

# Guidelines for Determining Frequency of Services to Support Learners with CVI



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This tool was possible due to the support and collaboration of many educators. The NorthWest Education VI team, Carly Schlotterer, Lisa Milliron, and several other professionals who share our passion. Through your willingness to inform and challenge our thought process, we were able to expand reasoning.

This work was further enhanced by our trainings with Dr. Christine Roman-Lantzy as members of the Michigan Department of Education-Low Incidence Outreach CVI Team. We have learned from each of you, and value the conversations we have shared. Thank you for sharing your knowledge.

Finally, thank you for our families who encourage our passion outside of the classrooms. Without your support at home, knowing that huge part of our lives is running smoothly, we would not have the time or energy to spend on projects like this one.

## Introduction

The Guidelines for Determining Frequency of Services to Support Learners with CVI has been developed to provide members of the Individualized Education Program (IEP) team with a data-based decision model when determining the service time for students with a cortical visual impairment.

The Guidelines for Determining Frequency of Services to Support Learners with CVI was developed while reflecting upon the implications the ten visual and behavioral characteristics of CVI (Roman, 2007) have on the expectations of the expanded core curriculum and accessibility needs throughout the learner's day. These considerations result in the ten areas of the Guidelines for Determining Frequency of Services to Support Learners with CVI.

All educational service times are an IEP team decision and must be based on the data the IEP team has gathered. It is suggested that IEP teams complete this tool together as part of their data collection in preparation for the IEP meeting. IEP Team members should bring data relevant to the ten areas to help the team in making the decision that best meets the needs of the learner with CVI.

The Guidelines for Determining Frequency of Services to Support Learners with CVI is not to be considered an assessment. It is advised that the guidelines be completed for initial IEP meetings and each subsequent IEP meeting.

## Rationale

As of this publication, service providers across the United States have tools to support their service delivery decisions for learners with an ocular diagnosis. A tool, designed to address the unique needs for the visual and behavioral characteristics, has not been available. Due to the lack of such tool, service providers are following a wide variety of service delivery models. According to the article in ASHA's *Journal of Language, Speech, and Hearing Services in Schools*, "Children With Cortical Visual Impairment and Complex Communication Needs: Identifying Gaps Between Needs and Current Practice," "42% of the parents indicated their children received "consult only" or "no" services from a TVI and 47% indicated their children received "no" O&M services at all"(Blackstone et al., 2021)

As of this publication, the developers are not aware of any efficacy studies to confirm service delivery standards. Research is needed in the field to test the variety of service delivery models and their efficacy in student progress.

## Purpose and Development

A growing number of educators are recognizing the needs for students with Cortical Visual Impairment (CVI). As the leading cause of visual impairment in developed countries (Hattan, 2007), we owe this population more of our time and efforts. While many educators recognize there is a need, services for these children and their families vary greatly across the United States. Even within one of our states, from district to district, students are receiving significantly different levels of support.

When a child with an ocular visual impairment is found eligible for services, professionals have a variety of tools to help determine the amount of service time. These tools, however, do not take into consideration the unique needs of learners with CVI.

When completing a learning media assessment for a student with an ocular visual impairment, you are likely to obtain results indicating the student has a primary learning modality of either visual, auditory, or tactile. When completing a learning media assessment while considering the ten visual and behavioral characteristics of CVI (Roman, 2007) you are likely to obtain results indicating your learner requires a balance of visual, auditory, and tactile. Further, their learning modalities may change as their vision progresses and educational needs change. (Roman and Tietjen, 2020)

65% of the population is identified as visual learners, they need to see what they are learning (Bradford, 2011). A child with CVI may begin their educational journey in what's considered Phase I (Roman, 2007) with most of their day being accessed with auditory modalities. A child with an ocular diagnosis is likely to have vision that either remains stable or potentially deteriorates. Conversely, a child with CVI should be expected to improve their functional use of vision. As a child progresses and is learning to use their functional vision, the child with CVI will likely begin to use vision for most of their day.

