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Increasing Kindergarten Students Awareness of Dental Hygiene

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Running Head: INCREASING KINDERGARTEN STUDENTS AWARENESS DENTAL

Increasing Kindergarten Students Awareness of Dental Hygiene

Daisy Morales

A Capstone project for the Bachelor of Arts in Human Development and Family Studies

INCREASING KINDERGARTEN STUDENTS AWARENESS DENTAL

Increasing Kindergarten Students' Awareness of Dental Hygiene

Introduction

Many children in Kindergarten may not be aware of the importance of dental health and proper dental care. As a result, the lack of dental hygiene education can put those children at an academic disadvantage as opposed to their peers. In order to address the children's lack of awareness, I created a three-session curriculum about dental hygiene for a Kindergarten class at Caroline Payne Harris Elementary School in Bakersfield, California.

Needs Statement

Dental hygiene is often an overlooked aspect of health that is essential to the academic and developmental success of children. By the time children enter kindergarten, some children may have received dental hygiene education from successful dental care programs (i.e. Early Head Start, pre-kindergarten), or from parents. Early Head Start programs in the United States have a dental care curriculum which has been shown to enhance and promote dental health behaviors in children (Burgette et al., 2017). However, children who enter kindergarten lacking sufficient dental hygiene education can be at an academic disadvantage due to dental diseases. The implications caused by dental disease may lead to school absenteeism, academic disengagement, and can negatively impact a child's psychosocial well being. All of these implications can result in low levels of academic performance.

School absenteeism due to dental disease in children is a huge problem in the United States. According to The United States Department of Health and Human Services (2004, as cited in Gardiner, 2020) dental caries (cavities), is one of the most common chronic diseases of childhood youth with an estimated 52 million hours of school missed due to dental disease. Additionally, Pourat and Nicholson (2009) reported an estimated 504,000 children in California

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missed a day of school due to ineffective dental care. In their study, Guarnizo-Herreño and Wehby (2012) found that children with dental diseases were more likely to have problems at school due to missing school and were also less likely to complete all required homework.

Academic disengagement in school can be a direct result of discomfort felt by dental diseases. In their study, Jackson et al., (2011) found that pain due to poor oral health in children was directly related to low school performance. Children with poor oral health and dental disease may be more likely to feel academically disengaged due to discomfort or pain which can cause them to fall behind academically. Crall and Vujicic (2020) reported that children who experienced discomfort and pain caused by poor dental health had difficulty sleeping and impaired speech both contributors to academic implications.

A child's psychosocial well-being can be impacted due to dental health related issues. Dental health is associated with all psychosocial outcomes (Guarnizo-Herreño & Wehby, 2012). Children with dental health issues are more likely than others to feel shy, insecure, in pain, and unhappy around other children which can be detrimental to their psychosocial well-being and lower their self-esteem. Children who suffer from dental health related issues can also be the target of school bullying. A child's negatively impacted self-esteem due to dental health can affect their motivation to socialize with peers, engage in academics, explore, and play.

Today, many kindergarten children might be unaware of the importance of dental hygiene and the potential effects of poor dental care. In order to increase awareness and promote healthy behaviors, I intend to provide a three-session curriculum about dental hygiene for Kindergartners at Caroline Harris Elementary School in Bakersfield, California.

Theory

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Kindergarten-aged children fall under Erikson's Initiative versus Guilt stage where children begin to seek purpose and direction while initiating their own activities and pursuing goals. An important aspect of self-development during this stage comes from children achieving a sense of initiative, which helps children jump at the opportunity to show off what they know and not be afraid to learn (Heath, 2018). Children who attain a strong sense of initiative begin solidifying their understanding of health and healthy practices such as brushing their teeth, taking a bath, etc. Since children are beginning to assert their independence at this stage, providing support for dental hygienic practices may be beneficial to help them manage a consistent hygienic schedule on their own.

