# Be the C.H.A.N.G.E. Grant Final Grant Report

#### **Basic Information**

- **Project title:** The Sayler Park Oral Health Initiative
- **Project location and date:** Sayler Park School in Cincinnati, Ohio on 10/08/19, 10/22/19, 11/12/19, and 11/19/19

#### **Project Information**

The overall objective of this outreach project was to educate the children of the Sayler Park Elementary School on oral health topics, such as proper brushing and flossing techniques, how dental caries can affect overall health, and choosing appropriate diet for optimal dentition. Additionally, the project provided dental health supplies, including toothbrushes, toothpaste, and floss to the pre-k through fifth grade students, as many of the children do not have these items in their homes.

The project objectives were reached specifically through the development and implementation of one-hour educational sessions for the students. These took place in October and November 2019. Kelsie Dirksing, from Mount St. Joseph University PA Program's class of 2020, developed the sessions, as well as purchased materials for the activities and the oral health supplies. The class of 2021 was then split up into groups of 2-3 each and taught the sessions by following scripts that were provided to them. Kelsie reviewed the scripts and activities with the class of 2021 before the sessions began.

The first round of educational sessions took place on October 8<sup>th</sup> and 22<sup>nd</sup>, and focused on proper brushing and flossing techniques. Prior to starting the lesson, all of the students completed a questionnaire to gauge their baseline knowledge of oral health. Lesson plans included several paper activities and puzzles that were fun and interactive for the students to complete while learning about the basics of oral health. Several mouth models were also purchased and brought to the school for visual demonstrations during the sessions. Students had the opportunity to practice brushing and flossing on these models. They were then given their own bag that included a toothbrush, toothpaste, and floss to take home.

The second round of educational sessions took place on November 12<sup>th</sup> and 19<sup>th</sup>. These focused on nutrition and the importance of a healthy diet for good dentition. Several activities were purchased and brought to the classrooms to allow the students to interactively demonstrate their knowledge of the food groups and which foods are healthy for teeth. The students were given Nutri Grain bars as a healthy treat during this session. They then completed another questionnaire to determine what they have learned as a result of these sessions and whether their knowledge of oral health has improved. At the end, the students were given another toothbrush to take home.





Mount St. Joseph University PA students teaching oral health topics at the Sayler Park school.

There were several major successes of this outreach project. The largest success was being able to provide approximately 225 children with toothbrushes, toothpaste, and floss to use and practice proper oral health in their homes. Additionally, they were educated on the correct techniques and appropriate diet to maintain healthy teeth. In the preschool classrooms, some parents even attended the sessions, which leaves us hopeful that they will continue to encourage their children to brush and floss their teeth at home as well. Additionally, throughout the whole process, strong relationships were established with the Sayler Park health clinic's nurse practitioner, Rachael Doll, along with several other individuals at the school, including the community outreach coordinator and the teachers. Each of these individuals offered easy communication and scheduling in regard to the oral health sessions, and all were very excited and appreciative of the project.

Overall, there were minimal difficulties with developing and implementing this project. When creating the survey to evaluate the students' knowledge of oral health before and after the educational sessions, the surveys were made to be as age appropriate for preschool through fifth grade students as possible. However, after discussion with the preschool teachers, it was decided not to administer the surveys to these students. Further, there were 201 pre-test surveys completed, while there were only 163 post-test surveys completed, which made analyzing overall results difficult. A couple of the classrooms also had different students in them during the second round of educational sessions than the first round, which definitely altered the results and does not accurately reflect the knowledge gained from the outreach project.

201 of the approximately 225 students completed the pre-test survey to evaluate their baseline knowledge of oral health. The average age of these students was 8 years-old; 100 males and 101 females completed the survey. 163 students completed the post-test survey to reevaluate their knowledge after the first round of educational sessions; again, the average age was 8, with 83 boys and 80 girls.

	Pre-Test	Post-Test	
	(201 students completed)	(163 students completed)	
Brush teeth twice daily	155 (77%)	123 (75%)	
Do not brush teeth at all	5 (2.5%)	2 (1.2%)	
Floss teeth at least once daily	79 (39%) 52 (32%)		
Use toothpaste when brushing	196 (97.5%) 157 (96%)		
Believe teeth look okay	170 (84.5%) 134 (82%)		
Have teeth that hurt	51 (25%) 44 (27%)		
Have had a cavity before	112 (56%)	88 (54%)	
Have seen dentist in past year	127 (63%)	112 (69%)	

Table 1. Results of Pre- and Post-Test to Evaluate Oral Health Practices

Although 38 less students completed the post-test survey, the results demonstrated that the students generally brush their teeth twice per day using toothpaste, while less students floss daily. Most students have had cavities in the past and have visited the dentist in the last year, however, there is definite opportunity to increase adherence to this practice.

