

Functional Literacy

AOTA Community of Practice on Literacy

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What drew
you to this
presentation?

Are there literacy
challenges that you see in
your daily practice?

Do you feel equipped to
address literacy challenges
in your practice?

Define

Define literacy and functional literacy



Explore

Explore literacy as an occupation and examine whether it fits within the occupational therapy scope of practice

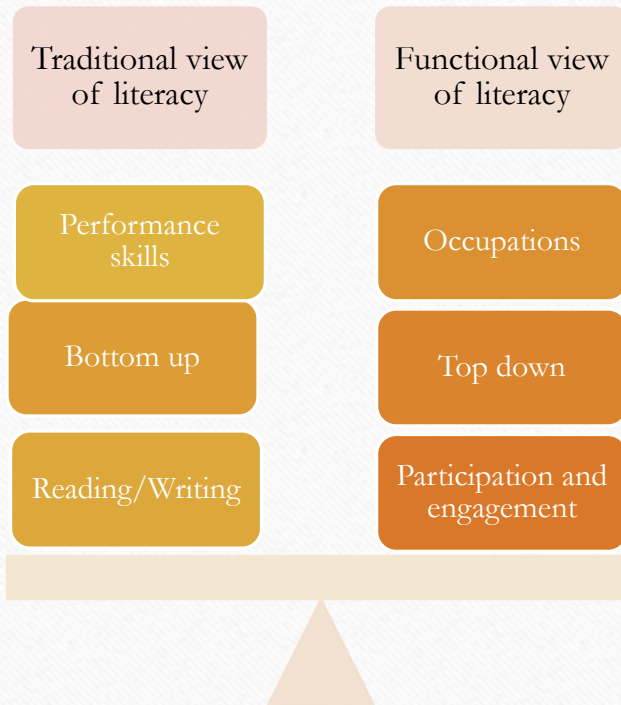


Brainstorm

Brainstorm how functional literacy principles and strategies can be embedded in your practice across the lifespan

Objectives

Paradigm Shift



Introduction

Low literacy may lead to limited accessibility of community resources and infrastructures

Poor literacy may lead to occupational deprivation.

As OT's, we do not develop reading abilities

We do promote literacy skills that promote occupational participation.

AOTA Community of Practice on Literacy

Community of Practice (CoP): is a group of people who share common concern or a passion for something they do and want to know how to do it better so they interact regularly (Wenger, Trayner & deLaat, 2011)

Began in January 2017 under leadership of Sandra Schekind and Lenin Grajo

26 member from across America met monthly via teleconferencing to explore OT role in Literacy

Currently, around 16 members still involved. Accomplishments include publications, presentations at AOTA and state conferences, invitation to join the discussion with the Clinton foundation "Too Small to Fail" <https://www.pbs.org/newshour/show/when-a-laundromat-becomes-a-library>

What is Literacy

National Assessment of Adult Literacy (NAAL),
(White & McCloskey)

- Literacy as task based and skills based
 1. Basic reading skills
 2. Language skills
 3. Text search skills
 4. Computation identification skills
 5. Computation performance skills
 6. Inferential skills
 7. Application skills

Is Literacy an Occupation?

- Occupation is defined as Meaningful everyday activities that people do individuals, in families and with communities to occupy time and bring meaning and purpose to life. Occupations include things people need to and want to and are expected to do. (AOTA, 2014)

