



## Educational Outcomes Assessment Record

**2011-2012**  
**(Report Year)**

**Dental Hygiene**  
**(Program/Option)**

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**(Report Prepared By)**

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dental disease.

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### **Attachments**

1. [EOP Assessment Results 2010, 2011, and 2012](#)

### **Approvals**

**Educational Outcomes Coordinator(s):** Ashley Caron, Jesse Coraggio, Leigh Goldberg, Magaly Tymms, Sabrina Crawford - August 28, 2012

**Provost :** Phil Nicotera - January 4, 2013

**VP Educational and Student Services:** Anne Cooper - February 19, 2013



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### **Introduction**

In support of the mission of St. Petersburg College, faculty committees established several specific goals. Two of these goals, as stated in the College's Mission Statement are to:

- Expand student access to baccalaureate programs, bachelor's degrees, graduate degrees, and careers; as well as prepare lower division students for successful transfer into baccalaureate programs through the associate in arts and articulated associate in science degree programs
- Perform continuous institutional self-evaluation and efficient and effective operations to assure a culture of excellence in student services and academic success

It is the intent of St. Petersburg College to incorporate continuous improvement practices in all areas. Assessment reports provide comparisons of present and past results which are used to identify topics where improvement is possible. SPC has traditionally used past results as a vital tool in achieving its commitment to continuous improvement.



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### I. Major Learning Outcome #1

The student will identify the anatomic structures including the human body, dental anatomy, tooth morphology, histology and embryology.

### II. Introduction

#### **Use of Past Results:**

The desired results were met for 2002 through 2005. The data indicated that student scores were close to the national average in the area of anatomic sciences.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. Changes were not made to Anatomy other than maintaining the reviews of basic foundation content in the dental hygiene courses, since we met the program needs, and maintained the same high standards in relationship to the National Dental Hygiene Boards.

SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

### III. Methodology

#### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in

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2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will identify the anatomic structures including the human body, dental anatomy, tooth morphology, histology and embryology.

#### IV. Criteria for Success

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

#### V. Summary of Assessment Findings

Year	N	SPC Mean	National Mean	Difference
2010	33	11.9	10.7	+1.2
2011	33	10.7	9.7	+1.0

Year	N	SPC program standard deviation above the national average
2012	31	+2.25

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

#### VI. Discussion and Analysis of Assessment Findings

The dental hygiene program employs a curriculum management plan that assesses the entire

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curriculum on a continual basis. The plan includes review of the national board scores, employer surveys, accreditation standards, and content review by both a faculty member and outside reviewer. SPC mean scores met or exceeded the national mean scores for this MLO from 2010-2012. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
E.	None	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan and continue to assess outcomes as well as employer satisfaction surveys.	9/2012

**I. Major Learning Outcome #2**

The student will identify the principles of physiology, biochemistry and nutrition and how they relate to dental hygiene care.

**II. Introduction****Use of Past Results:**

The desired results were met for 2002 through 2005. As indicated by the data, students were close to the national average in the areas of physiology, biochemistry and nutrition. Since we began this assessment process we have looked closely at Natural Science and found that at least half of our population of students take anatomy at other institutions prior to beginning their program of study at SPC. Since we have no control over those courses we focus on the Dental Hygiene curriculum specifically the biochemistry and nutrition component.



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SPC mean scores exceeded national mean scores for this MLO from 2007 through 2009. Faculty noted that the new curriculum was meeting the program's needs and maintaining the same high standards in relationship to National Dental Hygiene boards. No additional changes were recommended.

### III. Methodology

#### *Means of Assessment:*

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

*Date(s) of Administration:* 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will identify the principles of physiology, biochemistry and nutrition and how they relate to dental hygiene care.