Consideration of Diversity

My project will be conducted in person with Kindergarten children at Caroline Harris Elementary School in Bakersfield, California. Data from the School Accountability Report Card (SARC; 2020), Harris Elementary is 11.5% African American, 0.6% American Indian or Alaska Native, 0.9% Asian, 0.4% Filipino, 69.6% Hispanic or Latino, 14.2% White, 2.8% two or more races. SARC data also revealed that the total number of socioeconomically disadvantaged enrolled children was 89.4% with an additional 15.1% of which were English learners (SARC, pg. 3, 2019-2020). The number of kindergarten students for the 2019-2020 school year was 82. It is expected that the participants would be reflective of the overall school population. Since I will be conducting my lesson in English, the participants will have to be English proficient in order to participate. In order to be more inclusive, the lessons can be translated to another language. The content which I intend to provide was devised for Kindergarten children; therefore, it may likely

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not apply similarly to younger or older children since they fall under different developmental periods.

Learning Outcomes

I intend to provide three, 45-minute lessons to a class of Kindergarten children at Harris Elementary School.

By the end of the project, participants will:

1. Indicate which foods correlate with healthy teeth and which correlate with unhealthy teeth.
2. Indicate three daily practices related to healthy dental care.
3. Describe two implications of unhealthy dental care.

Method

Day 1

First I will introduce the topic of healthy and unhealthy foods for teeth by asking the class if they know which foods are healthy for their teeth and which are not and opening up the topic for class discussion. This discussion will allow the students to get a heightened sense of the topic of the day. Then, using a felt board and cut outs of healthy (happy) teeth, unhealthy (sad) teeth, and food cut outs (fruits, vegetables, junk food), I will teach the students which foods are healthy for their teeth, and which are not using the example from

http://123learnonline.blogspot.com/2011_02_01_archive.html. See Appendix A. I will teach

while allowing the students to decide which foods pertain to their respective category of healthy and unhealthy teeth. After the students finish the felt board exercise, we will all sing a song titled

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“Are Your Teeth Happy or Sad?”. See Appendix B. Students will then be broken into table groups where they will have a worksheet with different foods, happy and unhappy teeth and as a group, they will decide if the food being displayed is correlated with happy “healthy” teeth or sad “unhealthy” teeth by coloring in the teeth. See Appendix C. Group results from this worksheet will indicate if Learning Outcome 1 was met. After all groups are finished, we will all go over the worksheet as a class and review it together. I will conclude the day’s lesson by handing out stickers to the students for pledging to eat healthy and maintain healthy smiles.

Day 2

I will begin by introducing the day's topic of daily practices related to healthy dental care by allowing the children to answer what things they do to keep their teeth clean and healthy while opening the topic up for discussion. I will also add to the discussion by using other examples which could be left out such as brushing one’s tongue, flossing, eating a healthy diet, avoiding consuming too many sweets, attending regular dentist visits, etc. Next we will view an educational video on the importance of and the steps to brushing and flossing teeth from <https://www.youtube.com/watch?v=hDZXSMU2IAk>. Then, using props (a big teeth/mouth model, toothbrush, healthy foods and dental floss/string), I will go over all the techniques taught on the video on how to and what steps are required to properly care for teeth. See Appendix D. I will allow the children to tell me the steps needed to properly brush their teeth and let them come up and show the class how to do so using the props I provide. I will make sure to give everyone willing to participate a chance to demonstrate what they have learned so far. I will then read the book, *Sugarbug Doug: All About Cavities, Plaque, and Teeth* by Dr. Ben Magleby to the class. See Appendix E. To conclude, I will use a worksheet from <http://sugarbugdoug.com> where

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students will cross out everything that Sugar Bugs like, and everything that Sugar Bugs don't like. See Appendix F. Results from this worksheet will indicate if Learning Outcome 2 was met.

