IP Knowledge Question Bank
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BACKGROUND

The IP Knowledge Question Bank is an item bank focused on IPE Roles and Responsibilities, Communication, and Teamwork competencies. Using a committee approach, we created an item bank using expertise from nursing and medical faculty members in constructing multiple-choice test questions. The IPE competencies represent a substantial body of knowledge that students must apply to actual clinical settings so the exam items include “next best action” team vignettes that require the application of factual knowledge of systems-based healthcare to patient care vignettes. Exam questions were created by individual faculty members and were vetted by a committee of faculty members. They are stored in an online item bank and key worded with the IP competencies and course objectives. Item difficulty levels and reliability statistics for each item are provided based on implementation data. Users can purposefully select from the item bank to create examinations according to keywords and difficulty levels.

IMPLEMENTATION

A. Tool Name: IP Knowledge Question Bank

B. Participants: Any level

C. Setting: The IP Knowledge Question Bank is administered individually, either online or on paper.

D. Requirements: Users must have access to Microsoft Excel. The test bank questions are located in an excel file that is key word searchable and indexed based on competencies. The test is completed individually and performance is assessed as a test score.

E. IPEC Competencies: Communication, Teamwork, IPE Roles/Responsibilities. The questions are coded by competency so that users can easily select which competencies they want to test.

F. Administration: Administration is up to the user: it can be done electronically using an existing testing software, or administered using pen and paper. The correct answers can be scored manually or using a testing software.
G. **Recommended uses:** The test bank items can be used either for measurement of class pre/post competency development or for individual assessment.

   As an individual assessment tool – The knowledge test items can be administered to test for student mastery of IPE competencies.

   For evaluating a course or program – The knowledge test items can also be administered to an entire cohort of students before and after an instructional program to test the ability of the program to teach student competencies.

   As a needs assessment – Items from the item bank can also be used to assess the strengths and weaknesses of a cohort of students and to plan and target curriculum accordingly.

H. **Strategies for providing results to students:** Students should be given their results following the knowledge test. Results are easy to interpret as a simple fraction: number of correct items over number of total items, or a simple percentage correct.

   **Potential results are:** Each item is scored as correct or incorrect and students receive a summative total score.

   **They mean:** The total score is indicative of knowledge of the competencies.

I. **Challenges:** One of the challenges associated with using this tool is that there is no specific curriculum that has been designed for the question bank, and as a result, users must select the questions they feel most appropriate. Secondly, unless the questions are made mandatory, it may be challenging to get students to complete them. Finally, if this is used as a pre-test and post-test, there is the possibility of test-retest phenomenon.
References
1. Ahmad, R. G., & Hamed, O. A. Impact of adopting a newly developed blueprinting method and relating it to item analysis on students’ performance. Medical Teacher. 2014; 36(sup1), S55-S61.