### IV. Criteria for Success

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The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National Mean	Difference
2010	33	6.1	6.2	- 0.1
2011	33	6.5	6.5	0.0

Year	N	SPC program average standard deviation above the national average
2012	31	+0.57

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

In 2010, the SPC scores were slightly below the national mean. In 2011 the scores met the national mean, and in 2012 the scores were higher. Although the 2010 scores were slightly lower than the national mean, it was not a significant decrease. Through the curriculum management process we will continue to monitor and assess this MLO to maintain a score at or above the national mean or average.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**A. Enable Greater Student Success**

A1. Identify needs and address ways to improve overall student success



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Ref. #	Action Plan Detail	Date to Accomplish
<b>A.</b>	<b>Enable Greater Student Success</b>	
A1.	In 2010 the scores were slightly lower than the national mean. Since we met our goal in 2011 and 2012 we will continue to manage the curriculum through the defined curriculum management plan, and continue to assess outcomes as well as employer surveys. We will continue to include case study activities in biochemistry and nutrition areas.	6/2013

**I. Major Learning Outcome #3**

The student will describe the microbial count in periodontal disease and pathological conditions as well as the body's response to such invaders.

**II. Introduction****Use of Past Results:**

The desired results were met for 2002 through 2005. As indicated by the data, students were close to the national average in the area of periodontal and pathological diseases. Since we began using a full-time faculty member to teach these courses, scores have been on the rise and students' knowledge has been better integrated within the program.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores met or exceeded national mean scores for this MLO from 2006 through 2009.

**III. Methodology****Means of Assessment:**

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

**Date(s) of Administration:** 2010, 2011, and 2012

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**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the “5 year summary report”. This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school’s mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the “5 year summary report”, and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC’s average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will describe the microbial count in periodontal disease and pathological conditions as well as the body’s response to such invaders.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National Mean	Difference
2010	33	7.1	6.4	+0.7
2011	33	6.4	5.8	+0.6

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Year	N	SPC program average standard deviation above the national average
2012	31	+0.23

References:

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
<b>E.</b>	<b>None</b>	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan, and continue to assess outcomes as well as employer satisfaction surveys	9/2012

**I. Major Learning Outcome #4**

The student will analyze pathological disease conditions and how they relate to dental hygiene care and patient mortality.

**II. Introduction**



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### **Use of Past Results:**

The desired results were met except for 2002 to 2005. However, the development of the End-of-Program Assessment report process revealed that the program director needed to provide this information to Natural Science staff on a yearly basis at all campuses, and to discuss with them the curriculum for anatomy and physiology as a foundation for Dental Hygiene.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores met or exceeded national mean scores for this MLO from 2006 through 2008. Although the 2009 results were slightly lower than the national mean, it was not a significant decrease. This topic was reviewed for possible inclusion in the National Board review course.

### **III. Methodology**

#### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Population:** Dental Hygiene students are eligible to take the examination when they are

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within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will analyze pathological disease conditions and how they relate to dental hygiene care and patient mortality.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	8.5	8.1	+0.4
2011	33	8.5	7.9	+0.6

Year	N	SPC program average standard deviation above the national average
2012	31	+1.66

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

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**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
<b>E.</b>	<b>None</b>	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan and continue to assess outcomes as well as employer satisfaction surveys.	9/2012

**I. Major Learning Outcome #5**

The student will recognize the drugs commonly encountered in the dental office as well as their dosages, administration, contraindications and indications.

**II. Introduction****Use of Past Results:**

The desired results were met for 2002 through 2005. As indicated by the data, students were close to the National average in the area of periodontal and pathological diseases. Since we began using a full-time faculty member to teach these courses, scores have been on the rise and students knowledge is better integrated within the program.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores met or exceeded national mean scores for this MLO from 2006 through 2008. Although the 2009 results were slightly lower than the national mean, it was not a significant decrease. This topic was reviewed for possible inclusion in the National Board review course.

**III. Methodology*****Means of Assessment:***

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The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

**Date(s) of Administration:** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the “5 year summary report”. This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school’s mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the “5 year summary report”, and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC’s average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will recognize the drugs commonly encountered in the dental office as well as their dosages, administration, contraindications and indications.