Day 3

I will begin by introducing the topic of the day which is the implications caused by unhealthy dental care. I will begin by introducing two puppets to the class, one named Billy and the other Molly. See Appendix G. I will use them to perform a small play I wrote titled "Billy and Molly Address Billy's Dental Health Issue". See Appendix H. Performing the play using puppets will allow the students to attain a sense of the pain Billy is going through due to the implications of unhealthy dental care. After the play, I will ask the children why they think Billy got a cavity in the first place and what he could have done to prevent it. I will then ask them what troubles Billy was going through because of his cavity and his unhealthy dental care decisions. I will add to the discussion as needed if anything is left out so the children can add more information and gain a higher sense of the implications caused by unhealthy dental care. I will then hand out a worksheet titled "Sad Tooth, Happy Tooth" which I created so students can write in each corresponding box, two examples of the implications of unhealthy dental care and two of healthy dental care. See Appendix I. Results from this worksheet will indicate if Learning Outcome 3 was met. I will conclude by congratulating the class and thanking them for their participation and efforts by handing out small paper cups with grapes inside as a healthy snack award.

Results

Due to COVID-19, my project was unable to be executed.

Discussion

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Due to COVID-19, my project was unable to be executed.

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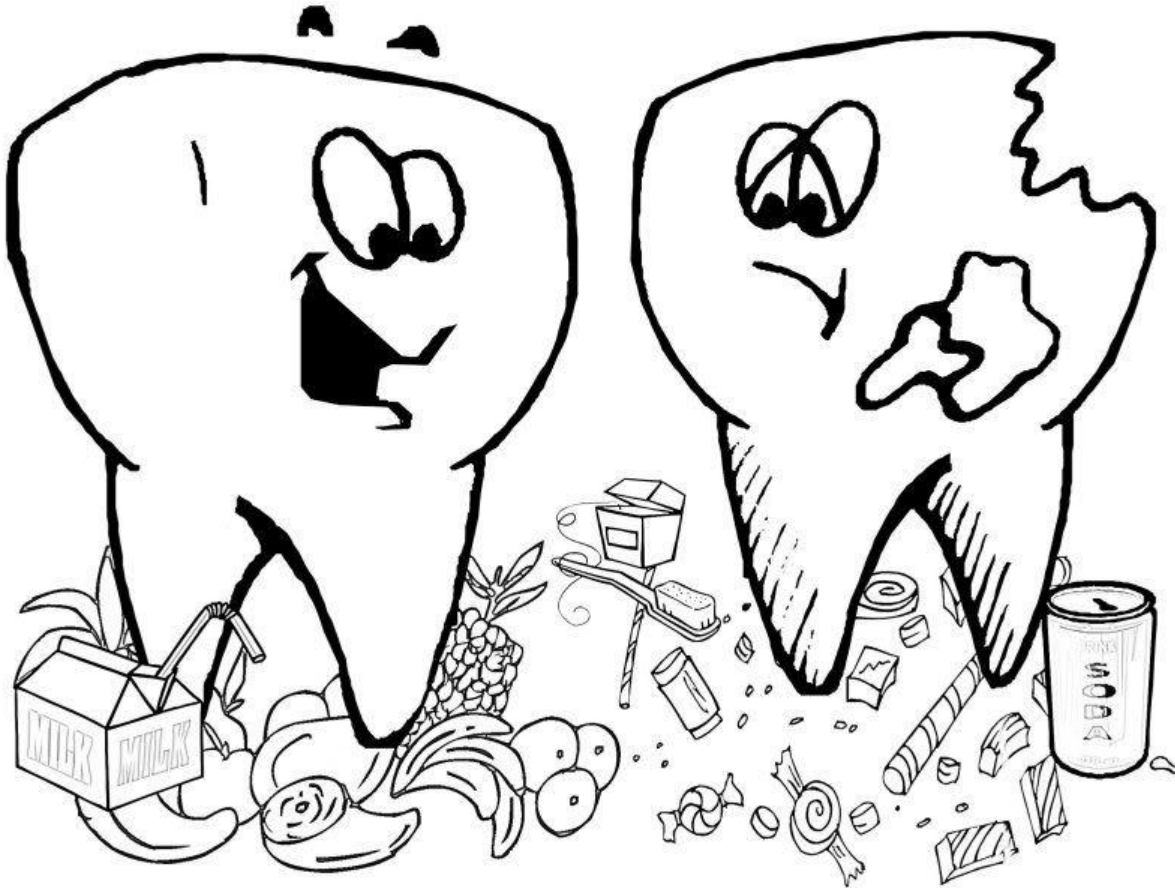
Appendix A

