

The Transdisciplinary Team: Bridging the Gap between Consumer and Products in Rehabilitation Medicine

Deborah E. Kenney, MS OTR/L

**Rehabilitation R&D Center - Veterans Affairs Palo Alto
HCS**

Department of Functional Restoration-Stanford University



Occupational Therapist

- Assisting people people who are unable to function independently or are not functioning as independently as possible in the areas of daily living, work, play, and leisure.
- Independence is increased through functional activities that are meaningful to the individual.
- Occupational Therapists treat the whole person!

The Transdisciplinary Team

Consumer

Family/Tutor/Caregiver

Rehabilitation Counselor

Director

Orientation Coordinator

Service Coordinator

Fabrication/Adaptation Technician

Training Coordinator

Physical Therapists

Prosthetists

Computer Engineer

Occupational Therapist

Speech-Language Pathologist

Assistive tech Specialist for Blind/Low Vision

Medical Consultants/Nurse Practitioners

Administrative Assistant/Secretaries

Teachers/Professors/Special Educators

AT Equipment Venders/Employers

Audiologists/hearing device specialist

Social Workers

Transdisciplinary Team Philosophy

- The person is what is important to the transdisciplinary team.
- Life circumstances are taken into account during the treatment process.
- The person's wants, needs and desires, for recovery are what the team will address.
- The treatment goals are developed by the rehab team in conjunction with the individual and their significant.

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 - Vocation**

Levels of Assistive Technology: Some Practical, Working Definitions

- Assistive technology devices can be classified by levels of technology and life skill areas.
- Devices can also be classified by the level of technical training that the user requires to implement the equipment.

Levels of Assistive Technology: Some Practical, Working Concepts

Low tech devices: equipment that is easy to use and do not require electrical power. Users may require a short training period in order to learn how to use them. For example a non-electronic communication board.

Levels

Low-tech

Characteristics

Strategies, methods and/or techniques that rely primarily on user's ability to move or utilize various body parts

Examples

Sign language; finger spelling
Knocking on a door
Scooting up and down steps in modified way



Unaided or endosomatic

Eye or finger pointing

Can be free, no expense

Tapping or squeezing hand

Commonly transparent or translucent in use

Vocalizing and speaking

Levels of Assistive Technology: Some Practical, Working Concepts

Middle or Elementary tech devices: they include most battery-operated devices. User requires a moderate training period in order to manipulate them. Some examples of middle tech devices are visual aids such magnification and environmental control devices.

Levels

Middle/
elementary

Characteristics

Incorporates strategies, methods, and/or techniques, as above, with relatively simple materials and equipment commonly found in living and working environments

Can rely on off-the-shelf, inexpensive consumer technologies

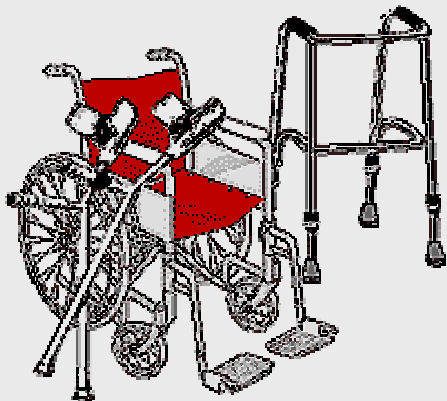
Commonly simple; transparent or translucent in use

Examples

Handwriting with pen or pencil
Modified eating utensils
Picture or symbol communication boards
Adjustable or reclining chair

Elevated or adjustable countertops
Basic wheelchair; stroller

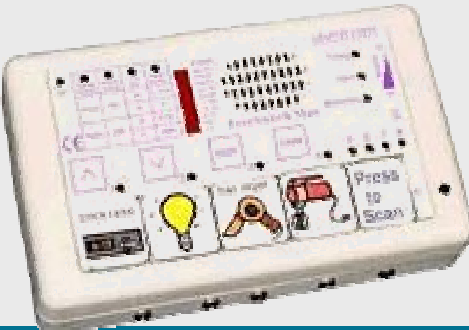

Modified knobs on faucets



Levels of Assistive Technology: Some Practical, Working Concepts

High tech devices: include complex and programmable equipment, such as an augmentative communication device or a computer that can be operated by eye-gaze control. These items require specific training in order for the user to take full advantage of their capabilities.

