## LEARNING MEDIA OF NUMERAL SYSTEM

## ON THE STANDARDS COMPETENCY APPLYING BASICS OF DIGITAL

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## **ABSTRACT**

This study aims to determine the performance, testing the feasibility of instructional media on the number system to apply basic standards of competence - basic digital techniques and test users on the X class students majoring in Electronics. The media can be used as a means of supporting the process of learning and teaching activities. Instructional media is designed and fabricated by combining a variety of multimedia objects such as text, images, animation and interactive buttons. Materials used in the subject matter of this medium is the theory of number systems and conversions between number theory

To determine the performance of the media tested with the instrument in the form of a checklist and expected function keys, compatibility with the function keys will show the media function according to its purpose, while for the due diligence performed by the validation tests by matter experts and media experts. For the user test, conducted with the involvement of students in grade XA and XB Muda SMK Patria Kalasan as research objects, aspects that are tested are aspects of design and ease of use of media. The results of this study is the performance, results of feasibility tests and test users. The results show the performance of which function as it should, both for navigation buttons or keys that function executes the simulation.

The results of the feasibility test of the media according to the expert review of the material aspects of the material obtained score of 80.36% (a very viable category), viewed from the aspect of the depth of the material obtained score of 80% (very viable category) and aspects of the evaluation by 75% (category worthy) so the total score is 79.55% (a very viable category). According to media expert learning this lesson the media review of the design aspects of getting score of 67.69% (viable category) reviewed aspects of information clarity 74.50% (category worthy) so that the total score was 72.61% (category worthy). Results of test users to design aspect got a score of 74.08% (category worthy), and ease of use get a score of 72.38% (category worthy) so that the total score of 73.38% (category worthy). Based on this, the instructional media used in this study as a viable means of supporting the process of learning and teaching activities on the basis of applying competency standards - the basic digital system at the vocational school majoring in electronics.

Key words: instructional media, number systems, conversion of numbers