Reading

Wheelchair Accessibility Issues

As many as 650 million people worldwide live with some form of physical disability, and about 100 million of the disabled need a wheelchair at least part of the time. Industrialized[1], higher-income nations in Asia, Europe, and North America are seeing an older population grow more incapacitated as they age, whereas in lower-income countries of Africa, Asia, and Latin America, poverty, conflict, injuries, and accidents account for most disabilities, many of them in children.

Wheelchairs provide a more independent lifestyle, but they come with their own set of problems: They are wide, unwieldy, and difficult to maneuver[2] in tight spaces, on slippery surfaces, and on steep slopes—not to mention impassable stair steps. Accessibility issues abound at home, work, and school; in recreation activities; and in transportation[3].

One of the most difficult places to use a wheelchair is the home. The average doorway width of about 76 centimeters[4] (30 inches) falls some 5 to 15 centimeters (2 to 6 inches) short of the space necessary to accommodate a wheelchair. To be accessible to a person in a wheelchair, bathrooms require grab bars in showers and tubs[5], built-in shower seats, lower sinks and mirrors, and higher toilet seats. Kitchens need lower counters and shelves as well as accessible switches for lights, garbage disposals, and exhaust fans. Also, because most homes have at least a few steps, a wheelchair ramp is a must.

Many countries have laws requiring public buildings—workplaces, stores, restaurants, and entertainment and sports[6] facilities—to be wheelchair accessible. To accommodate wheelchairs, building exteriors need wide sidewalks[7] with curb cuts and ramps. Automatic doors, including those on elevators[8], must be broad and remain open long enough for a person in a wheelchair to come and go with ease. In a building interior, corridors must be wide enough for a person in a wheelchair and another person on foot to pass side by side, and carpeting should be firm enough for wheelchairs to roll over easily. Restrooms[9] must be wheelchair accessible, too. Although many countries have made these improvements, many more have yet to follow their example.

[1]BrE: Industrialised
[2]BrE: manouever
[3]BrE: transport
[4]BrE: centimetres
[5]BrE: baths
[6]BrE: sport
[7]BrE: pavements
[8]BrE: lifts
[9]BrE: Toilets

LIVEWORKSHEETS

With appropriate technology, some wheelchair users can drive cars, although getting in and out of a vehicle while in a wheelchair usually necessitates a portable ramp. Many cities have subway and bus systems that accommodate wheelchairs, and the list is growing. For example, Beijing updated its subway system for the 2008 Olympics, providing disabled riders there access to it for the first time.

In most developing countries, a major concern is not so much wheelchair accessibility as access to a wheelchair. Growing public awareness is contributing to less expensive types of wheelchairs being designed for specific environments—for example, chairs capable of maneuvering across dirt roads and rugged terrain but lightweight and compact so they can fold up to fit in crowded spaces, such as the aisle of a bus. These wheelchairs also must be affordable and constructed of locally available materials for easy repair.

The number of people needing a wheelchair is expected to increase by 22 percent[10] over the next decade, with most of the increase coming in developing countries, where fewer than 1 percent of those in need now have access to one.

Answer the questions about **Wheelchair-Accessibility Issues.**

Questions 1–3

Choose the correct letter, ***A****,* ***B****,* ***C****, or* ***D****.*

1. In industrialized nations, disabilities are found more often among
   - **A** older people.
   - **B** children.
   - **C** students.
   - **D** injured people.

2. To be accessible to wheelchairs, buildings need
   - **A** more compact curbs.
   - **B** wider doors and corridors.
   - **C** elevators on the exterior.
   - **D** carpets in the interior.

3. Compact wheelchairs are
   - **A** more unwieldy.
   - **B** easier to use on a bus.
   - **C** less affordable.
   - **D** much wider.

[10]BrE: per cent

LIVEWORKSHEETS

Complete the summary using words from the list below.