Levels	Characteristics	Examples
High-tech	AT user integrated with complex, typically expensive electronic, mechanical, and/or hydraulic technologies to accomplish user's purposes	Sending a fax or e-mail Operating a speech-output computer Operating a motorized wheelchair
	Complex combinations of above technologies	Using an electric stair lift Modified controls and lifts for car or van
	Commonly translucent or opaque in use	Voice-operated ECU



Steps needed to issue an assistive device

- Selection of a device for an activity
- Site and method of instruction
- Time to introduce device during hospitalization
- Reinforcement of its use
- Written justification to insurance company

Equipment suitability

- Age
- Gender
- Perception of self
- Culture
- Support
- Pre prescription home visit

Instruction in the use of the assistive device

Repetition is key

Types of instructional

- demonstration

- practicing actual skills in hospital environment

- written

- video

Reinforcement

Transition of skills to community/home environment

Follow-up

Support groups

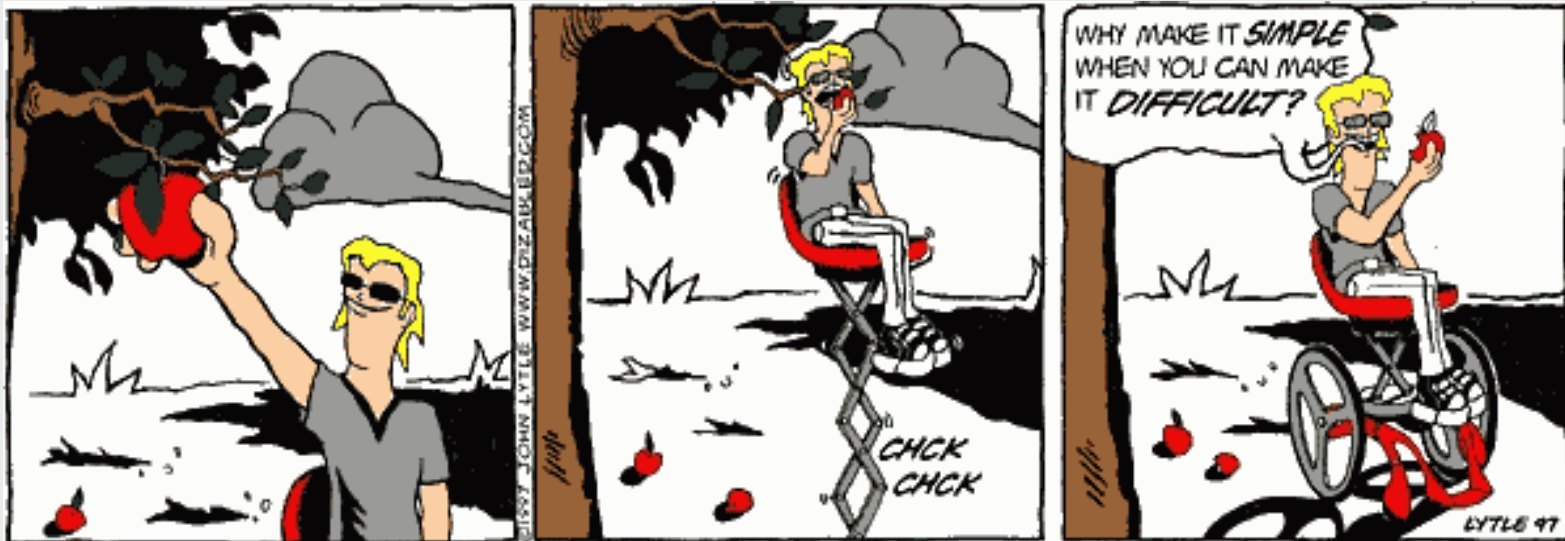
Refresher training may be necessary

Who pays?

- User
- Insurance
 - Private
 - managed care
 - fee-for-services
 - Medicare
- VA

Other factors associated with non-use of assistive devices

- Too many devices!
- Change in habits to make ADLs easier



Access to equipment and rehabilitation services

(Bingham and Beatty, 2003)

>50% needed assistive equipment in last 12 months
30% were unable to get needed equipment

40% needed rehab services in last 3 months
>50% did not receive those services