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	7.4	7.4	0.0
2011	33	5.1	5.6	- 0.5

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Year	N	SPC program average standard deviation above the national average
2012	31	+0.66

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or were below the national mean in 2010 and 2011. Although the 2011 scores were slightly lower than the national mean, it was not a significant decrease. SPC exceeded the national mean score for this MLO in 2012.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**A. Enable Greater Student Success**

A1. Identify needs and address ways to improve overall student success

Ref. #	Action Plan Detail	Date to Accomplish
<b>A.</b>	<b>Enable Greater Student Success</b>	
A1.	In 2011, the SPC student scores were slightly lower than the national mean. Since we met our goal in 2012, we will continue to manage the curriculum through the defined curriculum management plan, and continue to assess outcomes as well as employer surveys. We will be updating information in the National Board review course by updating the power point review for this subject matter.	6/2013

**I. Major Learning Outcome #6**

The student will describe and utilize current methodologies of assessment, prognosis and treatment planning for dental hygiene care.





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### II. Introduction

#### **Use of Past Results:**

The desired results were met for 2002 through 2005. As indicated by the data, students were close to the national average in the area of treatment planning. Since the dental boards and literature began to expand the dental hygienists role in treatment planning and dental hygiene care plans, we modified our curriculum accordingly. We closely monitor this area as the board examination has increased the concentration on exam as well.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

### III. Methodology

#### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

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**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will describe and utilize current methodologies of assessment, prognosis and treatment planning for dental hygiene care.

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	51.9	50.7	+1.2
2011	33	54.0	51.5	+2.5

Year	N	SPC program average standard deviation above the national average
2012	31	+1.61

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

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*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
E.	None	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan and continue to assess outcomes as well as employer satisfaction surveys.	9/2012

**I. Major Learning Outcome #7**

The student will describe the theoretical knowledge of radiography and demonstrate the ability to identify and interpret dental radiographs.

**II. Introduction****Use of Past Results:**

The desired results were met for 2002 through 2005, so no action was indicated at the time of assessment. This topic is a huge part of the curriculum. Since we began using a full-time faculty member to teach these courses, we have been pleased with the continued success of students in this area.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

**III. Methodology**



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### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will describe the theoretical knowledge of radiography and demonstrate the ability to identify and interpret dental radiographs.

## **IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

## **V. Summary of Assessment Findings**

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Year	N	SPC Mean	National mean	Difference
2010	33	37.9	36.8	+1.1
2011	33	39.5	37.3	+2.2

Year	N	SPC program average standard deviation above the national average
2012	31	+1.38

References:

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
<b>E.</b>	<b>None</b>	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan and continue to assess outcomes as well as employer satisfaction surveys.	9/2012

**I. Major Learning Outcome #8**

The student will describe all the components in the management of dental hygiene care.



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### II. Introduction

#### **Use of Past Results:**

Although the desired results were met during the past several years, there was a slight decline in our performance in the area of management of dental hygiene care. This is a very broad area and includes many critical thinking and application type questions. Our analysis of the data and our work with students in clinic indicated that they had the skills but may not have performed well on paper testing of these higher level skills.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

### III. Methodology

#### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

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**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will describe all the components in the management of dental hygiene care.

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	43.1	42.5	+0.6
2011	33	40.2	40.2	+0.0

Year	N	SPC program average standard deviation above the national average
2012	31	+0.01

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

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*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
E.	None	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan and continue to assess outcomes as well as employer satisfaction surveys.	9/2012

**I. Major Learning Outcome #9**

The student will describe classifications and features of periodontal diseases which will include etiological factors, contributing factors, host responses and treatments involved with the initiation and progression of periodontal disease.

**II. Introduction****Use of Past Results:**

The desired results were met for 2002 through 2005. As indicated by the data, students were close to the national average in the area of periodontal diseases. Since we began using a full-time faculty member to teach these courses scores increased, and students knowledge is better integrated within the program.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2007 through 2009.

**III. Methodology**





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***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will describe classifications and features of periodontal diseases which will include etiological factors, contributing factors, host responses and treatments involved with the initiation and progression of periodontal disease.