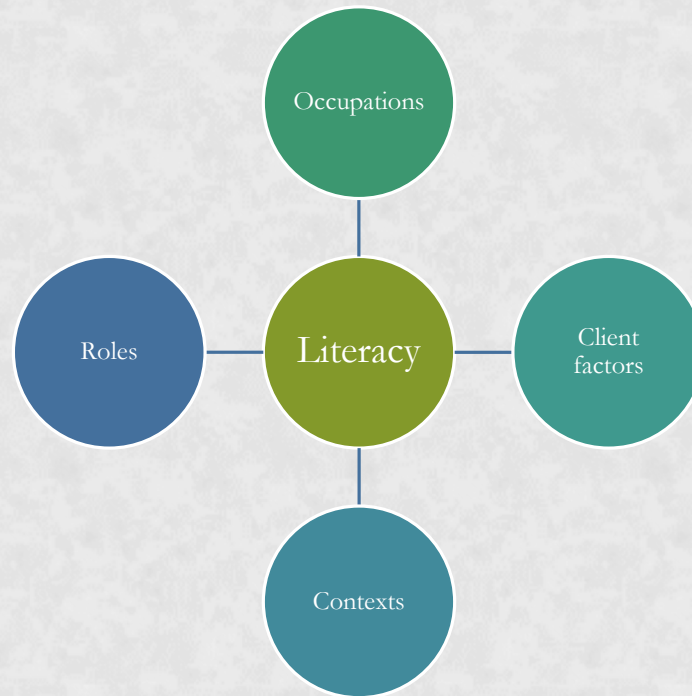
Functional Literacy

Defined

- “The ability to interpret common written material needed to effectively carryout basic daily life skills, particularly in meaningful occupations and social roles.” (Grajo & Gutman, 2019)
- “The ability to decode, process and use written information needed to perform self care and to be independent in communities.” (Grajo & Gutman, 2019)
- Functional Cognition: Thinking and processing skills to accomplish common everyday activities such as home/financial management, work, school, volunteer roles, driving and community navigation (AOTA, 2016)

