

Preparing Children and Youth to be Successful Nondrivers

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Laying the Foundation for Nondrivers: Working with Families and Young Children

“When families of adolescents with low vision do not provide alternatives for driving or opportunities to promote independence, adolescents may feel they have little control over their lives” – Sacks, Foundations of Low Vision, 2010, p. 75

Lindsey Goes to the Park

- Lindsey is learning to put on sunglasses, hat and sunscreen before outdoor time.
- Mom has Lindsey locate the car and “her” door.
- During the drive mom talks about the buildings and cars they are passing encouraging Lindsey to “look” for key landmarks.
- Mom asks Lindsey to “look” for red house where they turn into the park.
- Once parked, Lindsey leads the way to play equipment.
- Her landmark for the slide is the blue ramp.
- Lindsey negotiates surface changes with encouragement.

White Cane Day

- O&M staff took the lead.
- Students traveled on and explored different types of transportation.
- Each classroom arrived downtown using transportation methods:
 - public bus
 - taxi
 - “bicycle” taxi

The Monthly “Bus Trip”

- Children gain familiarity with the bus and “bus behavior.”
- Opportunities to communicate and socialize.
- Trips tie to classroom theme for “hands-on” learning.
- Generalization of skills.
- Problem solving & planning.

When Children Are Young, Families and Professionals Can...

- Describe the environment
 - What vehicles are on the road
- Involve the child in planning
 - Have the child plan a route
- Involve the child with nondrivers
 - Introduce the child to nondrivers

Rosenblum, L. P. & Corn, A. L. (2003). Families promoting travel skills for their children with visual impairments. *Re: View, 34(4)*, 175-180.

And More Ideas....

- Give the child money responsibilities.
 - Have the child pay for the bus.
- Give the child phone/internet jobs.
 - Call to get address or hours.
- Infuse literacy opportunities.
 - Have child read directions, shopping list etc.
- Infuse social opportunities into travel.
 - Have the child ask a personal shopper for assistance.

What Teens Have to Say About Potential Nondriving

Sacks, S.Z. & Rosenblum, L.P. (2006). Adolescents with low vision: Perceptions of driving and nondriving. *Journal of Visual Impairment & Blindness, 100(4)*, 212-222.

Driving: A Cornerstone of Our Teen Culture

"Driving in most of the American culture is an integral part of the adolescent way of life, and as such, it plays an important part in the teenager's mastering of certain developmental tasks."

--Schlecter and Gump, 1983, p. 110

Purpose of the Study

- To examine the perceptions of adolescents with visual impairments regarding their beliefs about driving and levels of independence.
- To examine the future experiences of adolescents with visual impairments as they relate to transportation access.

Driving is Important to Teens!

- “Driving is vital in my town for basic independence--socially, financially, and in all other aspects. A person not driving would be miserable.”
 - Senior with albinism with acuity better than 20/150
- “I want to drive, to be independent, to be able to do whatever I want without having to depend on someone else.”
 - Senior who did not provide etiology or acuity

But There’s Always the Flip Side

“If I don’t drive it is not a big deal. I could be perfectly fine walking or taking city lines. Honestly, I won’t have to worry about a car, taxes, or payments so I’m ok without driving.”

Sophomore who is legally blind

Educational Information

Grade (n=60)

- Middle School (n=4)
- Freshman (n=14)
- Sophomore (n=14)
- Junior (n=13)
- Senior (n=14)
- Freshman in college (n=1)

Educational Placement (n=55)

- General education with TVI and/or COMS support (n=41)
- General education + resource room (n=9)
- Specialized school (n=3)
- Other services (n=2)

Etiology

23 etiologies – most common:

- Albinism (n=8)
- Retinitis pigmentosa (n=5)
- Aniridia (n=4)
- Retinopathy of prematurity (n=4)
- Nystagmus (n=3)
- Toxoplasmosis (n=3)
- Optic nerve hypoplasia (n=3)
- Myopia (n=3)
- Achromotopsia (n=3)

Visual Status:

- Congenitally VI (n=50)
- Age of diagnosis for 10 participants
 - 18 months to 13 years
 - Median = 8 years
- Acuity range:
 - 20/25 – 20/150 (n=19)
 - Legally blind (n=28)
 - No response (n=14)

Is Driving In My Future?

