possible if there is interest.

