INTEGRATION OF MULTI-SENSORY ELEMENTS INTO CLASSROOMS
FOR STUDENTS WITH EXCEPTIONALITIES:

A PROJECT BASED WEBSITE

A Project
Presented
to the Faculty of
California State University, Chico

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education

by

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Spring 2016
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FOR STUDENTS WITH EXCEPTIONALITIES:
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by

Kayla M. Mora

Spring 2016

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DEDICATION

I would like to dedicate this project to my family: Randy, Joan, Jason, Diane, Morgan, Grandma Marilyn, and Bill. Thank you for always supporting me and encouraging me to never give up on my dreams! I am truly blessed to have you by my side and be able to call you mine. Each and every one of you have played such an important role in my life, and are the reason I am the person I am today. I’m eternally grateful! I love you all very much. Thank you for believing in me.
ACKNOWLEDGEMENTS

I would like to extend my gratitude and appreciation to my mentor, Dr. Kathleen Gabriel, and my supportive committee members, Dr. Tayla Kemper, Dr. Michelle Cepello, and Dr. Charles Zartman. Thank you for providing me with exemplary support as I completed my Master of Arts in Education.
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ABSTRACT

INTEGRATION OF MULTI-SENSORY ELEMENTS INTO CLASSROOMS FOR STUDENTS WITH EXCEPTIONALITIES:
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Master of Arts in Education
California State University, Chico
Spring 2016

People often dismiss things as primal as our senses, and how they affect our daily lives. For individuals with developmental disabilities this can be quite the opposite effect. Individuals with developmental disabilities often struggle with sensory processing which often times impacts their ability to process their environment and learn new concepts and skills. During the 1970s, two therapists from Holland began researching Multi-Sensory therapies. They discovered Snoezelen rooms, environments that offer sensory stimulation to users through a variety of auditory, visual, tactile, gustatory, and olfactory equipment. Through their research, they found that multi-sensory environments provided benefits to individuals with disabilities. These benefits include; enhance attention span, reasoning skills, thinking processes, concentration, and decrease self-stimulating and self-injurious behaviors.
Multi-Sensory Environments have become more known throughout the world but are still an underutilized resource. The special education community has started adopting multi-sensory intervention as a means to feed sensory diets for severely handicapped individuals. Individuals with mild/moderate disabilities are not as included in these studies. Therefore, awareness and implementation of multi-sensory interventions need to include all special education programs, as well mainstream classrooms. Multi-sensory interventions have the ability to help all students.
CHAPTER 1

INTRODUCTION

Background

The Snoezelen room is an environment that offers sensory stimulation to users through a variety of auditory, visual, tactile, gustatory, and olfactory equipment (Carter & Stephenson, 2012). The Snoezelen environment was developed in the 1970s by two therapists from Holland. The term Snoezelen derives from two Dutch words, “snuffelen” which means to seek out or explore, and “doezelen” meaning to relax (Fava & Strauss, 2010). The Snoezelen approach has been applied to individuals with developmental disabilities. Humans have an instinctive need for stimulation, but often times, individuals with developmental disabilities are inhibited from expressing and satisfying this need in an appropriate manner. The fundamental concept behind the Snoezelen room is to provide individuals with special needs leisure options (Carter & Stephenson, 2012).