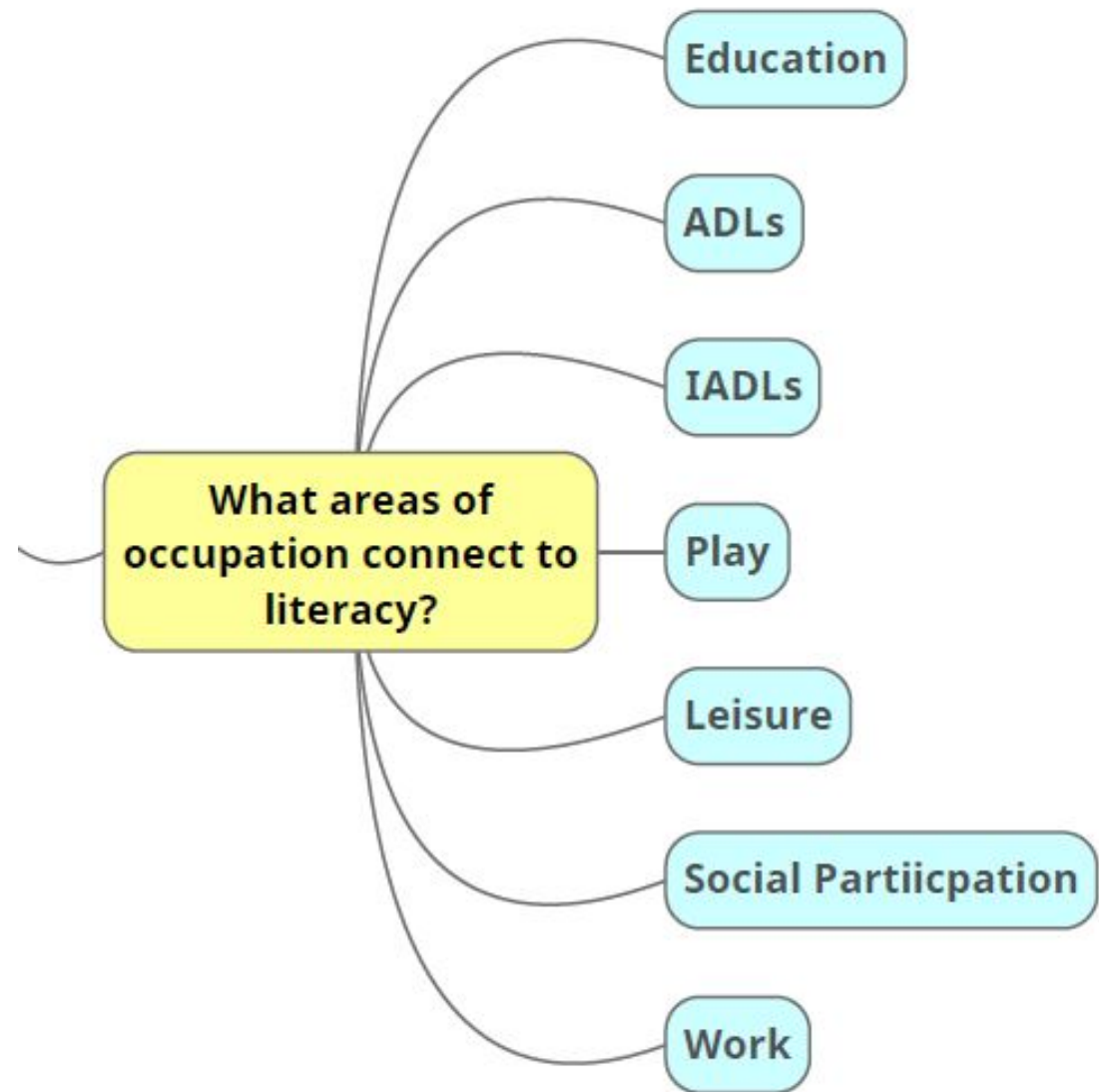
Literacy and the OTPF

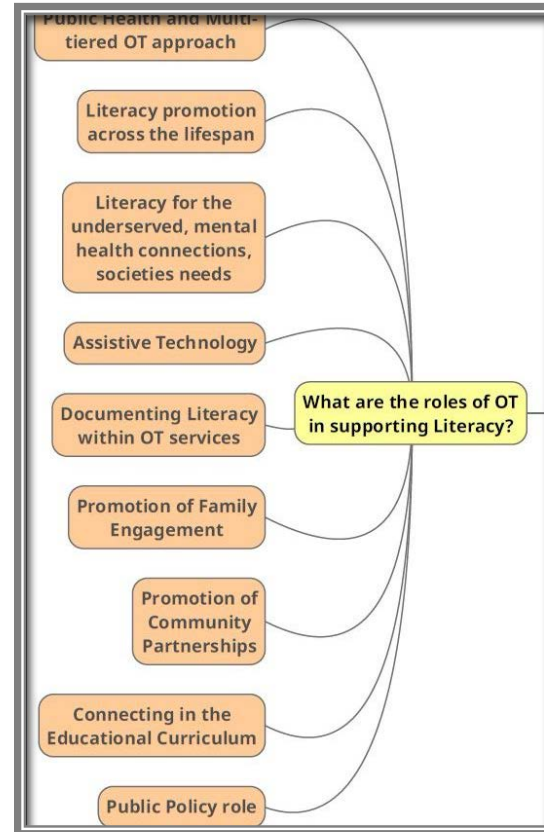
AOTA Literacy CoP Concept Map



Concept Map

Occupational Connections





Concept Map

OT Roles in Literacy

Populations and settings

Populations

- Early Intervention
- Homeless Population
- Severe Mental Illness
- Adults with Developmental Delays
- Schools
- Community based
- English as a second language

Settings

- Family Practice
- Public Health
- Higher Education
- Hospital based
- SNF
- Private Practice
- Criminal Justice

What client factors and skills are required for Literacy?

Language and hearing, auditory processing, phonological skills, communication skills

Vision: motor and perceptual

Motor: fine and gross

Cognition: Memory, Comprehension, Executive Function, Meta-cognition

Sensory processing, awareness

Concept Map

Client factors related to Literacy

Why has Literacy become a Hot Topic for OT?