I believe I will be able to drive. (n=34)

- “50/50 I think I will not be able to drive, but I am not going to sell myself short at the possibilities of driving.” Sophomore with nystagmus who is legally blind

I believe my parents feel I can get a license. (n=30)

- “The disability I have makes me not able to see in the dark. So that means there’s a chance I won’t get my license. “Sophomore who had “retina problems”

Discussing Driving with Family

- I felt my family understands where I’m at with my thinking about driving. (n=37)
- I felt my family was not realistic in their thinking about my driving. (n=2)
- I felt my family and I were totally opposite in thinking about my driving. (n=7)
- Other (n=7)
 - “They understand, but there is no resolution.”
 - “Everyone understands but Mom.”
 - “I don’t think my family understands my condition, but they support my driving.

Experience Driving

- Teens who have driven a car (n=30)
- Age driven (median=14)
- Who let the teen drive:
 - Parents (n=16)
 - Multiple individuals (n=7)
 - Siblings (n=2)
 - Friends (n=4)
 - Uncle (n=1)
- Where teens have driven:
 - Parking lot (n=8)
 - Quiet street (n=7)
 - Dirt road (n=5)
 - Multiple places (n=7)

Instruction in Driving and Nondriving

- Driver's education (n=9)
- Instruction in nondriving (n=21)
 - By COMS (n=11)
 - By TVI (n=1)
 - By TVI & COMS (n=6)
 - Adult with VI (n=2)

Traveling in the Community

My current independent travel skills are:

- Excellent (n=11)
- Great skills (n=19)
- Okay skills (n=19)
- Poor skills (n=3)
- Don't travel (n=7)

How I most often travel:

- Family (n=32)
- Alone (n=13)
- With a friend (n=11)
- Learner's permit (n=1)
- Multiple answers (n=4)
- Use a cane (n=5)
- Use a monocular (n=12)

Modes of Transportation Used

- Riding in a car with my parents (n=57)
- Walking (n=53)
- Riding with my friends (n=38)
- Riding a bike (n=28)
- Riding buses, trains or subways (n=17)
- Riding a school bus for students with disabilities (n=10)
- Hiring a taxi (n=6)
- Riding paratransit (n=2)
- Hiring a driver (n=1)

If you can't drive when you're an adult, how do you plan to get around?

- "Move to a large city with a transit system or if I make enough money hire a driver."
 - Junior who is legally blind due to Leber's
- "That is something I ask myself all the time but I can't do anything about it. It is very frustrating. I guess I'll do the same as I have been doing from friends or my mom. I'm not sure what I am going to do."
 - Senior who did not provide etiology or acuity

Give us driving directions from your house to your school.

Street Names and Where to Turn

"Leave the driveway, turn left, left on route 27, left on Cashew Drive, right on West Road, turn left ½ a mile down the road." Freshman with albinism who is legally blind

Landmarks

"Go down Canyon Road at the end of Canyon Road where Lilly and Canyon Road meet, turn right. Go down Lilly, look for fence with lots of bushes. Turn left, there is a creek on the right. Go down the street and you see the school ahead of you." Freshman with ROP who is legally blind

Cardinal directions

"North on New Hope, West on Washington, North on Van Buren." Sophomore with albinism who is legally blind

Uncertainty

"I never pay attention regarding how I get to school." Junior who is legally blind

"Oh, I don't know. You turn here and you go that way." Freshman who did not provide etiology or acuity

Phone Interviews and Qualitative Results

Interviewees (n=15)

States

- AZ=1, CA=2, CO=1, MA=1, OH=2, PA=1, TN=1, TX=1, VA=1, VT=3, WV=1

Gender

- Male=9, Female=6

Visual Acuity

- 20/25-20/150=9, legally blind=4, don't know=2

Age of Onset

- Congenital=10, Age 6=1, Age 10=1, Age 13=1

Grade

- 10th = 6, 11th = 4, 12th = 5
- Grades are one year different than survey results

Charlie

Charlie is a 10th grader who lives in a rural area in West Virginia. He has optic atrophy with acuity in his left eye of 20/100 and 20/200 in his right eye. Charlie does not believe he will be able to drive if "I obey the law. I have had some experiences and have tried it out." Charlie and his family have talked to the eye doctor about driving. The doctor told him, "Some visual aids, monoculars on glass rims and stuff isn't safe because you don't have any peripheral vision so that puts that out of the question." Charlie isn't sure where he'll live after high school or how he'll get around. He

believes that, "In a city I would use public transportation, if not I'll have to bum a ride." Charlie's biggest frustration is not being able to get a car. He shared, "All these people at school have a nice car. A car demonstrates who you are in a very real way, and I kind of miss out on that."