Individuals with developmental disabilities are entitled to leisure time, not only to fulfill their basic need for leisure and recreation, but also to satisfy their need for sensory stimulation (Chan, Fung, Tong, & Thompson., 2005). The term “leisure” has been used often but is loosely defined. Leisure is suggested to be time remaining after other obligations have been met. This time includes participation in freely chosen activities that are considered entertaining to the individual.
Snoezelen rooms are more commonly known as multi-sensory environments (MSE). MSE are specifically constructed to accommodate the user’s interests, leisure, therapeutic, and/or educational needs (Fava & Strauss, 2010). These environments allow individuals to select and receive sensory input in a manner and duration that he or she desires. (Kaplan, Clopton, Kaplan, Messbauer, & McPherson, 2006). The philosophy of MSE is founded on non-directive and failure-free approaches. All MSE should encourage relaxation and freedom of choice. In multi-sensory therapy programs, individuals are not required to learn new skills and are granted the opportunity to explore, feel, relax and experience activities that grab their attention and interest with no time constraints. MSE consist of activities that are rich in sensation with equipment that is free from injury. The environment also provides individuals with challenges that are appropriate to their ability level. The intervention environment engages the whole body, movement, and interactions with people and objects. MSE promotes intrinsic motivation that drives individuals to interact through play. The activities are rewards in themselves which are altered to meet the abilities of the student (Thompson, 2011) According to Bera (2008), multi-sensory environments enhance attention span, reasoning skills, thinking processes, and concentration. Even though MSE are accepted as an intervention approach for students with special needs, the effectiveness of this intervention is inconclusive.

Research illustrates that individuals with developmental disabilities who participate in sensory therapies appear to be more relaxed, experience improved concentration, and enhanced joy (Chan, et al., 2005). Multi-sensory therapies prompt relaxation which can help with problem behaviors. Muscle relaxation and problem
behaviors are incompatible, thus relaxation can replace problem behaviors. Studies have shown that clients experience behavioral changes after the use of multi-sensory therapies. Behavioral changes include an increase in positive behaviors like smiles and initiating contact, as well as a reduction in aggressive and self-stimulating behaviors (Chan, et al., 2005). Research indicates that MSE have a significant impact on the reduction of problem behaviors, increased concentration, improved relaxation, communication, and movement.

Statement of Problem

Without the ability to process the environment through sensory stimulation individuals are heavily impacted and risk having difficulties with learning new information. Sensory stimuli allows for individuals with disabilities opportunities to explore their environment while developing processing skills.

Purpose of the Study

The purpose of the project is to create a website that will support the use of multi-sensory elements within the special education classroom setting. The website will include ideas for sensory equipment, tactile tools, data tracking forms, visual schedules and supports, timers, and suggested implementation strategies. The focus of the project is aimed toward special education classrooms and populations but is not limited to. The strategies can be applied to a variety of educational and recreational settings.

The motivation behind the project is to investigate the impacts of MSE on children with disabilities, as well as how to implement multi-sensory elements within
special education settings. This will be demonstrated by showing the benefits of MSE for children with exceptionalities, how MSE decrease the frequency of problem behaviors, what tools can be appropriately used within the classroom setting. In researching effective MSE, the following questions will be answered:

1. How do MSE impact students with exceptionalities ability to increase concentration?
2. How do MSE improve students with exceptionalities behaviors?

Limitations of the Study

Students with exceptionalities have unique qualities and a variety of skill sets which makes generalization impractical. Strategies amongst students will vary depending on their ability level. One technique may work for one student but different from another. Elements from the project may need to be modified for students to appropriately address their sensory needs. Like all behavior supports, there is a period of trial and error which need to be explored before determining what is effective for the student. Another limitation includes tools being implemented correctly and avoid creating additional distractions.

Definitions of Terms

Snoezelen or Multi-Sensory Environments (MSE)

The Snoezelen rooms or multi-sensory environments (MSE) are environments that offers sensory stimulation to users through a variety of auditory, visual, tactile, gustatory, and olfactory equipment (Carter & Stephenson, 2012). Snoezelen rooms offer
these stimuli through an assortment of ways which include the use of tactile objects, lights, music, and aromas.

Students with Exceptionalities

Students with one or more disabilities and qualify for special education services because their academic performance is affected by: specific learning disability, speech and/or language disorder, visually impaired, traumatic brain injury, other health impairment, developmentally delayed, intellectually disability, physical disability, mental illness/health, neurodevelopmental disorders, and hearing impaired (IDEA, 2004).