This project was particularly helpful to Rachael, the school-based clinic's nurse practitioner. As often as she can, Rachael provides patients with toothbrushes and toothpaste, however most of these supplies are donated to her. She also tries to educate children on oral health at their routine well-child visits. This project served as an extension of the work Rachael does on a daily basis by providing additional supplies to students and equipping both the students and families with the knowledge

necessary to continue appropriate oral health practices at home. As a result, the relationship between medical providers, students, and the community was strengthened.

Through this project, the MSJU PA program has established a strong partnership with the Sayler Park School. The school's outreach coordinator, Joy, was a particularly important partnership, as she assisted in communication with the teachers and scheduling the education sessions. Rachael Doll, the nurse practitioner at the school's community health center, continues to be a strong partner with the PA program as well. She assisted with the development of this project, and served as a preceptor to Kelsie for her pediatrics rotation.

Hopefully, this outreach project will be sustained by MSJU's cohorts to come. The lesson plans, print materials, and activities that were purchased for this project will be passed on to students in these cohorts to allow them the opportunity to implement the project on their own. The mouth models and nutrition activities will be saved for this purpose as well. Patrick Cafferty has encouraged students to apply for the "Be the C.H.A.N.G.E" grant to either implement an oral health project or even a new project of their own.

#### **Engagement**

How many participating	#	Additional description/reflections
PAs/PA faculty	1	<ul> <li>Patrick Cafferty, PA-C – Mount St. Joseph University PA Program Director and Faculty Advisor for the project. Assisted with grant proposal and budget development; oversaw outreach activities.</li> <li>Rebekah Moore, PA-C – MSJU PA Program Faculty. Assisted with implementation of oral health education sessions and coordinating the Class of 2021 for participation in the project.</li> </ul>
PA students	34	<ul> <li>Kelsie Dirksing, PA-S – grant proposal and budget; development and organization of outreach activities; communication with Sayler Park School's staff and class of 2021 to implement project; analysis of project data/impact; final grant report.</li> <li>MSJU Class of 2021 – 32 students assisted with implementation of the project's outreach activities.</li> </ul>
Other health professions clinicians	1	<ul> <li>Rachael Doll, CNP – clinician at the Sayler Park School health clinic. Primary contact at the school; oversaw outreach activities.</li> </ul>
Other health professions students	0	
Community members/patients	1	<ul> <li>Sayler Park School students and staff – assisted with coordination of the education sessions; participated in the sessions and offered feedback.</li> </ul>
Estimate total number of volunteer hours for project planning/execution	50	

#### **Publicity/Exposure**

The PA profession received publicity first through the Sayler Park School's weekly bulletin. The outreach coordinator at the school shared a photo and small description of what our students were doing at the school.



The profession also received publicity through social media sites, particularly Facebook, as the MSJU program shared photos and information about the outreach activities throughout the project's duration. The university published an article on its website as well, highlighting the grant and the oral health project that was completed at Sayler Park School. Additionally, the Ohio Association of Physician Assistants (OAPA) featured Kelsie in their monthly "Student Spotlight," through which she highlighted the project and the grant as being one of the most rewarding aspects of her PA school career. The final results of the project will be disseminated at the OAPA annual fall conference this year through a poster presentation. Kelsie has also joined the Diversity Committee within OAPA and has already shared details about the project and its impact with the other members of the group.