Kaylee

Kaylee is a 10th grader who lives in a town in Arizona. She has ROP and has acuities less than 20/150. Kaylee has talked to her family and eye doctors about driving. She shares, "I hope [I can drive], I have talked to all of my eye specialists and it depends on my vision because it fluctuates a lot...I was not able to pass the vision part of getting the permit but I want to go try again." Kaylee talks to her parents a lot. "My dad says it is all in good time and not to rush things and not do things that will jeopardize my eyes. I have my entire life to drive. My mom says about the same stuff. I know that she knows my frustrations about not being able to drive." She notes, "I'm a very independent person and I hate to ask my parents. If I had my license I could hop in the car and go."

Liza

Liza is an 11th grader who lives in a city in Virginia. She was born with high myopia, nystagmus and amblyopia. Her father has the same condition. With acuity of 20/60 Liza believes she will be able to drive during the day and has talked to her family, eye care specialist and TVI about this. As for where she'll live as an adult, she says "Hard question! I would see myself going to college and living in a house. I've thought a little bit about college but I'm not really sure. I would live with other people. I would get around with friends or my mom if I needed help. I would probably have a car but I'm not sure." In the event she is unable to drive Liza believes, "If I couldn't drive at all, my mom, until she dies, or my husband, if I get married, would drive me around."

Craig

Craig is a 10th grader with albinism who lives in a rural area in Vermont. Now that he is no longer legally blind, he is hopeful that he'll be able to drive. He realizes, "I need to learn to be more visual if I am going to be on the road." He shared, "I am going to try and get my permit. My parents are lazy so I haven't gotten to DMV." If he is unable to drive, he plans to move to a city like New York so he can walk and take the bus. He has thought about how his future will be impacted if he can't drive. "Probably my job choices would be limited. In our global economy I might be able to work digitally but I would have problems with business trips."

What Does it All Mean?

- Many adolescents do not have accurate information they can share about their own visual impairment.
- Though 50% of adolescents in the study received a CLVE, few used optical aids and only 3 of those interviewed knew about options for low vision driving.
- Adolescents do not talk openly about their visual impairments to others.
- There is a need for support groups for adolescents to discuss their frustrations.
- TVIs, COMS, and other specialists must carve out time to discuss issues around driving or not driving with adolescents.
- Adolescents and families often talk about driving and not driving – future guidelines to aid families in these discussions may be of value.
- Adolescents with visual impairments often try driving – this can help take the “mystery” out of driving.
- Adolescents may benefit from meeting adults who are nondrivers or low vision drivers, to learn of their experiences.
- Transition planning must include units of instruction on driving & nondriving. Finding Wheels may be a tool to assist in planning these units.
- Community-based instruction must assist students to become aware of alternatives to driving.
- Ophthalmologists and low vision specialists must become aware of the psycho-social issues regarding nondriving among adolescents with visual impairments.
- A possible replication of this research needs to be designed to confirm findings.

Traveling Through Finding Wheels: An Overview of the Curriculum

What is Finding Wheels?

- It's a curriculum designed for TVIs, COMS and families.
- It's not a cookbook, rather it is a guide.
- It provides suggested activities to assist young people in exploring their options.

Why We Need Finding Wheels

- We live in a culture where driving is assumed.
- “Independent travel” for nondrivers includes a complex set of skills.
- Adults who are “drivers” may gloss over skills or may not know how to address such a sensitive topic.

You're Busy....Can You REALLY Use Finding Wheels?

"As you know we TVIs and O&Ms are out there running around like chickens with our heads cut off. What I liked about this was I could open up the book half an hour before class, start skimming things and come up with my ideas for that period. That worked really nice for me."