For people in wheelchairs, accessibility is an issue in most areas of their lives, whether they are at home or at school, working, or enjoying **4**..... during their free time. In homes, things need to be arranged so that they can be reached by a person in a wheelchair. Counters, shelves, and **5**..... need to be placed lower than usual, and **6**..... must be built in place of the usual front steps. Public buildings also need to be arranged to allow access to people in wheelchairs. Transportation is also an issue. Many cities have **7**..... their buses and subways so that it is easier now than it was in the past for people in wheelchairs to get around.

necessitated	ramps	slopes	terrain
poverty	recreation	switches	updated

My Words

Write the words that are new to you. Look them up in the dictionary and write their definitions.

Words	Definitions
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

LIVEWORKSHEETS

Word Families

noun	capability	If a wheelchair has certain capabilities, it is easier to take on a crowded bus or subway.
adjective	capable	Some wheelchairs are capable of being folded.
adverb	capably	People can get around quite capably with a wheelchair.

noun	disability	A disability does not have to prevent a person from living a complete life.
noun	disabled	The disabled require many adjustments to a house.
verb	disable	An accident can disable a person for life.
adjective	disabled	Wheelchairs have helped many disabled people get around.

noun	incapacity	His growing incapacity did not stop him from enjoying life.
noun	incapacitation	Incapacitation caused by aging is one reason that people use wheelchairs.
verb	incapacitate	Age, injury, and illness are all things that can incapacitate people.
adjective	incapacitated	People can become incapacitated with age.

LIVEWORKSHEETS

noun	necessity	He uses a wheelchair out of necessity.
verb	necessitate	Wheelchairs necessitate ramps and wide corridors.
adjective	necessary	Ramps are necessary to accommodate wheelchairs.
adverb	necessarily	Corridors in hospitals are necessarily wide to accommodate wheelchairs.

noun	slip	Slips and falls are a major cause of injury in the elderly.
noun	slipperiness	The slipperiness of the roads after an ice storm accounts for many accidents.
verb	slip	A wheelchair can slip on a wet or icy surface.
adjective	slippery	Ice can make a sidewalk too slippery for a wheelchair.

LIVEWORKSHEETS

Word Family Practice

Choose the correct word family member from the list below to complete each blank.

Physical **1**..... does not **2**..... mean that one has to live a limited life. Wheelchairs, for example, help millions of **3**..... people get around and live independent lives. Wheelchairs are **4**..... of going just about everywhere. As with any form of transportation, the user has to be careful to avoid accidents. For example, after a snowstorm or rainstorm, the **5**..... of sidewalks may make it difficult to maneuver a wheelchair safely.

1.	incapacitation	incapacitate	incapacitated
2.	necessitate	necessary	necessarily
3.	disability	disable	disabled
4.	capability	capable	capably
5.	slipperiness	slip	slippery

LIVEWORKSHEETS

Dictionary Skill

Parts of Speech
Exterior can be a noun or an adjective. *Interior* can also be a noun or an adjective.

Read the definitions below. Then read the sentences and write the letter of the correct definition for each sentence.

QUESTIONS 1–2

ex-te-ri-or [ex-TEE-ree-or]
A *noun.* the outside of something
B *adjective.* on or of the outside

_____ 1. The *exterior* doors need to be wide enough to allow wheelchairs to enter the building.

_____ 2. We need to make sure that the building's *exterior* can accommodate wheelchairs.

QUESTIONS 3–4

in-te-ri-or [in-TEE-ree-or]
A *noun.* the inside of something
B *adjective.* on or of the inside

_____ 3. The *interior* has been altered to accommodate wheelchairs.

_____ 4. The *interior* rooms need wider doors.

LIVEWORKSHEETS

Listening

CD 1 Track 25

*Listen to the conversation. Choose **FOUR** letters, **A–F**.*

Which **FOUR** accommodations for wheelchairs are already in place in the building?

A wide corridors

B wide doors

C ramp

D curb cuts

E elevator

F low switches

LIVEWORKSHEETS