We recognize that on some Individualized Education Program (IEP) teams, the individual responsible for ensuring access for the child with CVI may be different from case to case. A teacher for the visually impaired, physical therapist, occupational therapist, speech language pathologists amongst others understand CVI and its impact on the child's ability to access their education. Additionally, at the time we are developing this tool, there is a significant shortage of teachers for the visually impaired across our country. Further, we know inter-professional collaboration practices offer one of the best methods to address the needs of the children. "Inter-professional collaboration occurs when 2 or more professions work together to achieve common goals and is often used as a means for solving a variety of problems and complex issues." (Green, 2015) Instead, the hope is that as educational teams move into inter-professional collaborative practices, the team can work together to address the vision needs throughout the student's day.

Dr. Roman has identified CVI as 'a disability of access.' We created this tool to be used, by educational teams, to help guide them when determining frequency of services when supporting learners with CVI. Using a data-based decision model will help build consistency between all service providers.

## Process

IEP team members will bring data to inform and support each of the ten questions identified in the Guidelines for Determining Frequency of Services to Support Learners with CVI.

Step 1: Fill out the student information at the top of the form.

Step 2: Answer each of the ten questions below. Upon completion, team members should have a numeric score for each question.

Step 3: Using the chart labeled '**Total Score**,' enter the numeric scores given from the ten areas answered in step 2.

Step 4: Given the total score from the eight areas, identify the service recommendations from the table labeled '**Suggested Frequency of Services to Support Learners with CVI**'



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## Recommendations of Service

After scoring each of the ten areas, IEP teams will add up each of these scores to obtain a total score. From this total score, the learner's needs will fall into one of four recommended categories: intensive, weekly/bi-weekly, periodic, or consultative. The intensive service time ranges from three to five times per week. Weekly/-bi-weekly services range from one to two times per week or every other week. Periodic services are monthly (or similar regular intervals). Lastly, consultative services are considered as needed.

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# Guidelines for Determining the Frequency of Services to Support Learners with CVI

Today's Date: \_\_\_\_\_ Student Name: \_\_\_\_\_

Date of most recent CVI Range Assessment: \_\_\_\_\_ Phase (circle one): I II III

Score from Rating I: \_\_\_\_\_ Score from Rating II: \_\_\_\_\_

## 1. Using the scores from the most recent CVI Range Assessment, enter the values from the Rating II scoring guide.

Example: A 0.25 on CVI Range, Rating II Scoring for Color preference would be given a score of 1 on the table below.

| 0  | 1  | 2   | 3  | 4  |
|--|--|---|--|--|
| According to CVI Range, Rating II, the student scored a 0 (Not Resolved) | According to CVI Range, Rating II, the student scored a 0.25 | According to CVI Range, Rating II, the student scored a 0.5 (Resolving) | According to CVI Range, Rating II, the student scored a 0.75 | According to CVI Range, Rating II, the student scored a 1 (Resolved) |
|  | Color preference   |   |  |  |
|  | Need for movement  |   |  |  |
|  | Visual latency   |   |  |  |
|  | Visual field preferences                                     |   |  |  |
|  | Difficulty with visual complexity of object                  |   |  |  |
|  | Difficulty with visual complexity of array                   |   |  |  |
|  | Difficulty with visual complexity of sensory environment     |   |  |  |



|              |  |
|--------------|--|
|              | Difficulty with visual complexity of human faces |
|              | Need for light                                   |
|              | Difficulty with distance viewing                 |
|              | Atypical visual reflexes                         |
|              | Difficulty with visual novelty                   |
|              | Absence of visually guided reach                 |
| <b>Score</b> |  |
| 0            | CVI Characteristics                              |

**2. Consider the learners Learning Media Assessment results. What percent of the learner’s day are they expected to access materials via an auditory media?**

Learning areas include but are not limited to; math, science, English language arts, social studies, electives (specials), Transitions, physical therapy, occupational therapy, orientation and mobility, community-based instruction, etc.