Sections of Finding Wheels

- One: Meet Teens and Young Adults Who are Finding Wheels
- Two: The Realization of Nondriving and its Implications for Independence as an Adult
- Three: Transportation Options for Nondrivers
- Four: Strategies for Independence as a Nondriver

Pablo: "Give me that transit pass and I'm good to go."

"When I turned 16 I was really upset that I couldn't go get my driver's license like all the other kids in my class....I like to think of myself as an independent traveler because I make the decisions about where I am going to go and how I am going to get there."

Jason: "Hell no! I won't go!"

"I didn't want high school to end. I had my friends, I knew my way around my school, and I had no major desire to leave home and go 'out into the world'... Traveling in a city makes me nervous because I think I'm going to get lost."

A 10th Grader with CVI Due to Stroke Compares Herself to Jason

"Jason is like me because we both think using public transportation is lame and difficult. We both think that why should we have to go by ourselves when we have our family or friends to go with. I would rather go with someone. Plus we have canes we don't want to use."

Kisha: "The power of my own two feet"

"I'm not real comfortable with the bus thing...I'm really a spur of the moment kind of person and without a car that can be a challenge...I think that it is good that I live in a town where there are places you can walk...I'll look into driving with those special glasses."

Mary Ann: "I'd rather not be a burden"

"My dad says I can't ride my bike in traffic unless I am with someone who can watch out for me even though I ride my bike around the neighborhood...It seems like all the kids at school are going places and doing things but I'm not."

A 21-Year-Old with Low Vision

"When I found out that I was not able to drive I was 15 years old. I just wanted the experience of driving. Not doing it for the rest of my life. Yes, my feelings have changed. I'm glad that I can't drive. It's a stress plus parking is a pain."

Section 2: The Realization of Nondriving and its Implication for Independence as an Adult

- Unit 1: Understanding Visual Impairment and its Implication for Nondriving
- Unit 2: Facilitating Changing Directions: On the Road to Independent Wheels

Unit Organization

- Objectives
- Getting Started - "Think About It"
- Introduction
- Supporting Material for Objectives
- Activities
 - Self
 - Other
 - Community

Unit 1: Getting Started

Remember Mary Ann?

She assumed as she was growing up that she would be able to drive a car. It's not that she didn't know that she had some trouble seeing. Rather, because all the adults in her life drove cars, and because she did not know any adults who were visually impaired, she made the assumption she would drive. After all, she could ride her bike in the neighborhood and walk places. When she started to think about riding her bike to the mall and potentially getting lost, she began to realize that it takes good eyesight to travel outside the neighborhood.

THINK ABOUT IT: Why can't we assume that if someone has enough vision to ride a bicycle, they can safely drive a car?

My Visual Impairment: In the Words of a 12th Grader with Stargardt's

"I have macular degeneration which means I do not have any central vision and some peripheral vision. I use the vision that I do have well. My night vision is considerably worse than my day vision. I use devices like a CCTV, monocular and large print writing. Light plays an important role, and colors, in how well I can see things."

A 12th Grader with ROP Shares Her Perceptions of Why People Don't Drive

- Visual impairment
- Learning disability
- Physical disability
- Mentally challenged
- Money
- Not a citizen
- Grades
- Afraid of dangerous drivers
- Can't pass the test
- Mass transit available to them in a big city
- Don't have enough experience
- Trouble judging distance
- Older person
- Inadequate hearing

Section 3: Transportation Options for Nondrivers and Low Vision Drivers

- Unit 3: Personal Wheels: Walking and Biking
- Unit 4: Public Wheels: Buses, Taxis and Subways
- Unit 5: Specialized Wheels: Paratransit, Charity Services and Volunteer Services
- Unit 6: Hired Wheels: Taxis and Drivers
- Unit 7: Biopic Wheels: Low Vision Driving

When There are No Public Wheels

- Visit to a city where students pre-plan a trip
- Combine students so social opportunities occur
- Involve older nondrivers as role models
- Promote use of other skills

Interviewing: An Effective Tool

- Interview more than one adult nondriver to gain multiple perspectives.
- Consumer organizations, program graduates, listservs etc. can be used to locate adult nondrivers.
- Utilize a system to record the information gathered through interview(s).