1. MEET STATE
AND FEDERAL
DEMANDS



2. OCCUPATIONAL
JUSTICE



3. IMPROVE
HEALTH AND
WELLNESS



4. FOSTER SOCIAL
CONNECTEDNESS

Theme 1: Federal and State Demands

- 36 million adults in the US cannot read, write or do basic math above a third-grade level ([ProLiteracy, 2019](#))
- **CDC Health Literacy Plan** (2016)
- “Goal 1: Develop and disseminate health and safety information that is accurate, accessible and actionable”
- [Healthy People 2030](#): Eliminate **health** disparities, achieve **health** equity, and attain **health literacy** to improve the **health** and well-being of all. Create social, physical, and economic environments that promote attaining full potential for **health** and well-being for all.
- [State Identified Measure Result](#)(SIMR): Michigan’s goal for improving the quality of services for children with disabilities. Michigan’s emphasis continues to be on early literacy [Michigan Emphasis](#)

Theme 2: Occupational Justice

Keefe and Copen (2011)-Literacy is a human right

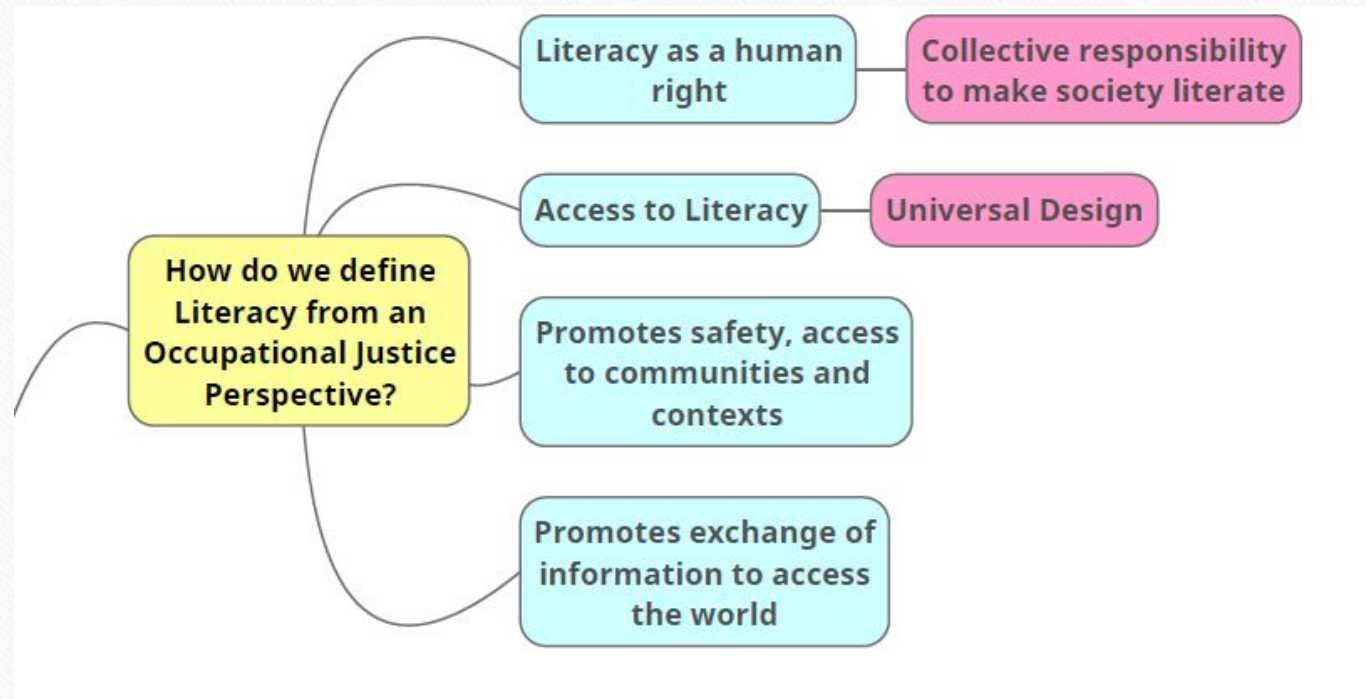
Fundamental part of the human experience. Central to human interaction. Leads to empowerment. Collective responsibility of all individuals in a community.