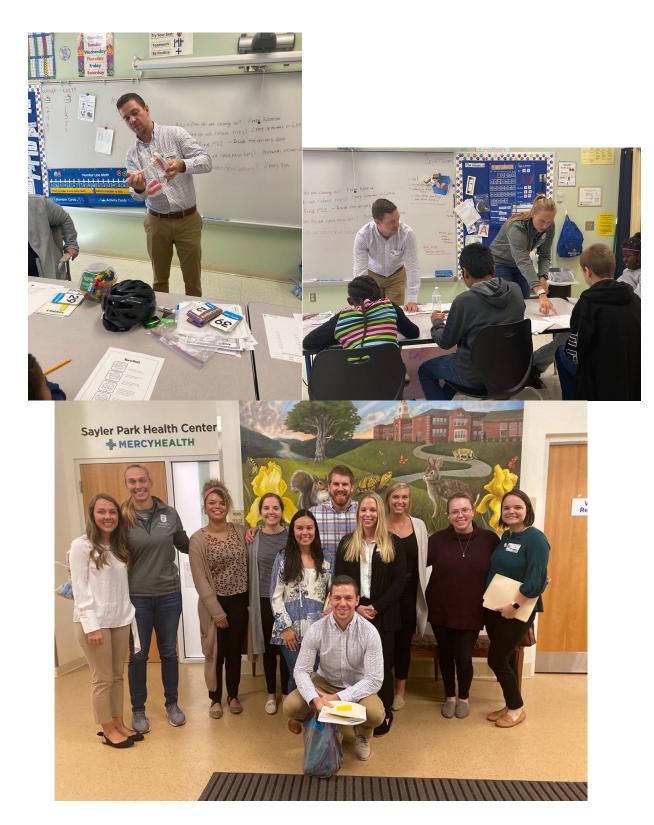
Second-year Physician Assistant (PA) student, Kelsie Dirksing at Mount St. Joseph University, was recently awarded the Ohio Association of Physician Assistants (OAPA) Diversity Scholarship. The scholarship recognizes diversity in healthcare as an essential component in delivering quality, patient-centered care, to improve health outcomes through diverse qualities of medical providers and those they care for.

Dirksing has worked on a variety of initiatives to support diversity causes in her field. Most recently, while completing her pediatric rotation in a medically underserved community, Dirksing noted that the majority of the young patients she saw did not have a toothbrush.

Thus, she took initiative and applied



for an Oral Health Grant through the NCCPA Health Foundation. With funding available, Dirksing prepared students from the program to assist her in teaching oral health while also providing them with needed supplies, which allowed her to make an impact in the lives of over 400 children.



Additional photos of MSJU PA students teaching oral health sessions at Sayler Park.



**Yogurt** 

Water

Cookies

Juice

Cheese



### **Oral Health Questionnaire**

Please answer these questions about yourself and your teeth. 1. How old are you? **2.** Are you a boy or girl? 3. How many times a day do you BRUSH your teeth? 4. How many times a day do you FLOSS your teeth? 0 1 2 5. Do you use toothpaste? □ Yes □ No **6.** Do you think your teeth look okay? ☐ Yes ☐ No **7.** Do any of your teeth hurt? ☐ Yes ☐ No **8.** Have you ever had a cavity? □ Yes □ No **9.** Have you been to the dentist in the past year? □ Yes □ No 10. What snacks and drinks are healthy for your teeth? Please circle them. Fruit Candy Chips Veggies Milk

# Module 2: "Keeping Teeth Bright and

Healthy" approximate time: 10 minutes

#### **Key Message**

Cleaning our teeth helps keep them strong and healthy.

#### **Student goals**

Upon completing this module students should know:

- That having clean teeth is an important part of having a clean body.
- Basic brushing techniques.
- What plaque is.
- What a cavity is.
- Why eating nutritious foods is important for our teeth.

#### Module Topics (with discussion points and questions)

1. Keeping our bodies and teeth clean. What are some of the things you do to keep yourself clean? [bathe, wash hair, wash clothes.] Why is it important to have clean hands, and to take a bath, and to wash our clothes? [So you don't get sick; so you look and smell nice.] How do you feel when you are clean? [Skin smells good, hands don't feel sticky, etc.] Can someone be really clean if their mouth and teeth are not clean? [No.] Why not? [Because a clean mouth feels nicer, your breath smells nice, etc.]

### Clean teeth and mouth are parts of a clean body.

2. Brushing teeth. What can you do to keep your teeth clean and healthy? [Brush your teeth.] How many of you brush your teeth? Great! How often should you brush your teeth? [Twice a day.] What do you put on your toothbrush? Yes, toothpaste. Why do you use toothpaste? [Cleans better than just water, gets the food off your teeth, makes your teeth stronger, makes your mouth taste good.] Those are all good answers. Does anyone know how much toothpaste you should put on your toothbrush? [Listen to a few suggestions.] You might be surprised, but you only need a very little bit of toothpaste on your toothbrush — about the size of a little green pea.

I have a very important question. When you are brushing your teeth, what do you do with the toothpaste in your mouth? Yes. Spit out all the toothpaste! Don't swallow it. Toothpaste is for cleaning your teeth, not your stomach!

