



The Infusion of Critical Thinking in a Self Confidence Survey ©

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DHED 408 Survey

Principles of Practice III
 DHED 408 (Check the most accurate response for each question)

How Confident Do You Feel?	Very	Somewhat	Not Very	Not at All
1. Obtain, review, update, and interpret an accurate medical/dental history and vital signs, recognizing conditions that require treatment modifications or consideration prior to or during dental hygiene care.				
2. Perform an extraoral and intraoral examination, differentiating between normal and abnormal conditions of hard and soft tissues.				
3. Perform an examination of the teeth, identify carious lesions, and accurately record the results using radiographs, distinguishing normal from abnormal anatomical findings and identify the need for taking radiographs with the supervising dentist.				
4. Perform a periodontal evaluation, identify the appropriate Periodontal Classification, and identify conditions that compromise periodontal health and function using radiographs and recorded data from your evaluation.				
5. Detect calculus to determine Difficulty Classification, and facilitate calculus removal.				
6. Analyze and interpret the data to formulate a dental hygiene diagnosis related to and congruent with the diagnosis of the dentist and other health care professionals.				
7. Obtain Medical, Oral Pathology, Periodontal, and/or other specialty consultations as appropriate.				
8. Establish a planned sequence of educational, preventative, and therapeutic services, collaboratively with the patient, based on the dental hygiene diagnosis.				
9. Educate the patient to prevent and control risk factors that contribute to caries, periodontal disease, and other oral/ medical conditions.				
10. Apply basic and advanced principles of dental hygiene instrumentation to remove deposits without trauma to hard or soft tissue.				
11. Control pain and anxiety during treatment through use of accepted pharmacological and behavioral techniques.				
12. Determine the outcomes of the dental hygiene interventions using indices, instruments, examination techniques, and patient self-report as specified in the patient's dental hygiene treatment plan.				
13. Determine what services are needed for the patient's next visit. Develop and maintain a periodontal maintenance program.				

D. Aden 8/11

PROJECT DESCRIPTION

- **Purpose:** The purpose of this study was to assess and evaluate if the critical thinking learning outcomes were being reached at an acceptable level by each dental hygiene student in this dental hygiene clinical course.
- **Methods:** A 13 item self confidence survey was administered to 27 undergraduate dental hygiene students enrolled in Dental Hygiene Principles of Practice III. The survey was anonymous and included a duplicate copy for the students to obtain. The self confidence survey was administered three weeks into the fall semester and again six weeks later. Both surveys were returned yielding an 88% response rate.
- **Discussion:** The learning outcomes that the students' conveyed to have lower confidence in became crucial teachable moments for the clinical faculty to spend with the students.

Concept Map

Dental Hygiene
Process of Care

Assessment

Dental Hygiene
Diagnosis

Planning

Implementation

Evaluation &
Maintenance

GOAL ACHIEVED

The findings suggested that this Classroom Assessment Technique (CAT) activity, Course-related Self-Confidence Survey, accomplished the goal of incorporating the standards of critical thinking in assessing the students in their clearness, accuracy, importance, precision, and relevance of the fundamental and powerful concept, the Dental Hygiene Process of Care.

DHED 408 Survey Results

Dental Hygiene Process of Care: The Five Linking Components	How Confident Do You Feel? (Check the most accurate response for each question)	% S1/ S2	Very	Somewhat	Not Very	Not at All
Assessment	1. Obtain, review, update, and interpret an accurate medical/dental history and vital signs, recognizing conditions that require treatment modifications or consideration prior to or during dental hygiene care.	S1	75%	25%	0%	0%
		S2	92%	8%	0%	0%
Assessment	2. Perform an extraoral and intraoral examination, differentiating between normal and abnormal conditions of hard and soft tissues.	S1	75%	25%	0%	0%
		S2	83%	17%	0%	0%
Assessment	3. Perform an examination of the teeth, identify carious lesions, and accurately record the results using radiographs, distinguishing normal from abnormal anatomical findings and identify the need for taking radiographs with the supervising dentist.	S1	8%	71%	21%	0%
		S2	25%	63%	12%	0%
Assessment	4. Perform a periodontal evaluation, identify the appropriate Periodontal Classification, and identify conditions that compromise periodontal health and function using radiographs and recorded data from your evaluation.	S1	42%	58%	0%	0%
		S2	63%	34%	0%	0%
Assessment	5. Detect calculus to determine Difficulty Classification, and facilitate calculus removal.	S1	4%	54%	38%	4%
		S2	12%	63%	25%	0%
Dental Hygiene Diagnosis	6. Analyze and interpret the data to formulate a dental hygiene diagnosis related to and congruent with the diagnosis of the dentist and other health care professionals.	S1	29%	67%	4%	0%
		S2	47%	50%	0%	3%
Dental Hygiene Diagnosis	7. Obtain Medical, Oral Pathology, Periodontal, and/or other specialty consultations as appropriate.	S1	29%	38%	29%	4%
		S2	38%	54%	8%	0%
Planning	8. Establish a planned sequence of educational, preventative, and therapeutic services, collaboratively with the patient, based on the dental hygiene diagnosis.	S1	58%	42%	0%	0%
		S2	66%	34%	0%	0%
Implementation	9. Educate the patient to prevent and control risk factors that contribute to caries, periodontal disease, and other oral/ medical conditions.	S1	75%	25%	0%	0%
		S2	83%	17%	0%	0%
Implementation	10. Apply basic and advanced principles of dental hygiene instrumentation to remove deposits without trauma to hard or soft tissue.	S1	17%	54%	25%	4%
		S2	30%	58%	12%	0%
Implementation	11. Control pain and anxiety during treatment through use of accepted pharmacological and behavioral techniques.	S1	46%	54%	21%	0%
		S2	34%	63%	0%	3%
Evaluation & Maintenance	12. Determine the outcomes of the dental hygiene interventions using indices, instruments, examination techniques, and patient self-report as specified in the patient's dental hygiene treatment plan.	S1	46%	54%	0%	0%
		S2	54%	46%	0%	0%
Evaluation & Maintenance	13. Determine what services are needed for the patient's next visit. Develop and maintain a periodontal maintenance program.	S1	50%	42%	8%	0%
		S2	66%	34%	0%	0%

REFERENCES

- Angelo, Thomas, and Patricia Cross. *Classroom Assessment Techniques*. San Francisco: Jossey-Bass, 1993.
- Nosich, Gerald M. *Learning To Think Things Through*. Boston: Pearson, 2011.
- Mould M, Bray K. Student self-assessment in dental hygiene education: a cornerstone of critical thinking and problem-solving. *J Dent Educ*. 2011;75. p.1061-72.



Not only did the Central Question for the students, “How can I treat this patient in the best way possible, based upon their assessment needs?” continued to be asked but this Central Question emerged of “How can we as course faculty (using the elements of reasoning) prepare the students to assess their patient’s needs to be able to treat them in the best way possible?”