Townsend & Wilcox, 2004: **Occupational Justice**- all humans have innate biological and psychological need to be involved in meaningful activity that supports desired social roles and connection to others

In the current Western society, low literacy lead to **marginalization** of people to social fringes where existence is not dependent on some level of literacy (homelessness, unemployment, underemployment, institutionalization, education drop out or failure). Caste system (Grajo & Gutman, 2019)

Erroneous assumptions that people need specific “readiness” skills in order to begin experimenting with writing serve to limit early attempts at exploration (Hanser, 2006)

Occupational Justice



Call to Action



1. Do not leave the need for other professionals.



2. Assess barriers to occupations



3. Identify intervention strategies through adaptation, compensation, and remediation.



4. Assistive technology



5. Partner with community infrastructure (eg banks, pharmacy, grocery stores, transportation).



6. Identify family, school and community resources, collaborate with colleagues

Theme 3:
Health
facilitation,
well being
and adaptive
capacity

Clients with low literacy have lower health outcomes

Common intervention use pictographs, booklets and videos leads to increased knowledge about health outcomes


Problem: Does not take into account varying literacy levels or the effects of literacy barriers on community participation

Health Disparity Call to Action

There is a need for OT's to address literacy and determine whether it impacts community participation



Healthy people 2030: is the achievement of health and well-being through the elimination of health disparities, the achievement of health equity, and the attainment of health literacy



Call to Action: Eliminating health disparities by facilitating clients' health literacy and addressing functional literacy

Strategies

- Occupation and Participation Approach to Reading Intervention (Grajo & Candler, 2016)
- Develop the literacy strategies of adaptation, compensation, and remediation.

Adaptation Strategies

To reduce the amount of screen/page words to enhance visual attention and organization

Magnifiers to increase readability

Replacing or coding words with pictographs and photos that enhance learning and comprehension

Using tactile aids and colored highlighting to increase visual attention to important details

Teaching clients to take structured breaks to reduce cognitive overload. (Grajo & Gutman, 2019)

Compensation strategy

- Using mnemonics to assist memory and voice activated technology to interpret unfamiliar words and obtain needed information. (Grajo and Gutman, 2019)

Remediation Strategies

Practice of real-life occupations requiring functional literacy skills, such as:

Check writing

Bill paying

ATM machine use

Transportation schedule interpretation

Meal preparation using package directions

Medication label interpretation

Written job application submission. (Grajo & Gutman 2019)

OT questions to guide practice



“What strategies and tools does the client use to overcome literacy challenges?”



“Are the client’s strategies and tools effective?”



“How can I facilitate the development of new tools and strategies that may be more effective?”

Theme 4: Social connection, Social participation, Community belonging



Social learning perspective-
literacy skills are learned in the
context of social activities and
relationships



Functional literacy as a co-
occupation between clients and
their important others.

Examples of social based functional literacy



Send text messages and emails



Read and post on social media platforms, such as Twitter, Facebook, and Instagram



Send and receive letters and greeting cards



Leave notes and reminder post-its for others to complete needed tasks



Check and record social events and activities on one's calendar or planner



Create a profile on an online dating site



Navigate video conferencing platforms, such as Skype or FaceTime. (Grajo & Gutman, 2019)

Recap

Functional literacy looks at how people use written communication in their everyday activities

It is embedded in every **occupation** and necessary for **participation, health and well being** and **social participation** and **connection**

It influences our clients across the lifespan and in every treatment setting

Using an **Occupational Participation** approach, literacy challenges can be addressed through compensation, adaptation and remediation

Other Types of Literacy

2018

Digital Literacy: The ability to communicate, understand and navigate computer use safely and efficiently for the purpose to gain and share information. (USdigital literacy)

2019

Informational Literacy: The ability to locate, evaluate and to effectively use that information to address a issue or problem. (Commonsense.org)

Other Types of Literacy

Family Literacy-addresses the intergenerational nature of literacy. Home literacy building activities that provide opportunities for young children, while enhancing the literacy needs for all family members. ([US Department of Education](#))

Financial Literacy: the ability to manage your money. The ability to manage your income, know where and how to invest money and how to save. Addresses deficits such as impulsivity, organization, memory. (Gaskins, Haynes and Porcello, 2017).