| 0   | 1  | 2  | 3  | 4  |
|---|--|--|--|--|
| Student utilizes auditory learning modality to access materials 0-24% of their day. | Student utilizes auditory learning modality to access materials 25-49% of their day. | Student utilizes auditory learning modality to access materials 50-74% of their day. | Student utilizes auditory learning modality to access materials 75-99% of their day. | Student utilizes auditory learning modality to access materials 100% of their day. |
| <b>Score</b>  |  |  |  |  |
|   | Auditory learning  |  |  |  |

**3. Consider the learners Learning Media Assessment results. What percent of the learner’s day are they expected to access materials via a tactile media?**

Learning areas include but are not limited to; math, science, English language arts, social studies, electives (specials), Transitions, physical therapy, occupational therapy, orientation and mobility, community-based instruction, etc.

| 0  | 1   | 2   | 3   | 4  |
|--|---|---|---|--|
| Student utilizes tactile learning modality to access materials 0-19% of their day. | Student utilizes tactile learning modality to access materials 20-39% of their day. | Student utilizes tactile learning modality to access materials 40-59% of their day. | Student utilizes tactile learning modality to access materials 60-79% of their day. | Student utilizes tactile learning modality to access materials 80-100% of their day. |
| Score  |   |   |   |  |
|  | Tactile learning  |   |   |  |

**4. Consider the learners Learning Media Assessment results. What percent of the learner’s day are they expected to access materials via a visual media?**

Learning areas include but are not limited to; math, science, English language arts, social studies, electives (specials), Transitions, physical therapy, occupational therapy, orientation and mobility, community-based instruction, etc.

| 0  | 1   | 2  | 3  | 4   |
|--|---|--|--|---|
| Student utilizes visual learning modality to access materials 0-5% of their day. | Student utilizes visual learning modality to access materials 6-25% of their day. | Student utilizes visual learning modality to access materials 26-50% of their day. | Student utilizes visual learning modality to access materials 51-75% of their day. | Student utilizes visual learning modality to access materials 76-100% of their day. |
| Score  |   |  |  |   |
|  | Visual learning   |  |  |   |

**5. Consider the coaching needed for all IEP Team Members (INCLUDING Family).**

| 0   | 1   | 2   | 3  | 4  |
|---|---|---|--|--|
| All team members can explain CVI diagnosis impact, modifications to their corresponding content/expectations, and how to implement modifications to meet student's needs with 100% accuracy | All team members can explain CVI diagnosis impact, modifications to their corresponding content/expectations, and how to implement modifications to meet student's needs with 80-99% accuracy | All team members can explain CVI diagnosis impact, modifications to their corresponding content/expectations, and how to implement modifications to meet student's needs with 60-79% accuracy | All team members can explain CVI diagnosis impact, modifications to their corresponding content/expectations, and how to implement modifications to meet students needs with 40-59% accuracy | Team can explain CVI diagnosis impact, modifications to their corresponding content/expectations, and how to implement modifications to meet student's needs with 0-39% accuracy |
| Score   |   |   |  |  |
|   | IEP team coaching   |   |  |  |

**6. Consider the amount of support the learner requires for daily living tasks.**

| 0  | 1  | 2  | 3  | 4  |
|--|--|--|--|--|
| Student requires support for 0 daily living tasks. | Student requires support for 1-3 daily living tasks. | Student requires support for 4-6 daily living tasks. | Student requires support for 7-9 daily living tasks. | Student requires support for 10+ daily living tasks. |
| Score  |  |  |  |  |
|  | Daily living tasks                                   |  |  |  |

## 7. Self-Determination

What percent of time is the individual able to independently anticipate and communicate the modifications they need?

| 0   | 1  | 2  | 3  | 4   |
|---|--|--|--|---|
| Student can anticipate and communicate modifications needed on their own 80-100% of the time. | Student can anticipate and communicate modifications needed on their own 60-79% of the time. | Student can anticipate and communicate modifications needed on their own 40-59% of the time. | Student can anticipate and communicate modifications needed on their own 20-39% of the time. | Student can anticipate and communicate modifications needed on their own 0-19% of the time. |
| Score   |  |  |  |   |
|   | Self-Determination   |  |  |   |

## 8. How well is the individual able to access and interpret social interactions with their peers and the adults in their daily lives.