# Brush twice a day with a fluoride toothpaste. Always spit out all the toothpaste.

3. *Brushing techniques*. Your mom, dad or another grown-up may help you brush your teeth, or maybe your dentist showed you how to brush. Move the brush back and forth gently in short strokes. Brush the top, front, and back sides of each tooth.

ACTIVITY #4: Here is a picture of one good way to brush your teeth. It says... (Show *How to Brush* and read instructions. Ask for questions and comments.)

"How to Brush" handout should be given to each child.

### Move the brush back and forth gently in short stokes. Brush the top, front and back sides of each tooth.

4. Toothbrushes. What kind of toothbrush do you use? [Get several answers.] I'm going to ask you a question and give you four answers. You tell me which answer you think is the right one.

Here's the question:

What kind of toothbrush would be easiest for you to use?

- a) A very big one
- b) One with a fancy handle
- c) A small, child-size toothbrush that is easy to hold
- d) A purple one

You're so smart! You should use a small, child-size toothbrush that is easy to hold.

Use a child-size toothbrush that is easy to hold.

ACTIVITY #6: Show Old and New Toothbrushes. Have the children identify the one that looks new.

Pass a couple of these handouts around.

# Get a new toothbrush when the bristles are bent and worn out.

5. What plaque is. When you brush your teeth at night, they feel clean and your mouth tastes good, right? Well, if you don't brush your teeth before going to bed, how does your mouth feel when you wake up in the morning? [Tastes bad, smells bad, teeth feel sticky.] That is because there is something else that gets on your teeth besides the food you eat. It's called plaque. Can you say "plaque"? Although you can't see it, plaque is a sticky film that is forming on your teeth all the time.

# Plaque is a sticky, clear film that forms on your teeth all the time.

6. How plaque contributes to cavities. Plaque is bad for your teeth because it contains germs. The germs in the plaque can hurt your teeth by helping to make a little hole called a cavity. What do you think happens if you take a nice strong tooth and put holes in it? [It isn't as strong any more.] Right. The tooth gets weaker. Plaque and cavities make our teeth weaker. That's why it is so important to brush all the plaque off of our teeth. How many times a day should you brush? Yes! Two times — in the morning and before going to bed at night are good times to brush.

### Module 3: "A Visit to the Dentist"

approximate time: 10 minutes

#### **Key Message**

Your dentist is a friendly doctor who will help your teeth stay healthy and strong.

#### **Student goals**

Upon completing this module students should have a basic understanding of a routine dental visit:

- The role of the dentist
- The roles of the dental helpers (receptionist, assistant and hygienist)

#### Module Topics (with discussion points and questions)

- 1. Why it is important to visit your dentist. What is a dentist? [A doctor who takes care of teeth and mouths.] How many of you have visited your dentist? Why is it important to visit the dentist? [To make sure your teeth stay healthy and strong.]
- 2. The dentist's office. What interesting things did you see in your dentist's office? [Discuss answers, which might include the exam chair, special light, special tools, dental mask and gloves, etc.] Your dentist has all sorts of interesting things in the office.
  - The special chair moves up and down so that people of different sizes can sit in it, and the dentist can see easily into all their mouths. The light helps your dentist see into mouths, too. Your dentist also has some other special things in the office. The little mirror lets your dentist see your back teeth; the "feeler" tool helps the dentist count your teeth; the x-ray machine takes pictures of the insides of your teeth; the bib protects your clothing; and there is even a little hose to spray water into your mouth.
- 3. The dental team. What other people might you see at your dentist's office? Who else works there? [Receptionist, dental assistant, dental hygienist.] The receptionist works at the desk and greets you when you come in. The dental assistant helps the dentist by getting the exam room ready. The dental hygienist also helps the dentist and may clean your teeth with special cleaners.
- 4. The dental exam. What is your dentist looking for when checking your teeth? [Get several answers.] Yes, your dentist looks for many things. Your dentist counts your teeth, sees if you are brushing properly, checks to make sure your teeth are growing the correct way, and looks for cavities. Your dentist also checks your tongue and the inside of your mouth to make sure they are healthy, too! If you have any questions about your teeth or how to take care of them, ask your dentist. Your dentist is a friendly doctor who wants you to have healthy, shining teeth.

**Summary:** The dentist is our partner in caring for our teeth.

5. What plaque is. When you brush your teeth at night, they feel clean and your mouth tastes good, right? Well, if you don't brush your teeth before going to bed, how does your mouth feel when you wake up in the morning? [Tastes bad, smells bad, teeth feel sticky.] That is because there is something else that gets on your teeth besides the food you eat. It's called plaque. Can you say "plaque"? Although you can't see it, plaque is a sticky film that is forming on your teeth all the time.