Felt board and cut outs of healthy (happy) teeth, unhealthy (sad) teeth, and food cut outs example.

Example from http://123learnonline.blogspot.com/2011_02_01_archive.html



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*Appendix B**“Are Your Teeth Happy or Sad?” song lyrics***Are Your Teeth Happy Or Sad?***(Use one finger on each hand to represent each tooth.)*

Sad tooth, sad tooth,
 full of decay.
 Candy and sugar
 caused me to look this way.

Happy tooth, happy tooth,
 pretty and white.
 Brushing and flossing
 keeps me shining so bright.

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Appendix C




























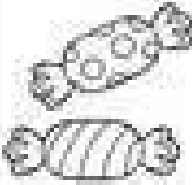


Happy "healthy" teeth or sad "unhealthy" teeth worksheet used for Learning Outcome 1

Name _____

My Study Buddy

Foods and My Teeth!

Directions: Color the happy tooth if the food shown is healthy for your teeth or the sad tooth if the food is not healthy for your teeth.

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Appendix D

Examples of the props used for lesson on proper dental care techniques





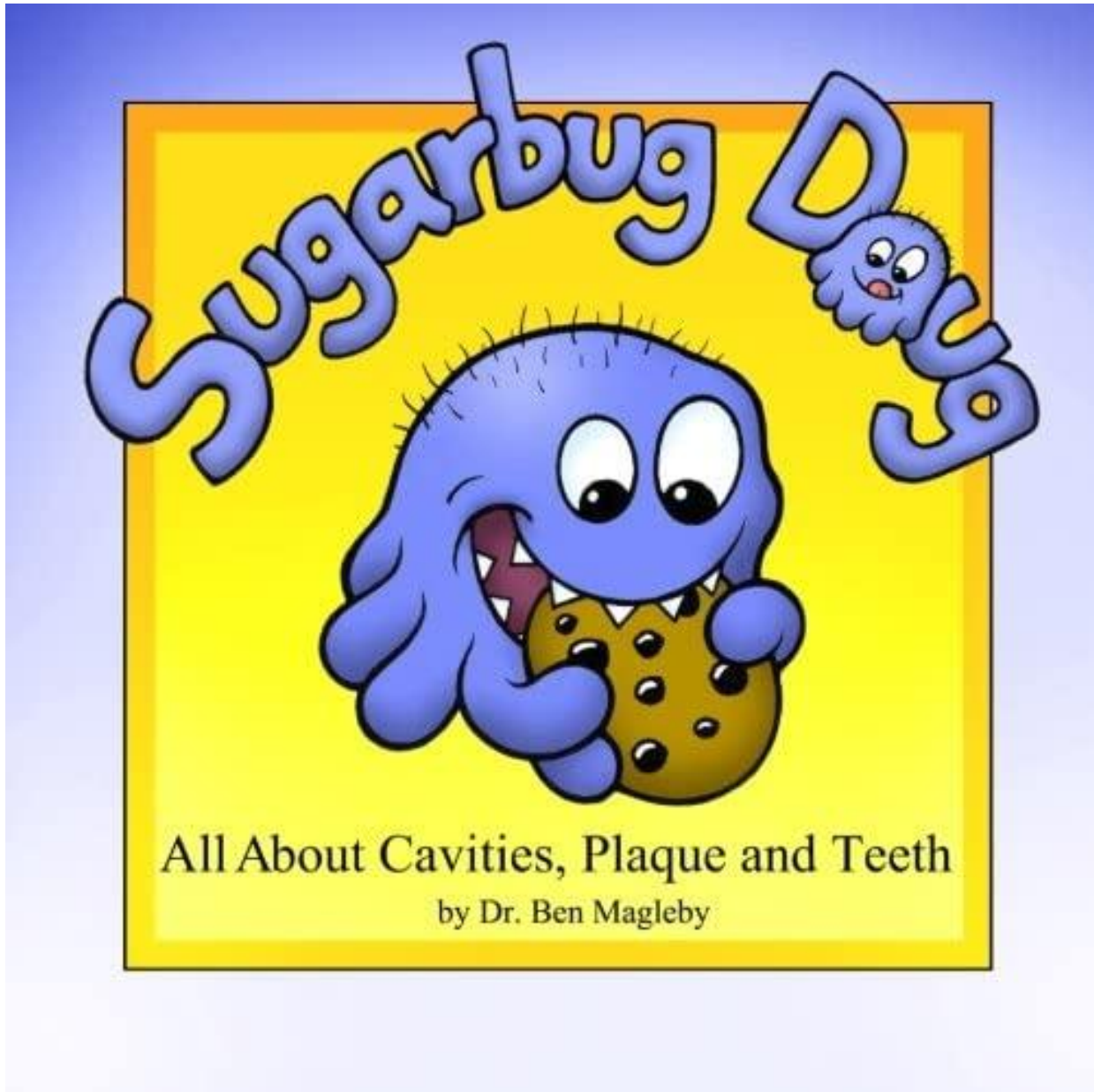
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Appendix E

