MSAEP UM-UWC Linkage Report Visit to Columbia, MO October -November 2018

Submitted by Prof. Dorina Kosztin, Teaching Professor, and Prof. Meera Chandrasekhar, Curators' Distinguished Teaching Professor

Visitors: Mark Herbert, Department of Physics, UWC and Ron Engelbrecht, Subject Advisor, Metro South Educatioa(Me)2 (s h (d)] J 0.m)4 (e) EMe.2a(Me)2pMeo

<u>Objective 1</u>. Finalize alignment of South Africa Curriculum and Assessment Policy Statement (CAPS) Physics concepts for grades 8-11 with content and pedagogy in the Exploring Physics (EP) curriculum.

<u>Objective 2</u>. Train selected 8-11 grade teachers to function as lead teachers in the future (train-the-trainer model).

Objective 3. Teach 8-11 grade science teachers physics content utilizing modeling pedagogy.

observer the various techniques such as exit slips, group responses, sorting and decision making methods, and designing of hands-on experiments.

B. Content alignment and funding opportunities (MU persons involved: Dorina, Meera and Doug). Addresses Objective 5 of Kosztin's proposal and Objective 1 of Chandrasekhar's proposal.

A preliminary alignment of the Exploring Physics content with the South African content standards (CAPS) has been conducted over the past two years. We continued this alignment process and completed our draft of the alignment during this visit. Ron will now ask his classis5.001 TcRoneost(o)2 (bs)1 Tc -2.915(w a)-2 (ur5 0 Td (915(w 1 Tc -0.002 Tw T*(c)-1 (las)2 bC2-2 ()-2 (ur5

Rock Bridge High School: Freshman physics – Travis Gabel, Honors physics Cathy Dweik and Physics 2 - Kory Kaufman

Hickman High School: Freshman Physics &

meeting Mark and Ron at that time. He is currently scheduled to meet school district teachers and administrators at the Metro South Educational District in Cape Town and to give a talk at UWC.

This visit addressed several objectives of Kosztin's proposal, and a few objectives of Chandrasekhar's. We continue to discuss opportunities to explore funding to develop teacher leadership and professional development in our monthly Skype meetings. Work on the summative assessments (objective 3 of Kosztin's proposal) is in progress. Other objectives of Chandrasekhar's proposal will be addressed during her June/July 2019 visit to UWC.