Problem Behaviors

These stereotypical behaviors include hand flapping, rocking, spinning, and rubbing. Another stereotypical behavior that is often observed is self-injurious behaviors. This behavior includes any movement that causes harm to self (Singh, Lancioni, Winton, Molina, Sage, Brown, Groeneweg, 2004).

Executive Functioning

Executive functioning governs higher order thinking capabilities which, includes problem solving, self-monitoring, awareness, and sequencing (Collier, 2008).

Leisure

Leisure is suggested to be time remaining after other obligations have been met. This time includes participation in freely chosen activities that are considered entertaining to the individual (Chan, et al., 2005).
CHAPTER 2

REVIEW OF RELATED LITERATURE

Problem Behaviors

Self-stimulating behaviors are stereotypical for individuals with developmental disabilities. These stereotypical behaviors include hand flapping, rocking, spinning, and rubbing. Another stereotypical behavior that is often observed is self-injurious behavior (Singh, et al., 2004). This behavior includes any movement that causes harm to self. Problem behaviors like self-injurious and self-stimulation can serve as an escape or task avoidance for individuals with developmental disabilities. Individuals may also engage in problematic behaviors to gain sensory stimulation (Singh, et al., 2004). A study conducted by Thompson (2011) indicated that anger, stress, self-injurious, aggression, and self-stimulatory behaviors are not conducive to sustained focus. This observational study took place in three different settings during a 20 minute interval (mainstream classroom, MSE, and mainstream classroom after MSE). Behaviors were measured by facial expression, body language, and vocal cues. The researcher wanted to find out if there is a difference in the average self-injurious behaviors before, during, and after experiencing a multi-sensory environment. Results indicated that self-injurious behaviors decreased by a mean of 98% after experiencing a multi-sensory environment (Thompson, 2011). These findings correlated with the results of Smith, Press, Koenign, & Kinnealey (2006) and Shapiro, Sgan-Cohen, Parush, & Melmed (2009) that suggest a sensory
integration approach in effective in reducing self-stimulating and self-injurious behaviors that disrupt daily functional activities for individuals with developmental disabilities.

Chan and Chien (2007) conducted a study that revealed mixed results regarding the effectiveness of multisensory therapy on individuals with severe disabilities. The results suggest that multisensory interventions being used as a leisure resource are effective in promoting psychological wellbeing rather than being a therapy to reduce problem behaviors.

Executive Functioning

Executive functioning governs higher order thinking capabilities which, includes problem solving, self-monitoring, awareness, and sequencing (Collier, 2008). Executive functioning can be broken up into two groups; sequencing of behaviors, and drive and motivation. The study explored how individuals participating in leisure and social activities have more difficulties accessing leisure activities due to their impaired executive functioning abilities. These individuals especially struggle with following instructions to games that are modified as the game progresses, as well as holding task instructions in their working memory (Collier, 2008). Multi-sensory environments offer activities that do not rely on the manipulation of information and equipment can be used without an expected outcome. These factors create a failure free experience.
Increased Concentration

Sensory integration requires the processing of information. It is also a neurobiological process that helps people organize sensations from the environment and one’s own body which makes it possible to effectively use the body within the environment. (Thompson, 2011). Concentration becomes a difficult task when individuals are unable to process their environment. Concentration and sustained focus is important for individuals to be able to successfully complete daily functional activities. For individuals with developmental disabilities, Kaplan et al. (2007) conducted a study that focused on the impact of MSE used as therapy for students with autism and concluded that there was improvement in the amount of students task engagement.

Attention deficits make it difficult for individuals to shift attention, sustain attention, and filter irrelevant sensory stimulation. Many leisure activities are often times too complex for individuals with developmental disabilities and their arousal time can regress very quickly, leading to distractibility. Some activities require undivided attention which can negatively affect task accuracy, and can lead to an increased chance of performance error. By using a MSE, stimulation can be monitored and adjusted to better meet the needs of the individual (Collier & Truman, 2008). Once individuals are able to increase concentration they are able to better identify their wants and needs and begin communicating those messages to others.