Consider skills including awareness of body language, gestures, facial expressions, and personal space.

| 0  | 1   | 2   | 3   | 4  |
|--|---|---|---|--|
| Student can access and interpret social interactions 80-100% of the time | Student can access and interpret social interactions 60-79% of the time | Student can access and interpret social interactions 40-59% of the time | Student can access and interpret social interactions 20-39% of the time | Student can access and interpret social interactions 0-19% of the time |
| Score  |   |   |   |  |
|  | Social interaction skills   |   |   |  |

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## 9. How many recreation and leisure activities require consultation and/or direct instruction?

Consider the individual's ability to participate in recreation and leisure activities. Further, consider the individual's awareness of what recreation and leisure activities are available for them to choose from.

| 0  | 1  | 2  | 3  | 4  |
|--|--|--|--|--|
| Consultation and instruction in leisure and recreational activities (options) are necessary for 0 activities | Consultation and instruction in leisure and recreational activities (options) are necessary for 1 activity | Consultation and instruction in leisure and recreational activities (options) are necessary for 2 activities | Consultation and instruction in leisure and recreational activities (options) are necessary for 3 activities | Consultation and instruction in leisure and recreational activities (options) are necessary for 4 activities |
| <b>Score</b>   |  |  |  |  |
|  | Recreation and leisure   |  |  |  |

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## 10. How well does the individual access their technology?

Consider the individual's ability to participate and access their curriculum. This area is including all but not limited to alternative and augmentative communication, JAWs, ZoomText, built in accessibility, picture communication symbols, use of switches etc. Educational teams are encouraged to consider the results of an assistive technology assessment. Links can be found in the [resources](#) section of this publication.

| 0   | 1  | 2  | 3  | 4   |
|---|--|--|--|---|
| Student has demonstrated mastery of technology to access their curriculum with 80-90% accuracy or is <b>not expected to use technology independently throughout the course of the day</b> | Student demonstrates 60-79% accuracy with technology to access their curriculum independently. | Student demonstrates 40-59% accuracy with technology to access their curriculum independently. | Student demonstrates 20-39% accuracy with technology to access their curriculum independently. | Student demonstrates 0-19% accuracy with technology to access their curriculum independently. |
| Score   |  |  |  |   |
|   | Technology   |  |  |   |

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## Total Score

The following table is filled in based upon the scores from the above ten questions. Copy each of the scores and add them together for a total score.

| Scores from the above categories (1-10) |                           |
|---|---------------------------|
| 0                                       | CVI Characteristics       |
| 0                                       | Auditory                  |
| 0                                       | Tactile                   |
| 0                                       | Visual                    |
| 0                                       | IEP Team Coaching         |
| 0                                       | Daily Living Tasks        |
| 0                                       | Self-Determination        |
| 0                                       | Social Interaction Skills |
| 0                                       | Recreation and Leisure    |
| 0                                       | Technology                |
| <b>0 Total Score</b>                    |                           |

## Suggested Frequency of Services to Support Learners with CVI

Using your student's total score, use the table below as a guideline when determining your learner's frequency of services\*.

**Total Score**

|                  |  |       |
|------------------|--|-------|
| Intensive        | 3-5 times per week                     | 67-88 |
| Weekly/Bi-Weekly | 1-2 times per week or every other week | 45-66 |
| Periodic         | Monthly or at regular intervals        | 23-44 |
| Consultative     | As needed                              | 0-22  |

\*This is a tool to help team determine services and does not dictate services.