Sugarbug Doug: All About Cavities, Plaque, and Teeth by Dr. Ben Magleby (book cover)



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Appendix F

Sugarbug Doug worksheet used for Learning Outcome 2

Name: _____

Date: _____



Supplement 2

www.sugarbugdoug.com

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*Appendix G**Billy and Molly puppets example*

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*Appendix H**“Billy and Molly Address Billy’s Dental Health Issue” short play script*

“Billy and Molly Address Billy’s Dental Health Issue”

Molly: well hello Billy, would you like to play jump rope with me?

Billy: Oh, I don’t know, I’m not feeling too well to be honest.

Molly: Oh, Billy what bad breath you have!

- Did you eat something bad that made your stomach hurt?

Billy: Oh uh, no... I have a toothache and I really don’t want to be at school right now.

Molly: Well, we have to report it to the teacher so the school nurse can take a look at it.

Billy: No! I’m afraid they will call my mom and tell her I have a cavity!

- She’s been asking me why my breath smells so bad and why my grades are down this week.
- I don’t want her to know I have a cavity because she will know I have been lying about eating healthy, brushing my teeth twice a day, and flossing regularly.

Molly: But Billy, if you don’t speak up now things will only get worse and worse.

- You will be in more pain and fall behind in your learning because the pain will be too strong for you to focus.
- And worse, you can end up getting a rotten tooth, even worse breath odor or have your tooth fall off!!
- Plus, you won’t want to play with me or everyone else anymore because of the tooth ache pain from your cavity and we need you on our team for the dodgeball tournament next week!

Billy: I guess you’re right Molly. I will tell the teacher about my cavity and tooth ache, but would you go with me?

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Molly: Sure, were friends of course I'll go with you don't you worry Billy the dentists will fix your tooth up right away.

- Just promise me you will start to brush twice a day, eat healthy, and floss regularly.
- Also, Billy, you're going to have to drink less soda and more water or milk. And replace all the candy and chocolate you eat with healthy fruits and vegetables. Do you promise me you will do that?

Billy: Well Molly since you are such a good friend, I promise I can make the right choices starting today to have healthy and happy teeth.