Questions to Ask the Panel

- Do you read maps or do you hear directions verbally?
- What transportation do you prefer to use regularly?
- How did you accept the fact that you can't drive?
- How do you make a backup plan?
- How do you decide whether it is safe to accept a ride from someone?
- How do you decide whether to take the shorter route or whether to save money and take the longer route?

What a 19-Year-Old, Blind 12th Grader Can Offer a Driver in Exchange for a Ride

- I could tutor a sibling in Spanish or French in exchange for transportation.
- I could help someone with their music.
- I could pay them cash.
- I could treat them to a meal at a restaurant.
- I could throw a party, and I could invite my driver to the party.
- I could save them a trip by hiring an occasional taxi to take me from one point to another.
- I could do some chores around their house for them.

Hiring A Driver: One Group's Experience at Interviewing

Before the Interviews

- Budgeted \$6 an hour
- Agreed to pay a driver for a minimum of 3 hours
- Determined the driver would need to assist with sighted guide and reading the menu
- Developed a list of questions to ask all interviewees
- Role played the interview
- Put up fliers on campus

What Are Mark's Qualifications?

- He has many years of driving experience.
- He has a 2000 Suburban with plenty of room for passengers and a wheelchair.
- He has had one traffic ticket in the last 3 years because he has a "lead foot."
- He works weekdays from 5:00 a.m. to 1:00 p.m.

Joe: Don't Miss an Opportunity

- Sophomore at a rural high school 1 hour+ from Tucson
- Attended NFB Summer Program in Denver previous year
- Only student with visual impairment in his high school
- Student teacher had introduced him to 4 travelers and done several other activities from Section 1 with him.
- He conducted 2 other interviews via phone after this interview

Section 4: Strategies for Independence as a Nondriver

- Unit 8: Funding Wheels: Budgeting, Funding, Exchanging, and Reciprocating
- Unit 9: Using Wheels Efficiently: Gathering Resources, Route Planning and Time Management
- Unit 10: Spinning Wheels: Coping with Nondriving, Interpersonal Relationships and Public Behaviors

A Teacher's Perspective

"We consider pieces of this [curriculum] but, we don't look at it together at once. Nothing has been written from an adolescent point of view...It's a really great concept. The authors really hit into taking responsibility and being there to do it for yourself."

A TVI & O&M Instructor Shares...

"Finding Wheels is like Huckleberry Finn. You read it at different ages and you get different things out of it. I can see concepts in the book starting early and going on as the kids get older."

THANK YOU!!!

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SECTION: Low Vision Nondrivers Using Optical Aids

The First Step: Clinical Low Vision Evaluation

- “Clinical low vision evaluations should be recommended for all individuals with a visual impairment regardless of their ages or the severity of their additional disabilities.”
- (Wilkinson, 2010, Foundations for Low Vision, p. 240)
- “The optimum combination of optical, electronic, and nonoptical devices depends on the visual tasks a person wishes to perform, the person’s visual capabilities, and his or her attitude toward both devices and visual disability.”
- Wilkinson, 2010, Foundations for Low Vision, p. 270)

Sacks & Rosenblum Found...

- 32 teens had a CLVE
- 18 teens used optical aids
- 25 teens were shown optical aids
- By a TVI (n=7)
- By a COMS (n=3)
- By an eye care specialist (n=9)
- By multiple individuals (n=6)

Jack

Jack is a 10th grader who lives in the suburbs in Texas. He has aniridia and glaucoma and is legally blind. When it comes to discussing driving he indicated, “I talk to my parents, my TVI, my O&M specialist, friends, and my ophthalmologists. They say I probably won’t be able to drive because of the field losses I have.” Jack perceives he will have obstacles in his life as a nondriver including “I can’t go on trips without planning. Where I work depends on where I live and transportation. It may limit what I do for fun, and I have to schedule everything in advance.” Jack was one of the few participants who had knowledge about tools for low vision driving. He shared, “There are places, like in Houston, where there is special training...I know the person learns to use a telescope mounted on glasses to find objects in the distance.”