Communication

Some individuals with developmental disabilities have difficulty with communication. These difficulties can include problems with verbal expression and
comprehension. Fortunately, MSE do not require verbal communication. Most of the interactions rely on non-verbal behaviors that include the interactions between the user and the facilitator. Communication is encouraged within the MSE through non-verbal communication, sign language, and body language (Collier, 2008). Equipment found in MSE provides opportunities for listening, indicating personal preferences, and recognizing symbols. MSE allow individuals to make decisions independently about which activity to interact with. Over time it is possible for students to learn how to use different communication outlets which will allow them to advocate their needs and begin getting their needs meet independently.

Movement

Movement can be an area of concern for many individuals with special needs. Some neurological problems impose difficult for individuals to initiate movement and participate in activities that require movement (Collier, 2008). MSE make it possible for these adaptations to be made so that participants who have difficulties with movement are able to interact with the environment. Equipment can be used to achieve a sense of movement through the use of swings, water beds, and hammocks (Collier, 2008). Having the ability to engage in different activities like movement without time constraints is an essential component of leisure activities.

Leisure

Leisure activities are preferred interests that bring happiness or reduce anxiety levels to individuals with exceptionalities. MSE can reduce anxiety levels by providing a
calming environment where sensory stimulation can be adjusted to address the needs of the clients. Research has been conducted to explore the emotion-oriented aspect of MSE and how the experience meets the requirements of a leisure activity. Individuals with special needs find that MSE are enjoyable and they are capable of making independent decisions about which equipment they would like to use (Collier, 2008). Music that reflects the client’s personal preference can be incorporated to help reduce anxiety levels and create a sense of belonging. Relaxation has been linked to a reduction of pressure, gentle stimulation, and a reduction of obligated concentration (Collier, 2008).

Assessment

Assessment is a critical component in identification of an individual’s personal abilities, likes, and preferences. Functional skill assessments are important when constructing a MSE. The Pool Activity Level (PAL) instrument is used for occupational profiling and can be used to determine an individual’s level of functioning (Collier, 2008). The levels include the planned activity level (ability to work towards completing a task), the exploratory level (ability to access familiar activities but more concerned with the effect of the activity opposed to completion), the sensory level (ability to respond primarily to the sensory component of the task), and the reflex level (the individual is not aware of their environment, movement is a reflex response) (Collier, 2008). The activities should be safe, repetitive, multi-sensory (sight, sound, taste, smell, touch, and movement), safe, adaptable, and respectful. The MSE should include activities with stimulation that appropriately challenge the individuals to achieve their maximum potential. The providers should strive for sensory stimulation opposed to sensory
deprivation. Activities should be directed to meet the sensory needs of the user. These activities should take place on a regular basis so that the individual will be able to cope with the requirements of the environment.

Summary

The multi-sensory intervention approach continues to be applied in a variety of settings for individuals with developmental disabilities. It continues to be a growing area of interest and the results are mixed. However, MSEs continue to be an accepted concept in the special needs community. Research indicates that MSEs have a significant impact on reduction of problem behaviors, increased concentration, improved relaxation, communication, and movement. A recommendation for further research would include gaining an understanding of how MSEs can help individuals with developmental disabilities improve communication skills, motor development, and self-management skills.
CHAPTER III

ORGANIZATION OF PROJECT

Methodology

The purpose of the project was to construct a website that supports multi-sensory integration into classrooms for students with special needs. The website is intended to provide fellow teachers and student support staff with information regarding multi-sensory integration and provide recommendations for implementation. The information within the website came from extensive research on the topic of multi-sensory environments. Upon research, the researcher began using multi-sensory equipment within her own classroom which allowed her to evaluate and determine effective and simple ways to implement multi-sensory elements into resource classrooms. The researcher is a resource specialist (RSP) employed with a Mild/Moderate education specialist credential that works in elementary setting serving grades K-5.

