Use of Microcomputers For Testing of Nursing and Medical Knowledge

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NURSESTAR is a microcomputer program that simulates a test experience for the National Council Licensure Examination (NCLEX) for Registered Nurse Licensure. TESTSTAR is an interactive test authoring system that allows educators to construct their own tests and then allows the student to take the test on a microcomputer. Both systems were designed by Allen F. Joseph and Lynda S. Joseph of the Logical Scholar Company. An option for a drill and practice test mode or an assessment test mode is part of both programs. A performance summary, assessment of strengths and weaknesses, and question analysis with rationales and explanations for each response provide immediate feedback to the student. Group analysis and item analysis are provided for faculty. NURSESTAR and TESTSTAR are compatible for the IBM/PC, Apple IIe and TRS-80 Model 111.

INTERPRETIVE SOFTWARE FOR CRITICAL CARE MEDICINE

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Much of the software that has been developed for critical care medicine is concerned only with the display of calculated data, while no attempt is made to interpret the data that is generated. We have developed two programs in Applesoft Basic that are capable of interpreting the data that is generated and suggesting therapy for each interpretation. The first program concerns hemodynamic assessments. This program not only displays a series of calculated hemodynamic parameters, but also interprets each “profile” and suggests the appropriate therapy to correct the problem. The second program involves nutritional therapy. This program uses routine nutritional assessment measurements to calculate daily caloric and protein requirements, and selects the appropriate hyperalimentation solution and infusion rate to be used in each case. Examples of the use of these programs will be demonstrated.