

Washington State University College of Education

Julie Ann Noyes

will defend their thesis on

Date: August 29, 2017

Time: 8:00 am

Location: Pullman - Cleveland 353

Faculty, students and the general public are encouraged to attend

IS A PICTURE WORTH A THOUSAND WORDS? EVALUATING THE DESIGN OF INSTRUCTIONAL ANIMATIONS IN VETERINARY EDUCATION

Chair: Kira Carbonneau

Empirical evidence demonstrates improved student learning outcomes when animations are developed in alignment with the design principles of the cognitive theory of multimedia learning (CTML). The extent to which these principles are used in the design of veterinary instructional animations is unknown. This study reviewed the veterinary education literature for manuscripts that discussed specific medical veterinary animations as learning resources. The 30 referenced animations were analyzed to determine if they utilized 11 major design principles of CTML. Analysis revealed that the animations most commonly adhered to only 4 principles: coherence, redundancy, modality, and spatial contiguity. The majority of the 11 CTML principles were utilized by less than 40% of the animations. Additionally, this study examined the alignment between instructor perceptions (effectiveness and enjoyment) and adherence to the design principles. Analyses revealed that animations the instructors assessed as most enjoyable and effective did not utilize more principles than animations they viewed as least enjoyable and effective. The results of this study indicate many missed opportunities to increase learning by developing animated learning resources according to empirically based design principles. Decisions to include specific animations in instruction should be based on whether the resources include elements that have been proven to increase learning instead of subjective perceptions of efficacy and enjoyment.