The following suggestions were a result of the researcher’s observations of her students who suffered from sensory processing deficits and wanting to find alternative resources to help support them in the classroom. Many of the multi-sensory elements were implemented into the researcher’s classroom prior to the study, but many have be added since the start-up of the project. General education teachers also reached out to the researcher for guidance on how to assist with special needs student’s sensory needs while supporting them in the classroom to encourage active participating and engagement. In addition to providing a list of multi-sensory elements, the researcher also generated
supplementary resources that included data tracking forms, behavior tracking forms, and classroom management strategies.

The website was organized into segments that touch on the major topic areas of multi-sensory integration.

- Problematic and self-injurious behaviors
- Executive functioning
- Concentration
- Communication
- Movement
- Integration
- MSE
- Teacher resources

Materials

The website was created on a free online program from Weebly.com (“Weebly: Create a Free Website, Online Store, or Blog,” n.d.). Several of the images came from vendors who specialize in equipment for multi-sensory integration and therapy. All teacher resources were created and implemented by this researcher. YouTube videos related to the topic of multi-sensory integration (“YouTube,” n.d.) and various internet resources were arranged throughout the website.
Descriptions

Home Page

The home page (Figure 1) provides an introduction to the topic, audience, and the target population of the project. In addition to the brief introduction, there are three links that take the user to the three most important pages of the project; “Learn”, “Explore”, and “Watch”. Those three pages can also be accessed by the navigation bar located at the top of the home page. There are short descriptions of what can be found on each page, located above each link.

Learn Page

The learn page (Figure 2) discusses the benefits of multi-sensory intervention with greater depth. The benefits include how multi-sensory intervention impacts problem behaviors, executive functioning, concentration, movement, and communication. The navigation bar has a drop down menu which leads the user to the next page.

Explore Page

The explore page (Figure 3 & 4) provides descriptions of tactile, kinesthetic, audio, and visual sensory stimulation. Below each subheading there are examples of sensory equipment or activities that can be used within the classroom. Examples are arranged in slideshow and lists to provide a variety of activities that show many to incorporate multi-sensory elements into classrooms.
Watch Page

The watch page (Figure 5 & 6) provides users with the opportunity to watch videos on multi-sensory interventions and MSE. The researcher provided videos of MSE to show users where the concept of multi-sensory learning derives from. The videos being placed side by side allows the user to see similarities and differences between two. The integration videos provide various examples of multi-sensory elements ranging from small fidgets to lessons that incorporate multi-sensory learning. The researcher wanted to show the flexibility in multi-sensory integration.

Articles Page

The articles page (Figure 7) has various articles that focus on multi-sensory interventions and the effects on individuals with exceptionalities. Most of the articles were used for research and give the user more access to studies that have been conducted on the topic. In most of the articles, the focus groups in the studies are severely handicap individuals and the settings are multi-sensory environments. This differs from the project because the researcher focused on how to integrate multi-sensory elements in the resource setting for students with mild/moderate disabilities. The project idea did stem from the provided articles.

Additional Resource Page

The additional resource page (Figure 8, 9, 10 & 11) provides multiple teacher resources that the researcher had used in her own classroom to monitor sensory integration. There are sensory, behavioral, weekly, and self-evaluation tracking forms. In
addition, there are examples of break cards and how to implement those into your classroom as a behavior management tool.

Limitations Page

The limitations page (Figure 12) list factors that go into multi-sensory integration. The list provides detail information regarding challenges a teacher might face when implementing multi-sensory interventions and what prepare for so that the transition can be smooth for both teacher and students.