# Plaque is a sticky, clear film that forms on your teeth all the time.

6. How plaque contributes to cavities. Plaque is bad for your teeth because it contains germs. The germs in the plaque can hurt your teeth by helping to make a little hole called a cavity. What do you think happens if you take a nice strong tooth and put holes in it? [It isn't as strong any more.] Right. The tooth gets weaker. Plaque and cavities make our teeth weaker. That's why it is so important to brush all the plaque off of our teeth. How many times a day should you brush? Yes! Two times — in the morning and before going to bed at night are good times to brush.

ACTIVITY #8: Have students complete the activity sheets Count & Color and Finders Keepers.

Each student gets the "Finders Keepers" handout. It can be completed during the session or sent home.

## Module 2: "Plaque Attack!" approximate time: 7 minutes

#### **Key Message**

Plaque can hurt teeth by making acids that cause cavities.

#### **Student goals**

Upon completing this module students should know:

- What plaque is.
- How plaque can harm teeth.
- What a cavity is.

#### Module Topics (with discussion points and questions)

- 1. Healthy teeth. Do everyone's teeth always stay strong and healthy? [Solicit a few stories].
- 2. Things that prevent teeth from staying healthy. What can happen to teeth that keeps them from staying healthy? [They get cavities, they can get broken or knocked out.]
- 3. What a cavity is. Let's talk about cavities and what causes them. What is a cavity? [A little hole in your tooth.]

### A cavity is a small hole in a tooth.

4. What plaque is. Does anyone know what causes cavities? [You may get a variety of answers, but they may not include plaque.] Those are all interesting answers, but there is one thing that plays a big part in causing decay, or cavities, in your teeth. It is called "plaque." [Write "plaque" on chalkboard.] Has anyone heard that word before? If you do not brush your teeth before you go to bed at night, how does your mouth feel when you wake up in the morning? [Tastes bad, smells bad, teeth feel sticky or "fuzzy."] That is because plaque has been forming in your mouth all night. Plaque is a sticky, clear film that is forming on your teeth all the time.

# Plaque is a sticky, clear film that is constantly forming on your teeth.

5. How plaque contributes to decay. Plaque is bad for your teeth because it contains germs. When a person eats or drinks sugary or starchy foods, the sugars and plaque mix together to make an acid. Does anyone know what acid does? [It makes holes in things.] The acids in your mouth attack your teeth and can make cavities.

# The acids in your mouth attack your teeth and can make cavities.

 Repeated acid attacks make cavities grow. Every time a person eats or drinks, plaque and sugar mix together to make acid. Each acid attack can last 20 minutes, and make a cavity get bigger and bigger. Let's do a demonstration to help us understand how a cavity grows.

### Repeated acid attacks make cavities grow bigger.

ACTIVITY #2: How a Cavity Grows. Draw a large tooth on a paper towel with a crayon or permanent marker. Using a black watercolor marker, make a heavy dot on the tooth to represent a cavity. Add a drop of water to the cavity to represent another acid attack. After a few minutes look at the tooth and see how the "cavity" has spread.

\*Bring with you:

-paper towel with tooth drawn on -black marker -water

7. Repairing cavities. What happens when someone gets a cavity? Does it heal itself like a scrape or cut on your knee? [No. You have to go to the dentist to get it fixed.] That's right; only your dentist can fix a cavity, by removing the decay and putting a special filling material in the hole.

Cavities cannot go away by themselves. They must be fixed by a dentist.

### Module 3: "YOU have the Power!"

approximate time: 15 minutes

#### **Key Message**

A healthy mouth and teeth are important parts of a healthy body. There are many things that children can do to keep their teeth clean, strong and healthy.

#### **Student goals**

Upon completing this module students should be aware of four steps for good oral health:

- Brush with fluoride toothpaste twice each day. Spit out all the toothpaste!
- Floss once a day with a grown-up's help.
- Eat and drink nutritious foods and beverages and limit snacks.
- Visit their dentist regularly.

#### Module Topics (with discussion points and questions)

1. Feeling healthy. How do you feel when you are healthy? [List things: feel strong, have lots of energy, feel happy, etc.] Can someone really be healthy if their mouth and teeth are not healthy? [No.] Why not? [Because a clean mouth feels nicer, your breath smells nice, etc.]