Health Literacy

Definition: The degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions.



It is more than just reading health information. It includes:

Finding
information and
services

Communicating
needs and
preference

Interpreting the
meaning and
usefulness of
information

Understanding
choices, options
and
consequences

Patient-client relationship influences health literacy



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graph TD; A[Patient-client relationship influences health literacy] --> B[People with increased health risks have reduced health literacy]; B --> C[12 % of adults have proficient health literacy]; C --> D[Almost 50% of adults who do not graduate high school have below basic health literacy]; D --> E[People with lower health literacy tend to get their information from the radio or TV];
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People with increased health risks have reduced health literacy

12 % of adults have proficient health literacy

Almost 50% of adults who do not graduate high school have below basic health literacy

People with lower health literacy tend to get their information from the radio or TV

Health Literacy Statistics

Progression

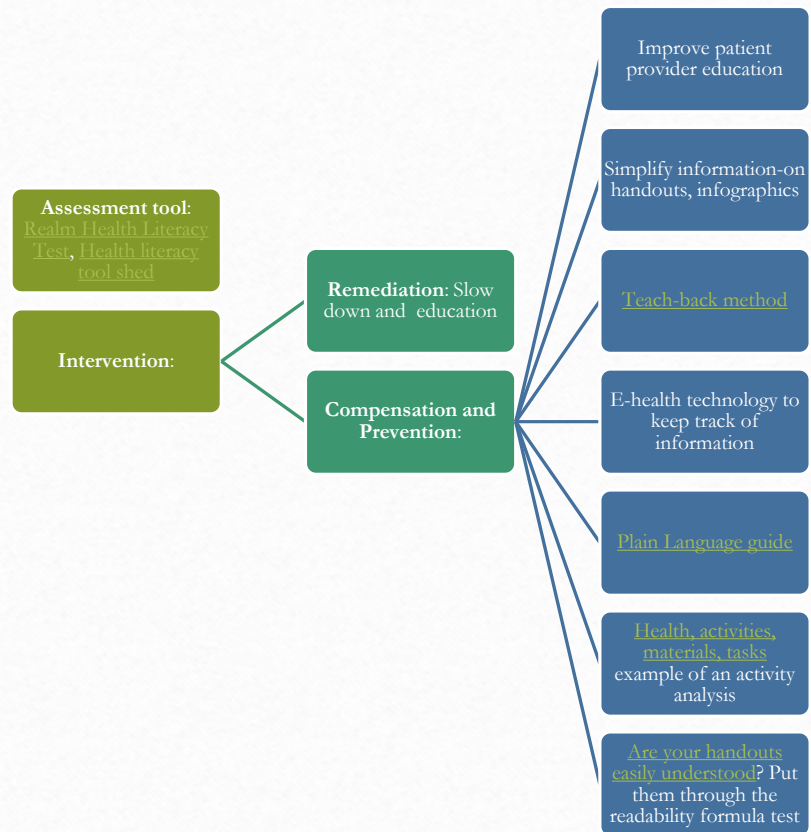
Poor health literacy

Challenges using and interpreting health information

Poor adherence to recommendations

Poor health outcomes





Health Literacy

Functional Literacy Across the Lifespan

Children

- Coloring/handwriting
- Communication needs/wants
- Academic learning
- Playing games
- Developing relationships
- Expressing emotions
- Keyboarding
- Understanding rules
- Reading
- Understanding technology

Adolescent

- Job applications
- Reading assembly directions
- Driving
- Reading maps
- Product labels
- Bus schedules
- Game scoreboards
- Videogame instructions

