CSDS 570

Auditory Environments Project

A. Pediatric Setting: Prince Edward Elementary School Cafeteria

• **People Present:** 1st grade students (28), teachers (3), cafeteria workers (4), Courtney, and Aspen

• **Date:** 3/11/19

• **Time:** 12:30pm – 1:00pm

Person Who Provided Permission: Mrs. Eiban
Arbitrary Listener: Student conversational partner

• Arbitrary Speaker: Student speaking

B. Geriatric Setting: Charley's Waterfront Café Sunday Brunch

• People Present: Hostesses (2), customers (25), waiters/waitresses (6), Courtney, and Aspen

• **Date:** 3/24/19

• **Time:** 11:30am – 12:30pm

• Person Who Provided Permission: Hayley Temple

• Arbitrary Listener: Conversational partner

• Arbitrary Speaker: Person speaking

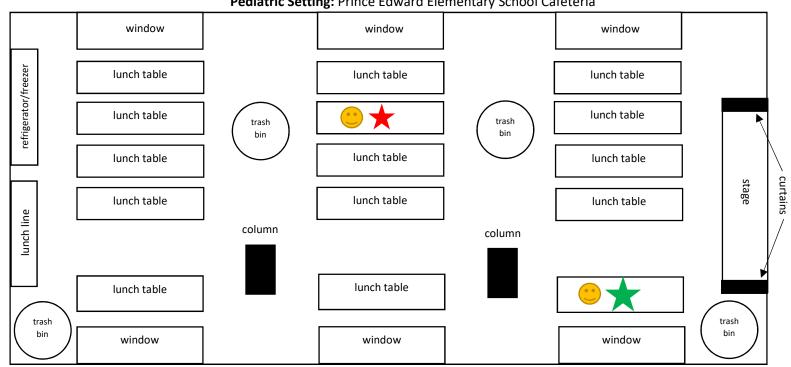
C.

	Pediatric Setting	Geriatric Setting
Visibility of Speaker of Listener	- Fluorescent and natural	- Natural and artificial
(Natural/Artificial Lighting)	lighting	lighting
	- Clear visibility; speakers	- Clear visibility; speakers
	sitting across and beside	sitting across and beside
	from each other, no	from each other, no
	shadows on faces	shadows on faces
Types of Sounds Present	Continuous:	Continuous:
(Source, Continuous/Transient)	- Fluorescent lighting	- Fans
	- Cafeteria refrigerators	- Humming from light bulbs
	and freezers	in hanging lamps
	- Heat and air conditioning	- Chairs scooting
	units	- Silverware clinking
		- Foot traffic (from buffet)
	Transient:	Transient:
	- Students	- Hostesses
	- Teachers	- Waiters
	- Cafeteria staff	- Customers
	- Hallway noise	- Chef
		- Phone ringing
Room Construction (Floor,	- Cinder block walls	- Brick walls
Ceiling, Walls)		- Dry wall
		- Wooden dividers