#### Healthy teeth and mouth are part of a healthy body.

- 2. Keeping teeth healthy. What can you do to fight plaque and help keep your teeth healthy? [List answers, which may include brushing, visiting the dentist, good food and drink choices and flossing.] Let's talk about some of these.
- 3. Proper brushing. How many of you brush your teeth? Great! How often should you brush your teeth? [Twice a day.] What do you put on your toothbrush? Yes, toothpaste. Why do you use toothpaste? [Cleans better than water, gets the food and plaque off your teeth, makes your breath smell good, makes your mouth taste good.] Those are all good answers. There is also something very important in most toothpastes that helps strengthen your teeth. Does anyone know what it is called? It's "fluoride." [Write "fluoride" on chalkboard.] Fluoride prevents cavities by strengthening and protecting the teeth from acid. By the way, after you've brushed your teeth, spit out all the toothpaste! Don't swallow it. Toothpaste is for cleaning your teeth, not your stomach!

Brush twice a day with a fluoride toothpaste.
Fluoride prevents cavities by strengthening and protecting tooth enamel.
Always spit out all the toothpaste!

Did your dentist, or the hygienist in your dentist's office, show you how to brush your teeth? Move the brush back and forth gently in short strokes. Brush the top, front, and back sides of each tooth.

ACTIVITY #3: Here is a picture of one good way to brush your teeth. It says... (Show *How to Brush* and read instructions. Ask for questions and comments.)

Every child should get the "How to Brush" handout.

### Move the brush back and forth gently in short strokes. Brush the top, front and back sides of each tooth.

4. Toothbrushes. What kind of toothbrush do you use? [Get several answers.] I'm going to ask you a question and give you four answers. You tell me which answer you think is the right one.

Here's the question:

What kind of toothbrush would be easiest for you use?

- a) The biggest one you can find
- b) One with a fancy handle
- c) A child-size toothbrush that is easy to hold
- d) A purple one

You're so smart! You should use a child-size toothbrush that is easy to hold.

# Use a toothbrush that has soft bristles and is comfortable to use.

#### Pass around a couple of these handouts.

ACTIVITY #4: (Show Old and New Toothbrushes and discuss when to get a new toothbrush.) Here are two toothbrushes. Which one looks new? How can you tell if you need a new toothbrush? [If the bristles are bent or broken.] Yes, you should get a new toothbrush when the bristles are bent and worn out.

# Replace your toothbrush when the bristles are bent and worn out.

5. Flossing. Is there anything else we can do to clean our teeth? [Use floss.] Who knows what dental floss is? [Looks like string or thread.] Dental floss is a special kind of string for cleaning between your teeth. How many of you floss your teeth? Cleaning between your teeth is just as important as brushing. Do you know WHY? [Flossing helps remove bits of food and plaque from between the teeth where your toothbrush can't reach. It helps keep your teeth and gums healthy.] Flossing is not as easy for children to do as brushing, so you should ask your parents or another grown-up to help you floss. You should floss your teeth very gently, once a day.

Floss your teeth very gently, once a day, with a grown-up's help.

#### Everyone should get the "How to Floss" handout.

ACTIVITY #5: Show floss and explain the technique used in *How to Floss*. Ask for a student volunteer, and demonstrate the following flossing technique using yarn: The child holds hands together with fingers straight up and tight against each other. These are the teeth. Use the yarn to floss between the student's fingers. Arrange students in pairs, give each pair a length of yarn, and allow them time to practice "flossing" each other's fingers. (One variation of this is to smear tempera paint between the fingers of the child representing the teeth, and then use the yarn to "floss." In this way, the children will actually see the "floss" cleaning between the teeth.)

Bring some yarn with you to do this activity if you'd like.

7. Dental visits. So now we know important ways to take care of our teeth — brushing, flossing, There is one more very important thing we should all do to keep our teeth healthy. Who can tell me what it is? Yes! Visit your dentist regularly. Your dentist will tell you when your next visit should be. What are some of the ways the dentist helps you take care of your teeth? [Checks your teeth to see if they are healthy. Tells you how to take good care of your teeth. Fixes cavities and repairs teeth.] Great! [If time allows, discuss the children's experiences at the dentist's office.]

### Visit your dentist regularly.

We have learned a lot about our teeth today and how to take good care of them.

- Our teeth are important.
- 2. Healthy teeth are part of a healthy body.
- 3. Taking good care of our teeth is something that each of us can do.

**Summary:** Healthy teeth can last a lifetime if they are cared for properly.

ACTIVITY #9: Have students work individually or in pairs to complete the activity sheets A-MAZE-ing Message and Something's Missing.