Adults

- Face book
- Medication management
- Financial management
- Home exercise instructions
- Daily planner/memory logs

Meaningful
communication for
the child with story
telling about his day

Pair words with
pictures to label areas
in room to increase
exposure to print

Tactile input with
letters with pairing
with sound

Incorporate
movement such as
therapy ball and
swing with letters

Letter bean bags
when on the swing

Cut out word bank
and glue on paper to
write about a picture

Pre- literacy Pediatric Ideas

More Pre-Literacy Pediatric Ideas



SHARED READING ON
IPAD WITH DIGITAL
BOOK WITH TEXT TO
SPEECH BY SWIPING OR
POINT TO AN ARROW TO
TURN THE PAGE



LOW TECH
COMMUNICATION-SUCH
AS YES/NO, LOW TECH
??? TO POINT TO
PICTURES FOR VISUAL
SCHEDULE AND
TRANSITIONS



OBJECT BOOK RELATED
TO BOOK FOR
MULTISENSORY
APPROACH

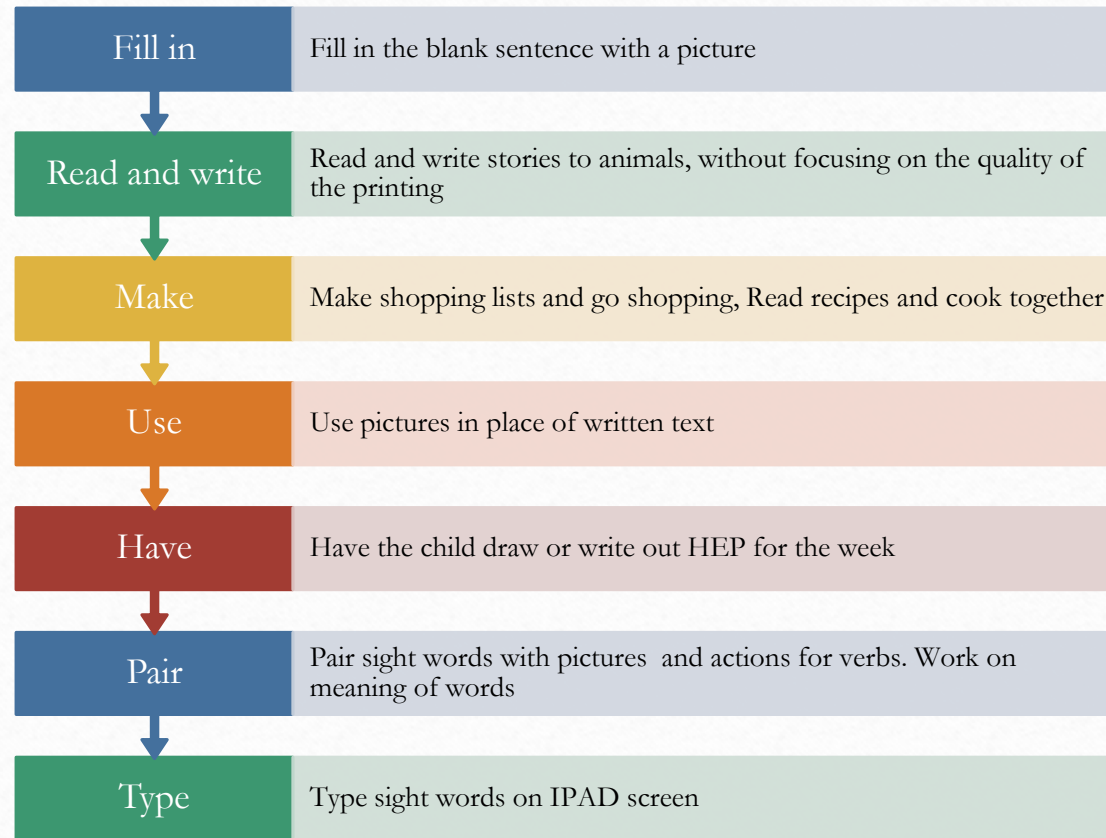


3-D LEARNING
ACTIVITIES



CAUSE AND EFFECT
APPS

Pediatric Literacy ideas



Using Technology to Support Pediatric Literacy



Take photo of the child doing his or her favorite things. Use to low tech picture symbols to write an opinion (I am, I like, I don't like). Use with Clicker Connect (<https://www.cricksoft.com/us/clicker/ipad/clicker-connect>)