Contact Page

The contact page (Figure 13) provides a brief biography of the researcher. There is also a link that allows the user to enter their own information and submit questions or comments to the researcher.
CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The purpose of the study was to research MSE and determine the benefits for students with exceptionalities. The website provides a resource for educators and other student support staff to understand benefits on multi-sensory integration and become more aware of strategies and activities they can do within their classrooms. Overall, the project and research emphasizes the important of sensory interventions for students with disabilities and it provides concrete evidence that sensory stimulation is extremely important to learning and retaining need skills and information. Multi-sensory interventions are becoming more recognized in the special education community, but remains to be a limited resource. With providing more information on the topic it will encourage more educators to be aware of the importance of sensory integration. This information will hopefully improve their ability to recognize sensory processing deficits as being a possible antecedent for problematic behaviors and use the alternative supports from the website.

Recommendations

This project was intended to bring more awareness to multi-sensory issues and provide activities and strategies to help support students in the classroom. Multi-sensory interventions are suitable for all students but require discretion of teachers and staff before implementing into all settings. Some research does indicate that multi-sensory
interventions do no impact problematic or self-injurious behaviors, so it is necessary for educators to consider a variety of techniques before implementing multi-sensory interventions with their students. There is still a great deal of research that needs to be completed on the topic, but the first step is making the public aware of multi-sensory interventions and making multi-sensory environments more accessible for individuals with exceptionalities.


APPENDIX A

http://multisensoryclassroomintegration.weebly.com/
A website for teachers, students, parents, administrators, and support staff of students with disabilities. This project is intended to show the benefits of multi-sensory integration to support student learning while getting sensory needs met.

Multi-sensory learning originated from Snoezelen studies that were done in the 1970s by two therapists from Holland. Snoezelen Environments offer stimuli through an assortment of ways which include the use of tangible objects, visuals, music, and aromas. Snoezelen Environments are more commonly known as Multi-Sensory Environments (MSE). The Snoezelen approach has been applied to individuals with developmental disabilities. Research has shown that MSE have a significant impact on the reduction of problem behaviors, increased concentration, improved relaxation, communication, and movement.

Benefits
Beneficial outcomes from multi-sensory integration

Integration
Ideas for tactile, kinesthetic, visual, and auditory integration

Multi-Sensory Learning
Videos of multi-sensory classrooms and environments
INTEGRATION OF MULTI-SENSORY ELEMENTS INTO CLASSROOMS FOR STUDENTS WITH EXCEPTIONALITIES

Benefits of Multi-Sensory Integration

Problem Behaviors
Self-stimulating behaviors are stereotypical for individuals with developmental disabilities. These stereotypical behaviors include hand flapping, rocking, spinning, and rubbing. Another stereotypical behavior that is often observed is self-injurious behavior. Problem behaviors like self-injurious and self-stimulation can serve as an escape or task avoidance for individuals with developmental disabilities. Individuals may also engage in problematic behaviors to gain sensory stimulation. Therefore, sensory integration can decrease problems behaviors because individuals receive proper sensory stimulation from appropriate equipment.

Executive Functioning
Executive functioning governs higher order thinking capabilities which includes problem solving, self-monitoring, awareness, and sequencing. Executive functioning can be broken up into two groups; sequencing of behaviors, and drive and motivation. Multi-sensory integration offers activities that do not rely on the manipulation of information and equipment and can be used without an expected outcomes. This allows for individuals to participate in classroom activities that require executive functioning skills while receiving necessary sensory input to increase concentration and processing.

Concentration
Sensory integration requires the processing of information. It is also a neurological process that helps people organize sensations from the environment and one’s own body which makes it possible to effectively use the body within the environment. Attention deficits make it difficult for individuals to shift attention, sustain attention, and filter irrelevant sensory stimulation. Multi-sensory integration can be monitored and adjusted to better meet the needs of the individual. Once individuals are able to increase concentration they are able to better identify their wants and needs and begin communicating those messages to others.