- That way we can all play together, I can learn better to become a video game designer one day, and so my breath wont smell bad anymore.

Molly: Yeah! That's the spirit friend!


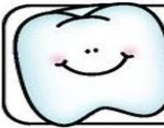
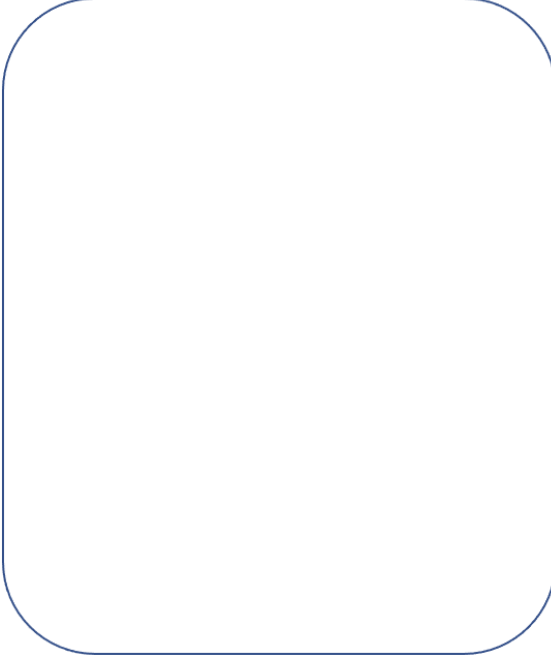
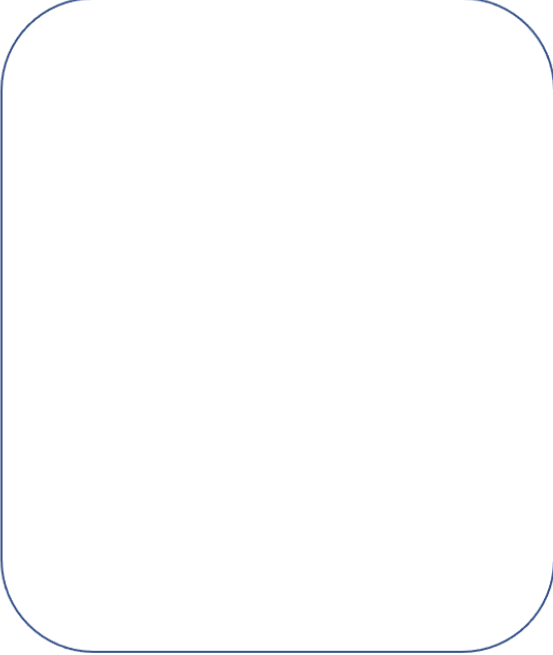
- Now let's go get your tooth fixed so we can beat Caleb's team next week in dodgeball and show him who's boss!!!

Both: High Five!!

Both: Bow twice.

Appendix I

“Sad Tooth, Happy Tooth” worksheet used for Learning Outcome 3

Unhealthy Teeth ☹️	Healthy Teeth 😊
<p>Sad Tooth</p> 	 <p>Happy Tooth</p>
	

*Appendix J**Presentation from Capstone Festival*

Increasing Kindergarten Students Awareness of Dental Hygiene

By Daisy N. Morales



Introduction

- The importance of dental hygiene.
- Dental hygiene related diseases.
- Three-lesson curriculum on dental hygiene to a kindergarten class at Caroline Payne Harris Elementary School in Bakersfield, California.



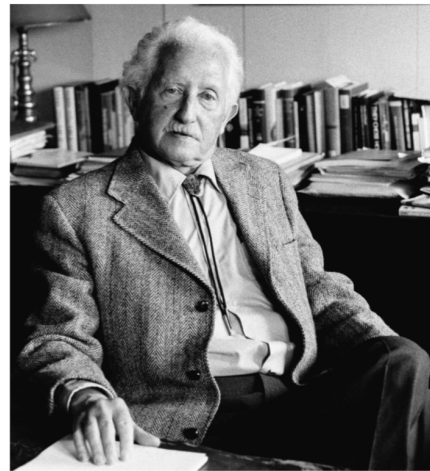
Need

- A lack of dental hygiene education can result in dental diseases.
- Dental hygiene is often overlooked as an important aspect of health.
- These implications can lead to many detrimental outcomes.