### IV. Criteria for Success

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

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**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	24.4	21.2	+3.2
2011	33	18.5	16.4	+2.1

Year	N	SPC program average standard deviation above the national average
2012	31	+2.85

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
<b>E.</b>	<b>None</b>	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan, and continue to assess outcomes as well as employer satisfaction surveys.	9/2012



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### I. Major Learning Outcome #10

The student will identify and describe the agents available to patients for the prevention of dental disease.

### II. Introduction

#### **Use of Past Results:**

The desired results were met from 2002 through 2005, however this area continued to be a struggle on the National Board. The end of the program assessment scores showed a similar pattern and the curriculum management team did not find any weakness in curriculum content. Since this area had been taught by several different faculty over the past few years, the Dean closely monitored this curricular content. The community has appreciated the students' and graduates' understanding and application of preventive dental health.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

### III. Methodology

#### **Means of Assessment:**

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

**Date(s) of Administration:** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however

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the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will identify and describe the agents available to patients for the prevention of dental disease.

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	9.3	9.6	- 0.3
2011	33	11.7	10.4	+1.3

Year	N	SPC program average standard deviation above the national average
2012	31	+1.34

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

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SPC mean scores were below the national mean in 2010. Although the 2010 scores were slightly lower than the national mean, it was not a significant decrease. SPC students exceeded the national mean score for this MLO in 2011 and 2012.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**A. Enable Greater Student Success**

A1. Identify needs and address ways to improve overall student success

Ref. #	Action Plan Detail	Date to Accomplish
<b>A.</b>	<b>Enable Greater Student Success</b>	
A1.	In 2010 the scores were slightly lower than the national mean. Since we met our goal in 2011 and 2012, we will continue to manage the curriculum through the defined curriculum management plan, and continue to assess outcomes as well as employer surveys. We will continue to incorporate case studies regarding agents that prevent dental disease and continue emphasis on the American Dental Associations recommendations regarding these agents. The curriculum has incorporated case studies regarding patients' home care, and applied more emphasis on ADA's recommendations for fluoridation.	6/2013

**I. Major Learning Outcome #11**

The student will identify the roles and uses of supportive treatment in the comprehensive dental hygiene care of a patient.

**II. Introduction****Use of Past Results:**

The desired results were met for 2002 through 2005, and the area was looked at by the



## Educational Outcomes Assessment Record

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curriculum management team. As our practice expands so will our curriculum for supportive patient care.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

### III. Methodology

#### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will identify the roles and uses of supportive treatment in the comprehensive dental hygiene care of a patient.

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**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	8.6	7.9	+0.7
2011	33	8.6	7.9	+0.7

Year	N	SPC program average standard deviation above the national average
2012	31	+3.85

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
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E.	None	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan and continue to assess outcomes as well as employer satisfaction surveys.	9/2012

**I. Major Learning Outcome #12**

The student will demonstrate an understanding of the principles of public health and the methodologies needed to present these concepts to the community.

**II. Introduction****Use of Past Results:**

The desired results were met for 2004 and 2005, but not for 2002 and 2003, however the difference was not deemed to be statistically significant. The End of the Program assessment process indicated that students needed to review testlet format more frequently so they would be comfortable with testing for NDHB examination.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores met or exceeded national mean scores for this MLO during 2006 and 2008, but were slightly below the national mean during 2007 and 2009.

In response, the Community Dental Health course was revised to include more small cases during the courses to improve students' critical thinking skills and analysis of community health concepts.

**III. Methodology****Means of Assessment:**

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

**Date(s) of Administration:** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board



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are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the “5 year summary report”. This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school’s mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the “5 year summary report”, and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC’s average and the national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will demonstrate an understanding of the principles of public health and the methodologies needed to present these concepts to the community.