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## About the Authors

Chaesa attended Western Michigan University where she received her master's degree in Teaching Students with Visual Impairments. For the past 13 years Chaesa has been employed with Northwest Educational Services as a Teacher Consultant of Students with Visual Impairments. Chaesa is also a Perkins-Roman Cortical Visual Impairment (CVI) Endorsed Specialist since 2017. Chaesa has shared her experiences at local conferences and MAER.

Stephanie Steffer is the Business Director at CViConnect and one of the founding teachers for the platform. Before this role, Stephanie was a teacher consultant for ten years. During this time, she provided children from birth to 26 years of age, with visual impairments. Additionally, Stephanie also has an Early Childhood Education endorsement and is a Perkins-Roman CVI Range Endorsed professional.

Stephanie has shared her experiences at a variety of invited and peer reviewed conferences (AER conferences, local/statewide conferences, CTEBVI, Closing the Gap, and ATIA).



## Acronyms

- AAC: Augmentative and Alternative Communication
- ASHA: American Speech Language Hearing Association
- CCN: Complex Communication Needs
- COMS: Certified Orientation and Mobility Specialist
- CVI: Cortical Visual Impairment
- ECC: Expanded Core Curriculum
- [IDEA](#): Individuals with Disabilities Education Act
- IEP: Individualized Education Program
- LMA: Learning Media Assessment
- O&M: Orientation and Mobility
- OT: Occupational Therapist
- PT: Physical Therapist
- SLP: Speech Language Pathologist
- TVI: Teacher for individuals with a Visual Impairment
- VI: Visual Impairment

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## Keywords

**Absence of visually guided reach:** Children with CVI often demonstrate a look and reach as separate events. This is often referred to as the ‘look, look away and reach.’

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Assistive technology:** Technology that supports the learning process with Braille displays, screen reading software, switches, and accessibility features.

**Atypical visual reflexes:** Children with CVI often demonstrate a lack of or delayed response to blink reflexes. The first is a blink to the touch on the bridge of the nose. The second is a blink to a threat (open hand) moving quickly at the face at midline. Both are important for the safety of the eyes. *There is no direct instruction or accommodation in relation to the blink reflexes.* These characteristics will usually resolve as the other visual behaviors improve (Roman 2007).

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Color preference:** Color is often more important to children with CVI than their peers. Many children with CVI respond quicker to a favorite color.

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Daily living skills:** The ability to care for oneself as independently as possible. According to State of Michigan Independent Living Skills Guides, these areas include but are not limited to:

- Dressing
- Laundry Skills
- Personal information
- Hygiene
- Organizational Skills
- Medical/Health Care
- Eating Skills
- Safety/Emergency Procedures
- Social Skills
- Cooking/Meals
- Telephone Skills
- Self-Advocacy
- Household Chores
- Time Concepts
- Orientation & Mobility
- Basic Household Repairs
- Money Skills

**Difficulty with distance viewing:** Distance viewing is directly related to the need of complexity. This is not a size and distance issue as is the case with acuity. Instead, for individuals with CVI, as distance increases, the amount of visual input increases. This can cause the visual target to get lost in the background among additional visual inputs.

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Difficulties with visual complexity:** (This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Complexity of the pattern on the surface of an object:** This area of complexity refers to how complex the surface of the visual target is. A child with CVI generally demonstrates more consistent visual attention to targets of a single color. Early on this may only be an item of their preferred color. As the child's functional vision improves, a child becomes able to attend and eventually discriminate targets with additional colors and increasingly complex patterns (Roman 2018).

**Complexity of the visual array:** Complexity of the visual array refers to the other visual inputs surrounding the visual target. Children with CVI may need the intended target to be isolated from the background for them to be able to interpret the target. For example, placing the target in front of a solid-colored background. Additionally, this characteristic relates to the number of visual targets the child is able to interpret. For some children, they may only be able to interpret one visual target at a time, while for others, they may be ready to interpret an array of six visual targets.