Theory

- Erikson's Initiative vs. Guilt stage of development.
- Children seek purpose and direction.
- Children achieve a strong sense of initiative.
- Children attain healthy dental hygienic habits.



Learning Outcomes

At the end of the project, participants would've been able to:

1. Indicate which foods correlate with healthy teeth and which correlate with unhealthy teeth.
2. Indicate three daily practices related to healthy dental care.
3. Describe two implications of unhealthy dental care.

Method - Day 1

- Discussion: What are some healthy and unhealthy foods for teeth?
- Lesson: Felt board
- Sing aloud: "Are Your Teeth Happy or Sad?"
- Worksheet: "Foods and My Teeth!"
- Stickers for pledging

Day 1



Method - Day 2

- Discussion: What are some daily practices related to healthy dental care?
- Video: “How to Brush Your Teeth Properly - For Kids”
- Lesson: Maintaining healthy teeth using props
- *Sugarbug Doug: All About Cavities, Plaque, and Teeth* by Dr. Ben Magleby
- Worksheet: Sugarbug Doug

Day 3



Molly: well hello Billy, would you like to play jump rope with me?

Billy: Oh, I don't know, I'm not feeling too well to be honest.

Molly: Oh, Billy what bad breath you have!

- Did you eat something bad that made your stomach hurt?

Billy: Oh uh, no... I have a toothache and I really don't want to be at school right now.


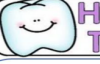
Molly: Well, we have to report it to the teacher so the school nurse can take a look at it.

Billy: No! I'm afraid they will call my mom and tell her I have a cavity!

- She's been asking me why my breath smells so bad and why my grades are down this week.

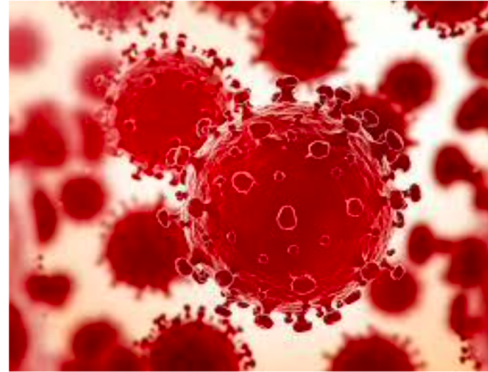
- I don't want her to know I have a cavity because she will know I have been lying about eating healthy, brushing my teeth twice a day, and flossing regularly.

Day 3

Unhealthy Teeth ☹️	Healthy Teeth 😊
<p>Sad Tooth </p> <div style="border: 1px solid black; height: 140px;"></div>	<p>Happy Tooth </p> <div style="border: 1px solid black; height: 140px;"></div>

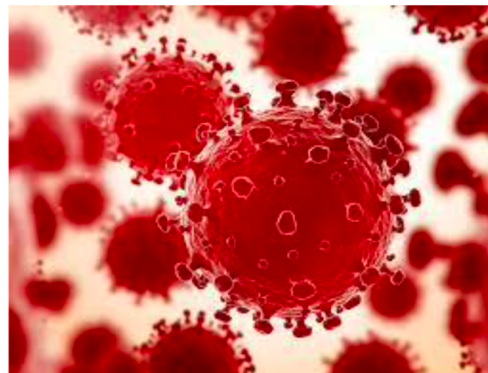
Results

Due to Covid-19 my project was unable to be executed; therefore, I do not have any results.



Discussion

Due to Covid-19 my project was unable to be executed; therefore, I do not have a discussion.





Thank You!
Any Questions?
Daisy N. Morales