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	14.6	14.8	- 0.2
2011	33	15.2	14.6	+0.6

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Year	N	SPC program average standard deviation above the national average
2012	31	+0.10

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores were below the national mean in 2010. Although the 2010 scores were slightly lower than the national mean, it was not a significant decrease. SPC exceeded the national mean score for this MLO in 2011 and 2012.

We will continue to implement small case studies in the Community Dental health course to improve students' critical thinking skills and analysis of community health concepts.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**B. Enhance Curriculum & Faculty Development**

B4. Revise course content

Ref. #	Action Plan Detail	Date to Accomplish
<b>B.</b>	<b>Enhance Curriculum &amp; Faculty Development</b>	
B4.	Community Dental Health course will include more small case studies that include research during the course to improve students critical thinking skills and analysis of community health concepts. The course director has implemented the use of another text for the course.	6/2013



## Educational Outcomes Assessment Record

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### I. Major Learning Outcome #13

The student will apply their comprehensive knowledge of dental hygiene care through dental hygiene cases.

### II. Introduction

#### **Use of Past Results:**

The desired results were met for 2002 through 2005. The program continued to use cases throughout the curriculum which provided students an opportunity to develop critical thinking skills.

The assessment process identified several areas that needed adjustment in 2007, and a new curriculum was implemented that year. The 2009 outcomes represented the first group of students to complete the new curriculum. SPC mean scores exceeded national mean scores for this MLO from 2006 through 2009.

### III. Methodology

#### ***Means of Assessment:***

The results of the National Dental Hygiene Board Examination (NDHB) were used to assess the Dental Hygiene students.

***Date(s) of Administration:*** 2010, 2011, and 2012

**Assessment Method:** Conduct domain analysis of the performance of SPC Dental Hygiene graduates on the National Dental Hygiene Board examination. The individual results from the National Board are provided to each student as well as to the program director. Prior to 2010, approximately three months following each exam the program director also received the "5 year summary report". This report provided the scores for the exam that was just given as well as the past 4 years as a comparison. Each subject area contained the school's mean, national mean, and standard deviation, for each of the 5 years in each of the 13 subject areas. In addition, this report provided the school ranking of overall performance as compared to the other 330+ schools taking the exam on the same date. Beginning in 2010, the "5 year summary report", and the number of questions were no longer provided, however the school mean and national mean was still reported. In 2012, the report was revised to provide the findings in a standardized value (d-value) representing the distance between SPC's average and the

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national average, in standard deviation units. A positive d-value of 1.0 indicates that SPC's average is one standard deviation above the national average. A d-value of -1.0 indicates that SPC's average is one standard deviation below the national average.

**Assessment Instrument:** National Dental Hygiene Board Examination (NDHB)

**Population:** Dental Hygiene students are eligible to take the examination when they are within four months of completing the requirements for graduation. The exam is required for licensure throughout the United States.

**Domain:** The student will apply their comprehensive knowledge of dental hygiene care through dental hygiene cases.

**IV. Criteria for Success**

The class average for this MLO, on the National Dental Hygiene Board Examination (NDHB), should be above the mean score for the United States.

**V. Summary of Assessment Findings**

Year	N	SPC Mean	National mean	Difference
2010	33	105.6	103.4	+2.2
2011	33	105.3	99.7	+5.6

Year	N	SPC program average standard deviation above the national average
2012	31	+1.32

*References:*

[EOP Assessment Results 2010, 2011, and 2012](#)

**VI. Discussion and Analysis of Assessment Findings**

SPC mean scores met or exceeded the national mean scores for this MLO from 2010 to 2012. We are maintaining the same high standards in relationship to National Dental Hygiene

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Boards. No changes are required at this time.

**VII. Action Plan and Timetable for Implementation**

*Based on the analysis of the results the following Action Plan Items have been selected for implementation:*

**E. None**

E1. No Action Plan is deemed necessary

Ref. #	Action Plan Detail	Date to Accomplish
E.	None	
E1.	Since we met our goal, we will continue to manage curriculum through defined curriculum management plan, and continue to assess outcomes as well as employer satisfaction surveys.	9/2012