**Complexity of the sensory environment:** This area of complexity refers to the impact of external and internal multi-sensory inputs children may have on their ability to process their functional vision. The brain's ability to process this information, in addition to the visual information, may increase latency or become too overwhelming and cause the child to avoid using their functional vision. Some multi-sensory inputs to consider include auditory input (background noise), physical touch, strong smells, room temperature, positioning of the child, if the child is tired, stressed, or overstimulated, etc.

**Complexity of the visual elements of human faces:** Due to the complexity of the human face, a student with CVI may have a hard time making eye contact. This includes eye contact with their own mirror image. Eventually the child may begin to demonstrate eye contact, but this may be brief. Due to the complexity of additional sensory inputs, while possible, eye contact should not be expected while the person is talking. Even if eye contact is made, a child with CVI may not be able to recognize or interpret the face that they are looking at.

**Difficulty with visual novelty:** Novelty refers to how new an object is to a child. A child with CVI often prefers items that are familiar and may need direct instruction in order to interpret an unfamiliar visual target.

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Learning Media Assessment (LMA):** According to IDEA (Individuals with Disabilities Education Act) iii. in the case of a child who is blind or visually impaired, provide for instruction in Braille and the use of Braille unless the IEP Team determines, after an evaluation of the child's reading and writing skills, needs, and appropriate reading and writing media (including an evaluation of the child's future needs for instruction in Braille or the use of Braille), that instruction in Braille or the use of Braille is not appropriate for the child; 34 CFR Section 300.346 (a) (2) (iii) and 20 U.S.C. 1414(d)

IEP teams utilize a learning media assessment as the evaluation tool to gather the data needed to make this determination.

**Learning modality:** The sensory channel used by an individual to access the curriculum.

**Need for light:** Children with CVI often respond quicker to visual targets that are paired with light. They may demonstrate a non-purposeful gaze to primary sources of light.

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Need for movement:** Children with CVI may visually respond best to targets that move in space or have reflective surfaces (Roman 2007). (The reflective surface of an object is interpreted by the brain to be moving and can increase visual attention).

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Recreation and leisure:** Activities that a person enjoys during free time, which may also prompt personal interests.

**Self-determination:** Learning how to express one's needs and wants.

**Sensory Balance:** An approach to learning media assessments while considering the ten visual and behavioral characteristics of CVI. Christine Roman-Lantzy (Ph.D) and Matt Tietjen share how educational teams need to consider the child's learning media needs throughout the day. Further ensuring the child's learning media needs continue to be addressed and modified as they progress through the CVI Range.

**Social interaction skills:** The skills needed to build, maintain, or nurture a relationship with two or more people.

**The CVI Range:** The CVI Range is taken from the work of Dr. Christine Roman-Lantzy. The CVI Range is a Functional Vision Evaluation tool for children with cortical visual impairment.

**Visual field preferences:** Children with CVI often demonstrate a faster response to visual targets in one visual field. It is common for a peripheral field to be their preferred visual field until vision progresses in additional visual fields.

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

**Visual latency:** Latency refers to the delayed response between the time the target is presented and the time the child takes to first notice it (Roman 2007).

(This is one of the ten visual and behavioral characteristics from Dr. Christine Roman-Lantzy)

# Resources

## Cortical Visual Impairment (CVI)

2-D Image Assessment

<https://www.perkinselearning.org/videos/webinar/what-do-you-see-cvi-tvi>

Bridge School- CVI

<https://cvi.bridgeschool.org>

Bridge School-Interventions

<https://cvi.bridgeschool.org/interventions/>

Complexity

<https://pcvis.vision/educators-and-therapists/the-whats-the-complexity-framework/>

CVI Fact Sheet

<http://bit.ly/CVIFACTSHEET>

CViConnect Facebook

<https://www.facebook.com/cviconnect>

CViConnect YouTube

[https://www.youtube.com/channel/UCcviQ158qV\\_wToFV29AADbg](https://www.youtube.com/channel/UCcviQ158qV_wToFV29AADbg)