Movement
Movement can be an area of concern for many individuals with special needs. Some neurological problems impose difficult for individuals to initiate movement and participate in activities that require movement. Sensory integration makes it possible for these adaptations to be made so that participants who have difficulties with movement are able to interact with the environment. Equipment can be used to achieve a sense of movement through the use of swings, water beds, hammocks, alternative seating, weighted materials, and stationary equipment.

Communication
Some individuals with developmental disabilities have difficulty with communication. These difficulties can include problems with verbal expression and comprehension. Fortunately, multi-sensory integration does not require verbal communication. Most of the interactions rely on non-verbal behaviors that include the interactions between the user and the facilitator. Communication is encouraged within the multi-sensory integration through non-verbal communication (i.e., Picture Exchange Communication System-PECS), sign language, and body language. Multi-sensory integration provides opportunities for listening, indicating personal preferences, and recognizing symbols. Integration allow individuals to make decisions independently about which activity to interact with. Over time it is possible for students to learn how to use different communication outlets which will allow them to advocate their needs and begin getting their needs met independently.
Integration of Multi-Sensory Elements into Classrooms for Students with Exceptionalities

Ideas for Multi-Sensory Integration in Classrooms

Multi-Sensory learning is when learners are engaging tactile, kinesthetic, auditory, and visual learning at the same time. Some of the following items can be used simultaneously within a lesson to provide multi-sensory learning. Other items are recommendations to provide sensory stimulation to learners to help support learning.

Tactile
- Equipment designed to be perceived by touch

Kinesthetic
- The sensation of movement or strain in muscles, tendons, and joints; muscle sense

Auditory
- Perceived through or resulting from the sense of hearing

Most teaching techniques currently incorporate auditory elements.

Here are some activities that can be used within a classroom to expand auditory integration:
- Think/Pair/Share
- Wait Time (allow for auditory processing)
- Audio Books
- Singing Transitions
- Students Repeating Directions (Verbally)
- Verbal Cues
- Reading Test Questions and Answer Options Aloud

Visual
- Perceptible by the sense of sight; visible

Rules and Procedures

Sensory Words
Most teaching techniques currently incorporate auditory elements. Here are some activities that can be used within a classroom to expand auditory integration:

- Think/Pair/Share
- Wait Time (allow for auditory processing)
- Audio Books
- Singing Transitions
- Students Repeating Directions (Verbally)
- Verbal Cues
- Reading Test Questions and Answer Options Aloud
- Blending and Segmenting Words

- Soft Background Music
- Pandora Stations for Work Time
- Classical for Studying
- Jazz Radio
- Vitamin String Quartet
- Ocean Waves for Deep Sleep
- Ovals
- The Piano Guys
- Vivaldi
- Zen Garden
- Rain forest
- Calm Meditation Radio
- Mozart for Kids
- Nature Sounds
- Disney
- Rockabye Baby

Rules and Procedures

Creating Visual Boundaries

Graphic Organizers

Anchor Charts
INTEGRATION OF MULTI-SENSORY ELEMENTS INTO CLASSROOMS FOR STUDENTS WITH EXCEPTIONALITIES

Integration into Classrooms

- The Use Of Creative Movement In the Classroom
- Dr. Susan Nolan demonstrates multisensory techniques
- Verticy Learning Multi-sensory Learning Strategies
- Flexible Seating Trailer
Watch Page (Figure 6)
INTEGRATION OF MULTI-SENSORY ELEMENTS INTO CLASSROOMS FOR STUDENTS WITH EXCEPTIONALITIES

Multi-Sensory Intervention Observational Research
Carla J. Thompson

Multi-sensory rooms: Comparing Effects of the Snoezelen and the Stimulus Preference Environment on the Behavior of Adults with Profound Mental Retardation
Leonardo Fava & Kristin Strauss

Comparison of Behavioral Intervention and Sensory Integration
Data Tracking Forms

Behavior tracking forms can be used to collect data on student behaviors and determine what interventions are working and where adjustments need to be made. All tracking forms were created by Kayla Mora and successfully implemented into a resource program.