Give "Something's Missing" handout to each child. Can complete in class if there's time, otherwise send home.

### Module 1: "Protect Your Prized Possession!"

20 - 40 minutes

#### **Key Message**

Healthy teeth and mouth are important parts of a healthy body. Taking proper care of teeth now helps them last a lifetime.

#### Student goals

Upon completing this module students should be aware of the three basic steps to good oral health:

- Brush with fluoride toothpaste twice each day, and floss once each day.
- · Eat nutritious foods and limit snacks.
- Visit your dentist regularly.

#### Module Topics (with discussion points and questions)

1. Value. Discuss what makes something valuable. [Write down all answers that apply to teeth: can't be replaced, good quality, lasts a long time, looks nice.] What about your teeth? Are they valuable? [Get opinions.] What do your teeth help you do?

#### Our teeth help us talk, eat and give us beautiful smiles!

2. Primary and permanent teeth. How many sets of teeth do people get in a lifetime? [Two.] What were your first teeth called? [Baby or primary teeth.] When you were little you got 20 baby teeth. Why did they fall out? [As children grow they need bigger, stronger teeth.] That's right, as you get older you need bigger, stronger teeth. By the time people are about 18 they have all 32 adult, or permanent teeth. (Show Permanent Tooth Development.) How long do permanent teeth last? [Your whole lifetime — more than 60 years with proper care.] If you lose a permanent tooth, will another one grow in? [No.]
Everyone should get "Permanent Tooth Development" handout.

We lose our 20 baby teeth and grow adult teeth because we need bigger, stronger teeth to last the rest of our lives.

People get 32 permanent teeth, which can last a lifetime with proper care.

#### Permanent teeth can last more than 60 years!

- 3. What happens if we don't take care of our teeth? So taking care of your teeth sounds like a smart idea. What happens to your teeth if you don't take care of them? [Wait until someone mentions "cavities."]
- 4. What a cavity is. Let's talk about cavities and what causes them. What is a cavity? [A little hole in your tooth.] Right. A cavity is another name for tooth decay. What happens when something decays? [Gets rotten, falls apart, loses strength.] It's no different with your teeth. When your teeth decay, they lose their strength. The decay can also spread throughout your tooth.

#### A cavity is a small hole in a tooth, also known as tooth decay.

5. What plaque is. Does anyone know what causes cavities? [You may get a variety of answers, but they may not include plaque.] Those are all interesting answers, but there is one thing that plays a big part in causing decay, or cavities, in your teeth. It is called "plaque." [Write "plaque" on chalkboard.] Sound familiar? If you don't brush your teeth before you go to bed at night, how does your mouth feel when you wake up in the morning? [Tastes bad, smells bad, teeth feel sticky.] That is because plaque has been forming in your mouth all night. Plaque is a sticky, clear film that is forming on your teeth all the time.

# Plaque is a sticky, clear film that is constantly forming on your teeth.

6. How plaque contributes to decay. Plaque is bad for your teeth because it contains germs. When you eat or drink sugary or starchy foods, the sugars and plaque mix together to make an acid. The acids in your mouth attack your tooth enamel — the hard outer layer of each tooth — and can cause decay. Each acid attack can last 20 minutes, making cavities bigger and bigger. Let's do a demonstration to help us understand how acid works on teeth.

# The sugars and germs in plaque mix together to make acid. The acids in your mouth attack your teeth and can make cavities. Repeated acid attacks make cavities grow bigger.

7. Repairing cavities. What happens when someone gets a cavity in their tooth? Does it heal itself? [No. You have to go to the dentist to get it fixed.] That's right. Only your dentist can fix a cavity, by removing the decay and putting a special filling material in the hole.

### Cavities cannot go away by themselves. They must be repaired by a dentist.

- 8. Keeping teeth and gums healthy. So what can we do to get rid of the acid? How can you fight plaque and acid and keep those valuable permanent teeth healthy? [List answers which may include brushing, flossing, visiting the dentist, good food and beverage choices.] Let's talk about some of these.
- 9. Proper brushing. Let's list all the good things that happen when we brush our teeth. [Brushing cleans food and plaque off your teeth, fights acid, makes your breath smell good, makes your mouth taste good.] Good answers. How often should you brush your teeth? [Twice a day.] There is a very important ingredient in most toothpastes that helps your teeth. Does anyone know what it is? [Fluoride.] Who knows what fluoride does? [Fluoride prevents cavities by strengthening and protecting the tooth enamel from acid.]