Touch Chat- (<https://touchchatapp.com/>) -low tech communication with core language for communication and writing on an IPAD



Alilipad (<https://appytherapy.com/abilipad/>)



IPAD-Pictello (<https://www.assistiveware.com/products/pictello>),

Tarheel Reader
(<https://tarheelreader.org/>)

Clicker Books

Inclusive Reading books on IPAD using **text to speech** output for shared reading



Choose it maker 3 (<https://www.helpkidzlearn.com/shop/online-software/chooseit-maker-3>) to design questions about the books using picture symbols paired with words

Examples of Possible OT Intervention for Adults



TRAINING IN:



EMAILS, TEXT
MESSAGES, VIDEO
CALLING



ONLINE SUPPORT
GROUPS



ONLINE DATING
ROOMS AND CHAT
ROOMS

Infographics



Definition: data or information that has been synthesized, visually translated and is presented in a way that tells a story



“A picture is worth 1000 words....”



65% of all people are visual learners



Quantitative in nature, story based information designed to spur action



Based on evidence



Delivered digitally



Is not a poster or flyer

Examples and Resources



[ACRL Visual Literacy Competency Standards for Higher Education](#)



[*Stunning Child Literacy Stats Infographic](#)



[10 Steps To Designing An Amazing Infographic](#)



[Piktochart](#)



[Canva](#)



[* SeekFreaks examples](#)

Why would OT be interested in Literacy

- “To achieve literacy, there must be reading. To achieve reading, it must be meaningful. To achieve meaningfulness, there must be communication. To achieve communication, there must be experience. To achieve experience, there must be opportunity. To achieve opportunity, there must be care and understanding.”

(National Center for Deaf-Blindness, Hinzman, n.d.)

Conclusion

Functional Literacy is “The ability to interpret common written material needed to effectively carryout basic daily life skills, particularly in meaningful occupations and social roles.” (Grajo & Gutman, 2019)

If we consider literacy as an occupation, how do you clients literacy levels influence their occupational participation outcomes, and their health and wellness?

Do your clients have effective strategies or tools to overcome their literacy challenges?

Are there simple adaptation, compensation and remediation strategies that you can incorporate into your treatment sessions?

Call to Action



Promote engagement in
reading and writing



Adapt environments to
increase literacy
participation



Foster social
connections



Continue to address
performance skills
needed for reading and
writing



Keep health literacy on
your radar, through
education and
infographics



Facilitate habits,
patterns and routines
that promote
engagement with
literacy through
remediation,
compensation and
adaptation



Be an ambassador for
occupational justice
when you encounter
occupational
deprivation due to poor
literacy

Questions



If you have specific questions regarding OT's role in literacy, or you are interested in developing a Michigan based CoP on Literacy, you can contact me at:



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Resources

- Health Literacy
- 1. REALM Health Literacy Test/Short Assessment of Health Literacy (I've attached link below)
- <https://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy/index.html>
- 2. Pepper (this is actually a reading assessment for low vision- not EXACTLY what you might be looking for, but related.)
- <https://www.lowvisionsimulators.com/products/pepper-vsrt>
- Below are some other resources:
- <https://www.cdc.gov/healthliteracy/researchevaluate/measure-peoples-skills-experiences.html>
- <https://nces.ed.gov/naal/reading.asp>
- <https://www.newreaderspress.com/read>
- <https://www.hsph.harvard.edu/healthliteracy/adult-literacy-population-assessments/>
- <https://www.air.org/project/national-assessment-adult-literacy>

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