Paths to Literacy: CVI

<https://www.pathstoliteracy.org/blog/category/cvi>

Pediatric Cortical Visual Impairments Society

<https://pcvis.vision/>

Perkins; CVI for the TVI

<https://www.pathstoliteracy.org/resources/cvi-tvi-webinar-series>

Perkins eLearning- CVI

<https://www.perkinselearning.org/topics/cvi>

Roman on CVI YouTube

<https://www.youtube.com/channel/UCx6owlBfWYCWd6SQc37wfwQ>

Salient Features Collaborative

<https://cvicollaborative.wixsite.com/salientfeatures>

Statement on Cortical Visual Impairment

<https://www.afb.org/blindness-and-low-vision/eye-conditions/cortical-visual-impairment-traumatic-brain-injury-and-0>

What's the Complexity?

<https://www.perkinselearning.org/videos/webinar/whats-complexity-webinar-matt-tietjen>

## **Alternative and Augmentative Communication (AAC) and Cortical Visual Impairment (CVI)**

Vision Language Learning Communication: An Approach to AAC for Students with CVI

<https://www.perkinselearning.org/videos/webinar/vision-language-learning-communication-approach-aac-students-cvi>

Welcome to the Communication Matrix

<https://communicationmatrix.org/>

## **Technology Assessments**

Assistive Technology Assessment Summary

<https://www.tsbvi.edu/assessment/143-assistive-technology-assessment-summary>

Assistive Technology Assessment for Students who are Blind or Visually Impaired

[https://www.teachingvisuallyimpaired.com/uploads/1/4/1/2/14122361/%5E46\\_at\\_assessment\\_for\\_vi.pdf](https://www.teachingvisuallyimpaired.com/uploads/1/4/1/2/14122361/%5E46_at_assessment_for_vi.pdf)

Assistive Technology Consideration to Assessment

<http://www.wati.org/free-publications/assistive-technology-consideration-to-assessment/>

## Assistive Technology Guidelines

<https://mdelio.org/blind-visually-impaired/educator-support/assistive-technology-guidelines>

## Independent Living Skills

<https://mdelio.org/blind-visually-impaired/expanded-core-curriculum/independent-living-skills>

## Overview of Assistive Technology

<https://www.teachingvisuallyimpaired.com/overview-of-assistive-technology.html>

## Severity Scales

### Michigan Severity Rating Scales

<https://mdelio.org/blind-visually-impaired/educator-support/severity-rating-scales>

### VISSIT: Visual Impairment Scale of Service Intensity of Texas

<https://www.tsbvi.edu/vissit>

## Transition

### Age Appropriate Transition Assessment ToolKit: 2nd Edition

<https://www.wcu.edu/WebFiles/PDFs/Tag.pdf>

## Functional Vision Evaluation

### Assessing Functional Vision in young children with multiple disability and visual impairment

<http://www.ssc.education.ed.ac.uk/courses/VI&multi/assfva.html>

### CVI and Learning

<https://pcvis.vision/educators-and-therapists/>

### Cortical Visual Impairment: An Approach to Assessment and Intervention 2nd ed. Edition

[https://www.amazon.com/Cortical-Visual-Impairment-Assessment-Intervention/dp/0891286888/ref=dp\\_ob\\_title\\_bk](https://www.amazon.com/Cortical-Visual-Impairment-Assessment-Intervention/dp/0891286888/ref=dp_ob_title_bk)



Learning Media Assessment For Students who are Blind or Visually Impaired

[https://www.teachingvisuallyimpaired.com/uploads/1/4/1/2/14122361/learning\\_media\\_assessment\\_revised\\_3.pdf](https://www.teachingvisuallyimpaired.com/uploads/1/4/1/2/14122361/learning_media_assessment_revised_3.pdf)

Sensory Balance: An Approach to Learning Media Planning for Students with CVI. Perkins School for the Blind.