Nonoptical Options

- Lighting
- Large print
- Felt tip pens
- Reading stands
- Color overlays
- Wide brim hats
- Sun filters (wrap-around or clip on)
- Talking or braille watch/clock

Quick Overview of Types of Optical Aids

- Relative Distance Magnification: Moving the object closer to the eye.
- Relative Size Magnification: The size of the object being viewed increases.
- Angular Magnification: Lens is used to increase the size of the object (e.g., hand held magnifier, telescope).
- Electronic Options: Through electronic means image is projected on a screen to increase its size.

Use of Magnification for Near Tasks

- Motivation
- Functionality
- Storage of device(s)
- Uses during actual travel
- Review schedules
- Read directions
- Uses at destinations
- Shopping
- Restaurants
- Museum displays

Laying the Foundation with Lindsey

- *Spotting*
- Localizing
- Shift of gaze
- Scanning
- Tracking

Telescopes

- The stronger the degree of magnification (e.g., power) the smaller the field.
- It is more difficult to view a moving object than a stationary one.

Biopic Telescopic Systems

- Telescopes mounted into prescription lenses.
- Telescopes are positioned above or below the individual's direct line of sight.
- Users spot with the telescope and when driving primarily use the carrier lens.

Considerations

- Work with eye care specialists to identify the appropriate aid(s).
- COMS and TVIs DO NOT prescribe!
- Start early!!!
- Give individuals functional reasons to use aids.
- Teach skills including focusing, spotting, scanning, and tracking.
- Provide opportunities to use optical aids in many environments to promote generalization.
- Make it fun (even for adults) to use optical aids.
- Introduce role models who use aids.

SECTION: What's the Connection Between Nondriving and Social Skills?

From Sacks & Rosenblum: Feelings and Frustrations

- "I'm going to be really sad when I turn 16 and cry really bad when all my friends drive and I don't. But, I'm still getting a car anyways."
 - Freshman who is legally blind due to ROP
- "I think it stinks, not being able to drive when I am supposed to and all my friends get their learner's permit and licenses before me."
 - Sophomore with myopia and nystagmus with acuity better than 20/150

Sacks, S. Z. & Rosenblum, L. P. (2006). Adolescents with low vision: Perceptions of driving and nondriving. *Journal of Visual Impairment and Blindness*, 100(4), 212-222.

From Sacks & Rosenblum: Future Frustrations of Not Being Able to Drive a Car

- Explaining to others why I can't drive.
 - (M=1.59, n=17)
- Not being able to travel where I want to go.
 - (M=1.72, n=18)
- Depending on my family for transportation.
 - (M=2.00, n=19)
- Not being able to date someone because we don't have transportation.
 - (M=2.00, n=8)
- Using public transportation. (M=2.08, n=12)
- Asking people for rides. (M=2.13, n=23)
- Waiting for ride. (M=2.18, n=17)
- Not being spontaneous. (M=2.18, n=17)
- Not being able to find a job. (M=2.43, n=7)

Holly

Holly is a 10th grader who lives in a city in Ohio. She is unsure about the cause of her visual impairment. She shared, "My VI teacher is taking me to look at a bioptic for driving. I don't talk to anyone about it. I want to drive. It is a dream." She said that thinking about not driving upsets her, so she doesn't like to talk about it. Holly's father doesn't drive because he is disabled and "My mom has better vision to drive, and she doesn't drive. That makes me mad." Holly will probably live at home with her dad after she finishes high school. If she is unable to drive, then she'll ask people for rides. She is concerned about the lack of spontaneity and independence in her life if she is unable to drive.

Recommendations

- Help students develop a concise disability statement and ways to respond to questions.
- Work to minimize and replace stereotypical and/or inappropriate behaviors.
- Don't answer for your student, get the person in the community to redirect the question/comment to the person with a visual impairment.
- Role play beginning at an early age.
- Introduce nondrivers to other nondrivers, including those who don't drive for different reasons.

Learning from Other Nondrivers

- How much do I tip a taxi driver?
- Where do you meet a taxi?
- Where are some safe places to be dropped off at night?
- How do you get a taxi at the airport?
- What do you do if your taxi isn't there at the ordered time?

Working with Drivers: Social Skills on Overtime!

- Where to advertise?
- How to interview?
- What to pay the driver?
- Who pays for gas?
- Whose car do you use?
- Who plans the route?
- What does the driver do when a destination is reached?
- If it is a long period of time what do you do about meals?
- How do you "fire" a driver?

