Faculty Block Directors

Data Storage
- Align questions with block (JC, MM, McC)
- Align questions with subject area—cases and lectures can fall within a subject area, as could questions with unknown source (WS, K)
- Align questions with case and/or lecture (JC, MM, HPP, L, PW, McC, K)
- Align cases with unique year-specific ID (HPP, L, PW)
- Allow current and previous versions of cases (L)
- Align block objectives with questions (JC, PW)
- Align content ideas with questions (JC, MM)
- Align lecture title and lecturer with questions (MM, HPP, PW)
- Align performance data with questions (JC, MM, HPP, PW, McC, K)
- Align images with questions (MM, PW, K)
- Standardize font (JC, MM)
- Preserve format and special characters (JC)
- Assign levels of access for block directors vs. other users (MM)

Display Options
- View
    - all PBL KB exam questions for respective block (MM, L, McC)
    - previous cases (MM)
    - last year's performance data (WS, McC)
    - when a question was last used (MM, HPP, L, PW, McC, K)
    - questions divided into question groups for scenarios with more than one question (PW, K)
    - previous versions of a question group (JC, L, K)
    - historical performance data (percent correct, Mermac and correlation data) for each exam question, if available (JC, MM, HPP, L, PW, McC, K)
- Separate and view
    - only the cases covered this year (JC, MM, HPP, L, PW, WS)
    - only questions from last year's exam (WS, McC, K)
- Separate and exclude questions from last year's exam (MM, L, WS, K)
- Browse available questions by
    - case (JC, MM, HPP, L, PW, McC, K)
    - lecture (MM, HPP, L, PW, McC, K)
    - subject area, for example organ system = 2 cases each + lectures (L, K)
    - keyword or content idea (JC, MM, HPP, L, PW, K)
    - type and difficulty (HPP, L)
    - block objectives (HPP, L, PW)
    - questions tagged or highlighted for potential use (MM, PW)
- Search within comments/block director notes only (PW)

- Sort out/grey out questions currently selected so that they cannot be re-selected (K)

Input and Revision
- Add a new version of a question group (JC, MM, HPP, L, PW, K)
- Add a new question group (JC, MM, L, PW, WS, McC, K)
- Add or link to an image (MM, HPP, PW, K)
- Add notes
  - to questions (L, PW, JC)
  - to justify an answer—such as articles, lectures, page numbers, and links (JC)
  - to block objectives and content ideas (JC)
- Identify duplicate or very similar questions prior to creating new question (McC, K)
- Insert superscripts, subscripts, and special characters (JC)
- Allow M4s to submit questions for review (JC, MM)
- Allow facilitators and lecturers to submit questions for review (MM, HPP, L)
- Review new questions/Evaluate by committee (MM, HPP, L, PW)
- For a particular question, tag
  - block objectives (JC, L, PW)
  - content ideas (JC, MM, HPP, PW, K)
  - subject area—larger than case (WS, McC, K)
  - year-specific case ID (HPP, L, PW, WS)
  - difficulty and type—essential knowledge, spreading out the class, conceptual, Bloom's taxonomy—(HPP, L)
  - author: M4, faculty lecturer, faculty tutor, M2-previous year (PW, McC)
  - keyword (PW, K)
- Modify a block objective (MM)
- Create a new content idea (JC, PW)
- Update questions from a case that is no longer used and transfer to a related new case (JC, MM, L)
- Mark contested or thrown out questions (JC, HPP, L, PW, WS)
- Mark question status, such as active/in progress/ pending/needs revision (L, PW, McC)
- Check spelling errors (JC, WS)
- Change or delete keywords (PW)

Communication
- Send dialogue to other users at any time (L)
- Generate PDF at any point to send to other faculty for review (L)

Putting together the Exam
- View a running tally of selected questions (JC, PW, K)
- Review alignment with block objectives (JC, PW)
- Find selected questions by keyword (JC, L, PW, K)
- Select and deselect questions over the course of the semester (MM, PW)
- View number of selected questions by
  - performance data (MM, HPP, L, PW)
  - case (JC, MM, HPP, L, PW, K)
  - lecture (MM, HPP, L, PW, K)

- lecturer (PW)
- content idea (JC, HPP, PW, K)
- block objective (JC, HPP, L, PW)
- View total number of questions from cases vs lectures (HPP, L, PW, McC, K)
- View source map for questions, showing number from each subject/case/lecture (MM, HPP, PW, WS, McC, K)
- View percent of PBL questions (WS)
- Scramble the order of questions for the actual exam (JC, HPP)
- Submit for review—Once submitted, edit privileges go away, but can view current status of the exam (K)