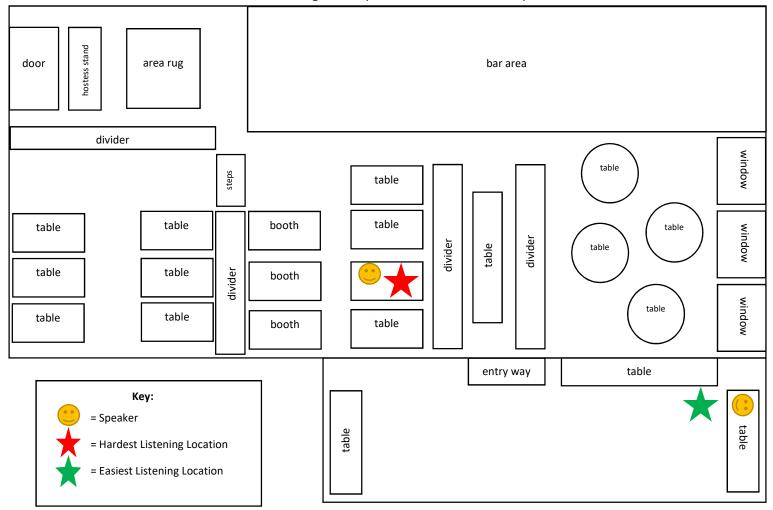
		1
	- 3 cinder block columns	- Stained glass
	dividing cafeteria and	- Wooden flooring
	hallway	- Arched wooden ceiling
	- Tile flooring	- Area carpet behind hostess
	- Drop ceiling tiles	stand
	- Floor to ceiling windows	- Carpeted stairs
	- Stage with curtains open	
	- Doors open to lunch line	
Furniture/Window Treatments	- Cafeteria lunch tables	- Dining tables (20)
	(15)	- Dining Booths (10)
	- Large trash bins (4)	- Artwork scattered
	- Furniture on stage	throughout walls
	- Carts (2)	- Fans
	- Projector	- Hanging lamps
	- Large artwork on walls	- Fake plants
		- Stained glass windows
Location of Seating Areas with	- Students sitting across	- Customers sitting across
Respect to Noise Sources	and beside each other	and beside each other
	- 5 tables located near	- Tables near hostess stand
	lunch line	- Tables near buffet table
	- 5 tables located near	
	stage	
	- 3 tables located behind	
	cinder block columns and	
	hallway	
Presence of any Acoustical	- Stage curtains	- Dining booths with leather
Treatments	- Large artwork	seats
		- Area rug
		- Dividers in dining area
		- Steps with carpet

D. Diagrams

Pediatric Setting: Prince Edward Elementary School Cafeteria



Geriatric Setting: Charley's Waterfront Café Sunday Brunch



E. Pediatric Setting: Prince Edward Elementary School Cafeteria

Location Easiest to Listen

	Measure	Sound Source	Distance	
1	70.7 dB	Student	6'	
2	75.5 dB	Student	6'	
3	72.6 dB	Student	6'	
Average = 79.9 dB				

Location Hardest to Listen

	Measure	Sound Source	Distance	
1	86.6 dB	Student	2.5'	
2	84.8 dB	Student	2.5'	
3	83.0 dB	Student	2.5'	
	Average = 84.8 dB			

The green star indicates the location that would be easiest to hear and understand sounds in the cafeteria. This lunch table is secluded compared to the rest of the lunch tables within the room. This lunch table is located near the stage and curtains which could help with reverberation within the room. It is also located further away from the lunch line and continuous noise of the refrigerator and freezer.

The red star indicates the location that would be hardest to hear and understand sounds in the cafeteria. This lunch table is surrounded by other lunch tables in the middle of the room with many students talking. This lunch table is not located near structures that could absorb sound. In addition, this lunch table is also adjacent to the continuous noise of the refrigerator and freezer.

Geriatric Setting: Charley's Waterfront Café Sunday Brunch **Location Easiest to Listen**

	Measure	Sound Source	Distance	
1	61.1 dB	Customer	3'	
2	60.5 dB	Customer	3'	
3	56.6 dB	Customer	3'	
	Average = 59.4 dB			

Location Hardest to Listen

	Measure	Sound Source	Distance	
1	84.4 dB	Customer	2.5'	
2	75.1 dB	Customer	2.5'	
3	79.0 dB	Customer	2.5'	
	Average = 79.5 dB			

The green star indicates the location that would be easiest to hear and understand sounds at Charley's Sunday Brunch. The room was secluded and away from majority of the customers and staff. There was also less foot traffic within this room due to its secluded location.

The red star indicates the location that would be hardest to hear and understand sounds at Charley's Sunday Brunch. This location was in the middle of the restaurant surrounded by conversations from tables within the room, foot traffic, and sounds of silverware clinking as people enjoyed their brunch. There was only one divider that helped to separate the noise within the room at this particular table.