**Manchester College**  
**Differentiated Instruction Activity**  

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**Date:** 11/19  
**Teacher:** Mrs. Gust  
**Title of Work:** Vision Impairment

<table>
<thead>
<tr>
<th>Criteria</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>Audience cannot understand presentation because there is no sequence of information.</td>
<td>Audience has difficulty following presentation because presentation jumps around.</td>
<td>Group presents information in logical sequence which audience can follow.</td>
<td>Group presents information in logical, interesting sequence which audience can follow.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Content Knowledge</strong></td>
<td>Each member of the group does not have grasp of information; each member cannot answer questions about subject.</td>
<td>Each member of the group is uncomfortable with information and is able to answer only rudimentary questions.</td>
<td>Each member of the group is at ease with content, but fails to elaborate.</td>
<td>Each member of the group demonstrates full knowledge (more than required) with explanations and elaboration.</td>
<td>4</td>
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<tr>
<td><strong>Multiple Means of Expression</strong></td>
<td>Group does not provide options for multiple means of expression.</td>
<td>Group provides very limited options for multiple means of expression.</td>
<td>Group provides good options for multiple means of expression.</td>
<td>Group provides excellent options for multiple means of expression.</td>
<td>4</td>
</tr>
<tr>
<td><strong>Effective Teaching Strategies</strong></td>
<td>Group does not utilize effective teaching strategies based on Universal Design.</td>
<td>Group uses few effective teaching strategies based on Universal Design.</td>
<td>Group attempts to use effective teaching strategies based on Universal Design.</td>
<td>Group uses effective teaching strategies based on Universal Design.</td>
<td>4</td>
</tr>
<tr>
<td><strong>Level of Audience Engagement</strong></td>
<td>Audience is not expected or encouraged to be engaged.</td>
<td>Audience is not expected or encouraged to be engaged most of the time.</td>
<td>Audience is expected, but not encouraged to be engaged most of the time.</td>
<td>Audience is expected and encouraged to be engaged throughout the activity.</td>
<td>3</td>
</tr>
</tbody>
</table>

**Teacher Comments:**  
All appeared prepared to start...appropriately dressed.  
Your group did not all seem to know how the smelling project was set up.
Learners with Blindness or Low Vision

Legal Definition

- Legally Blind
  - Visual acuity of 20/200 or less in the better eye even with correction (e.g. eyeglasses)
  - Width of the field of vision is not greater than 20 degrees

- Low Vision
  - Visual acuity following between 20/70 and 20/200 in the better eye with correction

Educational Definition

- Who has difficulty accomplishing visual tasks, even with prescribed corrective lenses, but who can enhance his or her ability to accomplish these tasks with the use of compensatory visual strategies, low vision or other devices, and environmental modifications (Corn & Koenig, 1996, p. 4).
Educational Definition

- It is the preferred definition.
  - Visual acuity is not a very accurate predictor to determine how people will function with the slight they have.
  - Only a small percentage of those who are legally blind have no vision, while majority can see to some degree.

- Beliefs
  - Stresses method of reading instruction.
  - Individuals who are blind must learn to read Braille or use audio methods.
  - Those with low vision can benefit from using Braille.

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Preferred over Legal definition

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Serious Impairments (Congenital)

- Glaucoma
  - "sneak thief of sight"

- Cataracts
  - Clouding of the lens

- Diabetic retinopathy-interference from blood supply to retina

- Cortical visual impairment-( results from infection, stroke, etc.)

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Problems affecting Children

- Visual impairments are due to prenatal causes and heredity
- Retinitis pigmentosa-tunnel vision and night blindness
- (prenatal)-syphilis and rubella
- Retinopathy of prematurity-is found in premature infants-less now

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Strabismus-condition in which eyes are directed inward or outward
*problem-can cause blindness

Nystagmus-condition in which eyes move involuntary resulting in dizziness
*can be a sign of brain malfunction
Causes of Low Vision

Most common are errors of REFRACTION (bending of light rays as passing through the eye)
Myopia—nearsightedness
—eye too long, cannot see things far away
Hyperopia—farsightedness
—eye too short, cannot see things close up
Astigmatism—blurred vision
—cornea or lens of the eye is irregular

Braille

- What is it?
  - Quadrangular containing from 1 to 6 dots.
  - Dots represent letters, numbers, and even punctuation marks.
  - Best method for reading Braille is to use both hands.

- Braille Codes
  - Literary Braille—use in everyday situations
  - Nemeth Braille—use for mathematical and scientific symbols.

- Ways to write Braille
  - Perkins Braille—It has 6 keys, 1 for each dot of the cell, which leaves an embossed print on the paper.
  - Slate and Stylus—Paper is held in a slate while a stylus is pressed through openings to make indentations on paper.
Braille Bills

- In 2003, 32 states passed a bill to make Braille more available for students with visual impairments.

- 2 Important components:
  1. Braille must be available for students if any members of the IEP team, including parents, indicate that it is needed.
  2. Teachers of students with visual impairments need to be proficient in Braille.

Accommodations

- Mobility
  -- Long Cane
  -- Guide Dogs
  -- Tactile Maps
  -- Human Guides

- Technological
  -- Kurzweil 1000
  -- Braille Notetakers
  -- Screen Readers (Zoom Text)
Activities

1. Do you see what I smell?

2. Pirate Toss

Resources

www.dhislinkresource.uct.edu/viewer.asp

Foundation of Exception Learners: An Introduction to Special Education
Serious impairments - are congenital

*Glaucoma - called sneak thief of sight
  * point to pick of cataracts
  Clouding of lens

Explain D. Retinopathy

Cortical visual impairment
  Change Slide

Problems affecting kids

- Prenatal causes
  R. Pigmentosa - tunnel vision
  Syphilis + rubella

Talk about Strabismus + Nystagmus
  Change Slide

Causes of Low Vision

* Refraction *

Myopia
Hyperopia
Astigmatism
  Contacts
  Explain Pics
Strategies and Accommodations to Teach Students with Visual Impairments

- Extended Exam Time may be requested if a student who is blind or has low vision uses a scribes or readers for exams or quizzes.
- Large Print may be requested by someone who has low vision instead of regular sized print.
- Note taker may be requested by some students who are blind or have low vision.
- Some students who are blind or have low vision may request a reader for in-class assignments, exams or quizzes. A reader would read the material aloud to the student.
- Refreshable Braille Display may be requested by someone who is blind or has low vision for classroom use with handouts or materials.
- Scan and Read may be requested by someone who is blind or has low vision. A textbook, worksheet or handout can be scanned into a computer and then read aloud.
- Screen Magnification of the computer to enlarge text and graphics may be requested by someone with low vision.
- Screen Readers capabilities of a computer may be requested by someone who is blind or has low vision in order to hear what is on the screen.
- Verbal Instructions and Written Materials such as assignments, due dates, class discussion and blackboard materials may need to be written out for students who are blind or have low vision.
- Tape Recorder may be requested by someone who is blind or has low vision for the use of note taking in class.
- Text to Speech may be requested by students who are blind or have low vision in order to use their computer to read text, graphics or scanned materials on the computer screen.