SECTION: Working Age Adults: Supporting Them in Their Busy Lives

A Few Thoughts on Teens Transitioning to Adulthood

- Look at the skills and tasks needed in the next environment.
- Plan lessons that build on previous skills and incorporate new ones.
- Ensure families provide opportunities to practice skills.

Maureen's 9th Grade IEP Goals

- Will become familiar with new high school campus.
- Will construct a map of the city of Tucson that includes street names and addresses.
- Will plan and travel 2 routes on the city bus.
- Will maintain her street crossing skills by crossing at a variety of lighted intersections.

Maureen's 10th Grade IEP Goals

- Use her understanding of the address numbering system in her city to locate 2 places of interest.
- Plan and travel 2 routes on the city bus, which includes transfers.
- Use blocker cars to cross safely at driveways and quiet residential streets with walking along busy parallel streets.
- Practice safe parking lot skills.

Maureen's 11th Grade IEP Goals

- Use a map of Tucson when planning travel.
- Use her understanding of the address numbering system to locate 2 places of interest.
- Plan a taxi ride to a place of interest.
- Take a taxi ride to a place of interest.
- Plan and travel 2 routes on the city bus, which includes transfers.

Maureen's 12th Grade IEP Goals

- Use the internet to research the address numbering system and make a map of the city of her choice.
- Use the internet to research public transportation and plan a route for her chosen city.
- Use her problem solving skills to get to a predetermined location on a "drop off" lesson.

Sacks and Corn, 1994

- Examined the transportation experiences of 110 working age adults in the US.
- If mass transit was used it was primarily to go to school or work.
- Few people used paratransit, and if they did it was to go to work.

Ways participants reciprocated for rides:

- Paying for gas or rides
- Bartering for services
- Giving of treats
- Found that women were more frustrated being nondrivers than men and those with low vision were more frustrated than those who were blind.
- Advantages to nondriving
 - Lower cost to travel
 - Less stress than those who drive
 - No parking problems
- Frustrations of nondriving
 - Lack of spontaneity
 - Not being able to go where mass transit does not go
 - Waiting for late rides

Corn, A .L. & Sacks, S. (1994). The impact of non driving on adults with visual impairments. *Journal of Visual Impairment & Blindness*, 88, 53-68.

Adventitiously Visually Impaired Adults

- How to understand the diagnosis.
- When to give up driving.
- How to get connected with services.
- How not to feel dependent.
- How not to feel isolated.
- What tools can help me?
- What skills do I need to learn?

Parents who are Visually Impaired Raising Children

- 56 parents ages 24 to 60 (m=40)
- Parents had at least one child at home who was a senior in high school or younger
- 34 parented with a spouse, 16 alone and 10 in other arrangements
- 67% of parents worked outside the home
- The parents had 106 children, 25% of whom had a disability

Rosenblum, L. P., Hong, S., & Harris, B. (2009). Experiences of parents with visual impairments who are raising children. *Journal of Visual Impairment & Blindness*, 103(2), 81-92.

Challenging Aspects of Being a Parent with a Visual Impairment

- “The biggest challenge is probably transportation....One of the causes of anxiety for me is that I have had to arrange for transportation.”
 - A 52 year old married mother who is Caucasian and blind raising a 15 and 19 year old
- “When Sandy was 18 months old I put them against a fence and told them to stay. I was opening the stroller and Holly told me calmly that Sandy was in the street in front of the bus. After that she was attached to me by a type of leash [harness to keep the child near].”
 - A 43 year old married mother who is Jamaican and blind and is raising a 15 and 19 year old
- “For the girls they used to be mortified that I squint and look different than the other moms. I couldn’t drive them to the mall like other moms. It is getting less now. But they were not happy campers.”
 - A married mother who is 47, Caucasian, has low vision and is raising a 17, 14 and 11 year old
- We don’t have that spontaneity. He says, “mom can I...” He didn’t tell me before and I didn’t budget for the taxi...Everything takes some planning.”
 - A single mother age 35 who is Hispanic and blind raising a 10 year old

Maria’s Thoughts...