Brush twice a day with a fluoride toothpaste.
Fluoride toothpaste helps prevent cavities by strengthening and protecting tooth enamel.

Move the brush back and forth gently in short strokes. Brush the top, front, and back sides of each tooth. You should also brush your tongue — very gently! Really! Your tongue has lots of germs on it that can cause your breath to smell bad.

ACTIVITY #3: Here is a picture of one good way to brush your teeth. It says... (Show *How to Brush* and read instructions. Ask for questions and comments.)

Everyone should get "How to Brush" handout.

Move the brush back and forth gently in short strokes.

Brush the top, front and back sides of each tooth.

Brush your tongue gently, too.

10. Toothbrushes. What kind of toothbrush is best for your teeth? Should it be large or small? [Get several answers.] You're right! You should use a toothbrush is easy to hold and helps you reach all your teeth.

Use a toothbrush that is easy to hold and helps you reach all your teeth.

#### Pass a few of these handouts around.

ACTIVITY #4: (Show *Old and New Toothbrushes* and discuss when to get a new toothbrush.) Here are two toothbrushes. How can you tell if you need a new toothbrush? [If the bristles are bent or broken.] Yes, you should get a new toothbrush when the bristles are bent and worn out. A worn out toothbrush can't clean the plaque off your teeth very well.

11. Flossing. Who remembers what dental floss is? [A special kind of string for cleaning between your teeth.] How many of you floss? How many of you floss once a day? Cleaning between your teeth with floss is just as important as brushing. Do you know why? [Flossing cleans between the teeth, where your toothbrush can't reach.] Flossing helps keep your teeth AND gums healthy! Flossing is not as easy to do as brushing, so you might have to ask your dentist, parents or another adult to show you how to do it properly. You should floss your teeth very gently, once a day.

Floss your teeth gently, once a day.

ACTIVITY #5: Show floss and explain the technique used in *How to Floss*.

Everyone should receive "How to Floss" handout.

13. Dental visits. So far we have talked about three important ways you can care for your teeth — brushing, flossing and eating nutritious foods. There is one more very important thing we should all do to keep our teeth and gums healthy. Who can tell me what it is? Yes! Visit your dentist regularly. What does your dentist do? [Examines your teeth and mouth to see if they are healthy. Tells you how to take good care of your teeth. Fixes cavities and repairs teeth.] What else happens when you go to the dentist? [Get your teeth cleaned, have X-rays to see the insides of teeth to check for cavities and other problems, may get fluoride treatments.] Your dentist will tell you when your next visit should be.

Visit your dentist regularly.

#### **The Sayler Park Oral Health Initiative**

2<sup>nd</sup> Sessions: November 12<sup>th</sup> and 19<sup>th</sup>

#### 1. Discussion About Nutrition

Brushing and flossing are very important ways to keep teeth clean and healthy, but there are a few more things that each of us can do. Any ideas?

I'll give you some hints: It has to do with plaque and germs and acid. It also has to do with keeping the rest of your body healthy.

The FOODS we eat and the BEVERAGES we drink are very important for keeping our teeth healthy. So let's talk about food.

Does anyone remember the food groups? (Fruits, Vegetables, Protein, Grains, Dairy) Eating a mix of foods from these groups for breakfast, lunch, and dinner is the best way to keep your teeth and whole body in good shape.

But what about snacks, pop, and sweets? Are these good for your teeth?

Who remembers what happens in our mouths after we eat?

The plaque and sugar mix to form acid. The acid then attacks our teeth. The more often we eat snacks and drink sugary liquids, the more acid attacks we have.

But that doesn't mean that all snacks are bad for you. Sometimes growing kids need to eat between meals.

If you are hungry and need a snack, what are some nutritious foods that you can eat? Fruit, low-fat cheese, low-fat yogurt, or raw vegetables.

#### 2. Activity

**Preschool, 1**<sup>st</sup>,  $2^{nd}$ ,  $3^{rd}$ , **Special Education**  $\rightarrow$  Do activity with the figures. Have the students place the different foods in the appropriate food groups.

 $4^{th}$ ,  $5^{th} \rightarrow$  Give students the "My Plate" handout. Have them either write or draw foods in each of the food groups to come up with a complete healthy meal. Have some of them share their meal ideas with the class.

#### 3. Complete Survey & Hand Out Snack

Please have the students complete the survey again to see what they've learned! Hand out healthy snack.