<https://www.perkinselearning.org/videos/webinar/approach-sensory-balance>

## Compensatory Skill Area

Expanded Core Curriculum for Student with Visual impairments (Annual Needs Consideration)

[https://www.teachingvisuallyimpaired.com/uploads/1/4/1/2/14122361/1\\_ecc\\_annual\\_needs\\_consideration.pdf](https://www.teachingvisuallyimpaired.com/uploads/1/4/1/2/14122361/1_ecc_annual_needs_consideration.pdf)

TSBVI: What is the Expanded Core Curriculum?

<https://www.tsbvi.edu/math/3973-ecc-flyer>

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## References

- Blackstone, S. W., Luo, F., Canchola, J., Wilkinson, K. M., & Roman-Lantzy, C. (2021). Children with cortical visual impairment and complex communication needs: Identifying gaps between needs and current practice. *Language, Speech, and Hearing Services in Schools*, 52(2), 612–629.  
[https://doi.org/https://pubs.asha.org/doi/full/10.1044/2020\\_LSHSS-20-00088](https://doi.org/https://pubs.asha.org/doi/full/10.1044/2020_LSHSS-20-00088)
- Bradford, William C., *Reaching the Visual Learner: Teaching Property Through Art* (September 1, 2011). The Law Teacher Vol. 11, 2004, Available at SSRN: <https://ssrn.com/abstract=587201>
- Green, Bart N, and Claire D. Johnson. “Interprofessional collaboration in research, education, and clinical practice: working together for a better future.” *The Journal of chiropractic education* vol. 29,1 (2015): 1-10. doi:10.7899/JCE-14-36
- Hatton, D.D. et al. (2007). Babies Count: the national registry for children with visual impairments, birth to 3 years. *JAAPOS*, 11: 351-5.
- MDE-LIO. (n.d.). *Independent Living Skills*. The Michigan Department of Education Low Incidence Outreach (MDE-LIO). Retrieved November 15, 2020, from <https://mdelio.org/blind-visually-impaired/expanded-core-curriculum/independent-living-skills>.
- Patel, L. (2013). Roman Word Bubbling. Retrieved April 5, 2020, from <http://roman-word-bubbling.appspot.com/>.
- PCVIS. (2019, June 28). *An Approach to Literacy*. Pediatric Cortical Visual Impairment Society. Retrieved September 18, 2020, from <https://pcvis.vision/educators-and-therapists/cvi-and-literacy/>.
- Roman, C., Baker-Nobles, L., Dutton, G.N., et al. (2010). Statement on Cortical Visual Impairment. *JVIB*, 104:69-72.
- Roman-Lantzy, C. (2018). *Cortical Visual Impairment: An Approach to Assessment and Intervention*. AFB Press.
- Roman-Lantzy, C. (2019). *Cortical Visual Impairment: Advanced Principles*. APH Press, American Printing House for the Blind.
- Roman-Lantzy, C. (2019, February 28). *Roman on CVI- Digging Deeper: Comparative Thought*. YouTube. Retrieved March 3, 2019, from <https://www.youtube.com/channel/UCx6owlBfWYCWd6SQc37wfwQ>.
- Roman-Lantzy, C., & Tietjen, M. (2020). *Sensory Balance: An Approach to Learning Media Planning for Students with CVI*. Perkins School for the Blind.
- Salient features dictionary*. Salient Features. (n.d.). Retrieved August 1, 2020, from <https://cvicollaborative.wixsite.com/salientfeatures>.
- Section 1414 (d)*. Individuals with Disabilities Education Act. (2019, November 7). Retrieved March 5, 2021, from <https://sites.ed.gov/idea/statute-chapter-33/subchapter-ii/1414/d>
- Texas ECC Committee. (2016, August 3). *What is the expanded core curriculum?* Texas School for the Blind and Visually Impaired. Retrieved November 15, 2020, from <https://www.tsbvi.edu/images/ecc-flyer.pdf>.

Tietjen, M. (2019, June 28). *Salient features and comparative thought*. Pediatric Cortical Visual Impairment Society. Retrieved October 15, 2020, from <https://pcvis.vision/educators-and-therapists/salient-features-and-comparative-thought/>.

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