“They were born into it. Since they were newborns I’ve always taken them places. From an early age [a visually impaired parent should] teach your child about safety and staying with mom. By the time they are 2 they know how to get on the bus, sit next to mom etc. They were little and they would tap on the seat of the bus to tell me where they were sitting.”

Ideas Parents Shared for Keeping Children Safe During Travel

- Keep the child in a stroller or on a leash.
- Take another adult to monitor the child (e.g., at the park).
- Teach children to respond when they are called.
- Maintain physical contact with the child at all times
- Have set rules, and if violated, immediately go home (e.g., when you exit the car you must touch the car until parent gets out stroller).
- Dress the child in clothing the parent can see.
- Use a remote control beeper device pinned to child’s clothing.
- Use optical aids to monitor the child.

Transportation Issues

- Issues around fitting car seats and storing them
- Trip planning

- Lack of spontaneity
- Challenges using a cane or dog and having young children.
- "I have a little red wagon I use. I use a guide dog so I pull the wagon behind me and the baby in a front backpack."

Transportation Creativity

- Mother who took her child to work via paratransit and then paid a co-worker to drive her child to daycare
- Parent who got services through an agency that provided transportation to seniors
- Parent who had multiple car seats to use in different drivers' cars

Impact on Children of Having a Parent who is a Nondriver

- Not getting to do everything they or their parents would like them to do.
- Feeling embarrassed.
- Having to grow up faster.
- Having a higher level of maturity, acceptance of others and independence.
- Feeling like one has to care for the parent.
- Needing to learn to drive.

SECTION: Reclaiming Independence: Video and Resource Guide

Leading Up to the Video...

- 1994: Corn & Sacks, JVIB article
 - Experiences of 110 adults ages 16 to 60 and older
- 2000: Corn & Rosenblum, Finding Wheels: A curriculum for non-drivers with visual impairments for gaining control of transportation needs
- 2002: Corn & Rosenblum, 3 JVIB articles
 - Experiences of 162 adults 60 or older

Who is the Video for?

- The target audience is older adults transitioning from drivers to nondrivers.
- The "stars" share with the audience strategies they use to meet their transportation needs.
- Through watching the video and reading the Resource Guide new nondrivers can broaden their own knowledge base about:
 - Transportation options
 - Orientation and Mobility
 - Low Vision
 - Vision Rehabilitation Therapy

Ideas for Using The Video & Resource Guide

- The video can be shown to individuals and groups by:
- Blindness agencies
- Eye care specialists
- Senior centers
- Social workers
- The resource guide could be used by individuals or groups at home or in an instructional course

Section One: Understanding Your Visual Impairment

- Typical vision changes that occur with aging
- Eye conditions/diseases that cause significant vision loss in older persons
- Types of eye care professionals
- Symptoms of significant visual problems that affect driving
- The meaning of "legal blindness"
- Discussion points when seeing your eye care specialist
- Discussion points when talking with family and friends
- Notifying the department of motor vehicles or other license issuing agency

Section Two: Services for Adults with Vision Loss

- Clinical low vision specialist
- Low vision therapist
- Vision rehabilitation therapist, also called rehabilitation teacher
- Orientation and mobility specialist
- Assistive technology used by persons with visual impairments
- Support groups and counseling

Section Three: Transportation Options and Strategies for Using Them Successfully

- Transportation options used by older adults with visual impairments in the United States
- Strategies for being an effective pedestrian
- Strategies for using public transportation including buses, subways, and light rail
- Strategies for using paratransit
- Strategies for using taxis and hired drivers
- Strategies for using transportation with a specific focus
- Strategies for negotiating transportation with family and friends
- Strategies for using long distance transportation including buses, trains, and planes

Section Four: Finding Resources that Work for You

- Locating rehabilitation services for people with visual impairments
- Locating providers of clinical low vision evaluations
- Locating appropriate assistive technology
- Finding transportation in your part of the United States
- Finding useful organizations and agencies for people with visual impairments

Others Beyond Adults with Vision Loss Can Learn

- Family members
- Friends and neighbors
- Residents of senior communities (many of whom may not realize they are in the beginning stages of vision loss)
- Professionals who have not received training to work with older adults who have vision loss
- Individuals preparing to be professionals in the vision field or related fields

THANK YOU!!!

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