This tracking form (above) was created for a student that needed more sensory stimulation to alert him opposed to calming him down.

Daily Task Sheet

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<th>3rd History</th>
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Date:
Additional Resources (Figure 9)
### Additional Resources Page (Figure 10)

#### Weekly Tracking Forms for Older Students

**History 2nd Period**

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<th>Tasks</th>
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<td>Partner Work</td>
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**ELA 3rd Period**

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**Points = Computer Time**

- 25-50 pts = 5 min
- 51-75 = 10 min
- 76-100 = 15 min
- 101-125 = 20 min
- 126-150 = 25 min

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**Suzie’s Break Card**

I need a break.

5 minute break in LC
Break cards are provided to students as a visual and verbal prompt to take a break. Students may need a break to reset and refocus. Students also work for breaks or are working on self-monitoring which can be used a break. The red card has a 5 minute break because it enough time for many of my student to be able to reset before returning to class. This can be adjusted based on the teacher discretion. The green card has a 10 minute break because I want to encourage students to practice using learning strategies to help them be successful in the classroom. It's an incentive for them to have more time in the LC for earned breaks. Needed breaks are not used a punishments, they are opportunities for the student to reset their mind and/or attitude so that they can return to learning.

Needed break activities:

- Sensory Break
  - Puzzle
  - Reflection Worksheet
  - Finding calm area in the classroom
  - Going for a walk
  - Drink of water
  - Listening to soft music
  - Closing eyes and putting head down
  - Deep breathes
  - Reading

Earned Breaks:

- Preferred Activities
  - Computer Time
  - Reading
  - Drawing
  - Conversation with teacher
  - Manipulatives (legos, building blocks, beads, etc.)
  - Sensory Break
Limitations

A few limitations to multi-sensory integration include:

- Trial & Error
- Time
- Monitoring
- Modifications
- Appropriate Setting

All students are different and most classrooms have students with a variety of skill sets and unique needs. One piece of sensory equipment may work for one student but not another. This requires teachers to experiment with many different pieces of sensory equipment to determine what tools will work for their students. Sensory equipment can also be seen as a toy to some students, so it is important for teachers to monitor their students to identify where adjustments need to be made. Rules and procedures for use of sensory equipment must be taught. This takes time and multiple attempts to demonstrate appropriate implementation. This project focused on how to implement multi-sensory elements into classrooms to support student learning, so the intentions are to provide supports for students so that they can continue to participate in classroom activities while getting their sensory needs met. It's also important to take into consideration what program the student is in. Most general education classrooms require sensory equipment that is discrete and not a distraction to the target student or the surrounding students. Whereas more restrictive environments might provide more flexibility in use of sensory tools.
INTEGRATION OF MULTI-SENSORY ELEMENTS INTO CLASSROOMS FOR STUDENTS WITH EXCEPTIONALITIES

Contact Page (Figure 13)

Contact Me
Name *

Email *

Comment *

Submit

A little bit about myself...
My name is Kayla Mora and I am currently a resource specialist in Yuba City, CA. I have been teaching special education for two years. My first year was in a middle school RSP setting. This year I am teaching in an elementary RSP setting. I received my mild/mod, mod/severe, and multiple subjects credentials from CSU, Chico in spring 2014.

My growing interest in multi-sensory environments and interventions stemmed from an article I stumbled upon that focused on leisure activities for individuals with special needs. With extensive research, I began to understand the benefits of multi-sensory intervention and became interested in how I could implement multi-sensory elements into my own classroom. The concept of multi-sensory integration has become more popular in recent years, but there are limited resources. I wanted to create a website to help teachers understand the benefits and hopefully integrate more sensory friendly devices and activities into their classrooms.

Please feel free to contact me with any questions or comments. Thank you for visiting my website!