Help and documentation
- Access link to online tutorial for writing new questions (JC)
- Include login timestamps (MM)
- System for field testing? (HPP)
- Permissions system for accessing/transferring questions across blocks if cases get swapped (L)

Instructional Designers

Prior to Editing
- Manually move questions around (KGP)
- Lock placement of specific questions prior to scrambling (KGP)
- Scramble exam questions automatically (KGP, MG)
- Create numbers automatically (KGP)

Editing the Exam
- Preserve an original copy of the exam prior to editing (KGP, MG)
- Correct typos and capitalization (KGP, MG)
- Correct grammar and mechanics (MG)
- Ensure special characters appear correctly (MG)
- Add
    - footer (KGP)
    - cover sheet (KGP, MG)
    - lab values (MG)
    - honor code (MG)
- Standardize the format of distractors (MG)
- Highlight questions with fewer distractors (MG)
- Ensure points match (KGP)
- Highlight and add notes where uncertain about revision (KGP, MG)
- Create a list of notes and suggested changes (KGP, MG)
- Identify duplicate or very similar questions (KGP, MG)
- Print off a hard copy (KGP, MG)

Communication
- Dialogue back and forth between users
- Ask block director for additional notes and concerns (MG)
- Send list of highlights, notes, and changes to the faculty member (KGP, MG)
- Update status (created by block director, submitted for review, ready to print, finished by students, reviewed/ready for next year)
- Have another faculty member check over to make sure nothing was missed (MG)
- Keep the block director up to date on status (MG)

After Review
- Make discussed corrections (KGP, MG)
- Create and print PDF (MG)
- Fill out appraisal form (KGP, MG)
- View exam without answer key or identifiers, with possible answers scrambled (MG)
- Finalize and print the exam (MG)

After the Exam
- Save new versions of all edited questions and update in the database for future use (MG)
- Edit privileges never disappear
- Update status to finished

- Make updates after exam is over
- Add exam dates/times

Faculty Block Directors

Standardization
- No need to reformat the questions or transfer between programs (JC, MM, HPP, L, WS, McC, K)
- No need to manage and technical aspects of the database and maintain it (JC, HPP, L, McC, K)

Organization
- All questions, pictures and exam data in one place (JC, HPP, PW, McC, K)
- Everything for a question—including previous versions and performance data—available at the click of a button so that it's easy to track (L, PW, McC, K)
- Find questions from a specific case or lecture; see at a glance how many questions have been selected from cases vs. lectures (JC, HPP, PW, McC, K)
- Save and view notes on questions, questions-in-progress, and answer choices (JC, PW, K)
- Eliminate redundancies and prevent future duplicates by checking whether a "new" question already exists (L, PW, WS, McC, K)
- Update cases from year to year (L, McC)

Efficiency
- Streamline the process for less steps, easier deadlines (HPP, PW, McC)
- Make the transition easier for directors new to a block (L, PW, McC)
- Input new questions—and update old ones—quickly and easily (JC, MM, HPP, L, PW, McC, K)

Data Integrity
- Eliminate risk of losing data between multiple edits and files (JC, HPP, McC)

Increased Security
- No need to store data on flash drives or laptops (McC)

Improved Content
- Define questions that fulfill a block objective or contain specific content ideas (JC, HPP, L, PW, K)
- See when questions were last used to avoid repeating in consecutive years (L, PW, McC)
- Keep track of unused questions and those that need revision (L, PW, McC)
- Get to the "50% New" standard more easily by rotating in questions that haven't been used recently (McC)
- Access additional performance data by question, including Mermac analysis graphs (L, K)

Instructional Designers

Efficiency
- Save time and avoid errors through automatic scrambling of questions (KGP, MG), as well as automatic formatting and numbering (KGP, MG)

Data Integrity
- Back-up of original stored in the system—revert or look back easily (KGP, MG)

Communication
- Within the system, send faculty a list of notes and potential corrections automatically linked to the questions (KGP, MG)

Consistency
- Save questions after editing—they will be updated in the database for future use by faculty (MG)

Flexibility
- View and print questions with or without identifiers, answers, and comments. The data remains intact but hidden in exam view (MG)