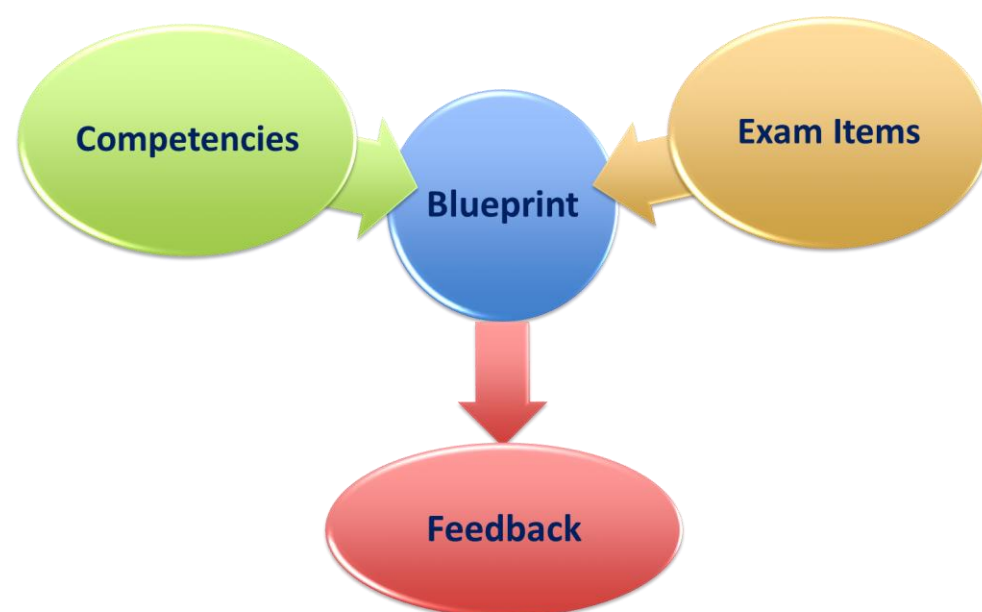


## PROBLEM

- **Clinical examinations** in dental hygiene education assess a variety of student competencies regarding application of knowledge and skills in an authentic setting.
- However, this analysis of competence is rarely returned to students in the form of **constructive feedback**.
- Confidentiality and time constraints often limit feedback for these intensive examinations.

**PURPOSE:** To develop an assessment blueprint for providing structured quality feedback following a dental hygiene clinical examination.



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## METHODS

### Step 1: Identify Relevant Competencies

- Identify all competencies relevant to the assessment.
- Additional learning resources may also be used to guide the blueprinting process.

### Step 2: Create Domains

- Group similar competencies.
- Determine and define the overall domain (e.g. skill) that encompasses the group of competencies.

### Step 3: Match Test Items to Domains

- Select the appropriate domain for each test item.
- Note missing or extraneous test items and add/remove.
- Finalize the assessment blueprint.

## RESULTS

- The blueprinting process identified four skills-based domains as essential to the history taking examination: **eliciting essential information, effective communication, client-centered care, and interpreting findings**
- Test content was improved—an inadequate number of test items for assessing client-centered care were identified, and new items added.
- Overall student weaknesses in the area of interpreting findings were revealed.
- Feedback reports were successfully delivered through online mechanisms to all dental hygiene students following their history taking examination in 2016 (see right Figure).

Overall Score	82%	AVERAGE
Effective Communication	74%	BELOW AVERAGE
Client-Centered Care	90%	ABOVE AVERAGE
Eliciting Essential Information	85%	AVERAGE
Interpreting Findings	86%	ABOVE AVERAGE

The expected minimum achievement level for this examination is 70%  
Description: The goal of this examination was to collect a thorough history prior to dental hygiene therapy. The skills emphasized in this examination were effective communication, client-centered care, eliciting essential information from the client, and then properly interpreting that information. Click on each skill for more information.

Effective Communication	74%	BELOW AVERAGE
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Skill: Effective Communication		
Description: This skill emphasizes how you are communicating, as opposed to what is being said. Effective communication strategies make the client feel safe and comfortable. It also means information is provided in an appropriate manner the client can follow and understand.		
Review Your Feedback	How to improve: Let the skill description above and the dental hygiene competencies listed below guide your practice.	Tips: Notice that non-verbal communication (e.g., your body language, tone of voice, and eye contact) is equally important to verbal communication (i.e., what you are saying).
Study	Review the communication techniques described in DHYG 221 (Concepts and Communications for Behaviour Change), and DHYG 320 (Health Education and Leadership).	Develop a rapport with your client—use an ice-breaker.
Practice	Watch/shadow instructors or peers whose communication styles you admire. Notice what they do differently, and determine why you think their communication is effective. Practice using communication techniques on friends and peers, and ask for their feedback.	Organize your questioning process within the natural flow of a conversation.

Effective communication is essential for your competence as a dental hygienist	
Competencies defined by the CDHA <a href="http://www.cdha.ca/dfs/Competencies_and_Standards.pdf">http://www.cdha.ca/dfs/Competencies_and_Standards.pdf</a>	
Role	Competency
Communicator and Collaborator	Use effective verbal, non-verbal, visual, written and electronic communication. (B1) Demonstrate active listening and empathy to support client services. (B2) Select communication approaches based on clients' characteristics, needs, and linguistic and health literacy level. (B3) Facilitates confidentiality and informed decision-making in accordance with applicable legislation and code of ethics. (B5)
Critical Thinker	Convert findings in a manner relevant to clients using the principles of health literacy. (C14)
Coordinator	Manage time and other resources to enhance the quality of services provided. (E7)
Oral health Educator	Create an environment in which effective learning can take place. (G10)

## CONCLUSIONS

- Blueprinting dental hygiene competencies and test items to assessment domains provides a mechanism for structured, confidential, and efficient feedback following clinical examinations.
- This process further validates the examination itself by revealing missing or irrelevant test items.
- Assessment blueprinting can be used to provide feedback for any dental hygiene clinical examination.