



# Educational Impact Matrix for Students Who Are Deaf or Hard of Hearing (DHH)



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# Preface

## Introduction

In 2010, a small committee formed, supported by the Michigan Department of Education–Low Incidence Outreach (MDE-LIO). The committee worked to revise an existing document by Oakland Schools, titled *The Severity Rating Scale for the Hearing Impaired*. The revised form was piloted between January and June 2011. Feedback and data were collected and analyzed to produce *The Educational Impact Matrix for Students who are Deaf or Hard of Hearing (DHH)* in October 2011. The current version is reformatted and includes some updated information.

This *Educational Impact Matrix* is an optional resource designed for use with students who have hearing loss and attend classes in the general education setting. Use this document to assist school professionals and parents in discussing student needs. This is a data-collection tool for guiding discussions and is not intended as a determiner of service. Service determination is the responsibility of the individualized education program (IEP) team.

## Instructions For Use

The *Educational Impact Matrix* should be completed by a DHH professional using data collected from various sources and team members.

### Part A: Factors for Consideration

Six factors for consideration, and their definitions, are listed in bold type. The DHH professional should collect data and score each factor separately. It is possible that several statements are applicable to the student. Check all statements that apply. Add the points associated with each statement and divide by the total number of boxes checked to determine an average of points. Record this average in the far right column.

Example: In the Audiological Factors section, check all statements that apply. It is possible that the student has a bilateral hearing loss of 50 decibels (2 points), occasional middle ear problems (2 points), aided speech discrimination of 75% (3 points), fluctuating hearing loss (3 points), and history of progressive hearing loss (4 points). Adding the number of points associated with these statements yields a total of 14. Divide by the number of boxes checked (5) for an average of 2.8.



## Part B: Contributing Factors (optional)

This section provides an option for teams to consider other influential data. Review each contributing factor. If applicable, use +.5 or -.5 to indicate how the factor might impact the student's educational needs. Add the numbers to obtain a total.

Add the totals from Part A and B to reach the Educational Impact Score. This score may assist teams in discussing student needs and potential support. Compare the Educational Impact Score with the Impact Score Ranges and corresponding Guideline for Considering Range of Service. Each student has unique needs. Therefore, teams should use this document NOT as a determination of service but as information to consider.

## Acknowledgments

Thanks to DHH professionals at Oakland Schools and Midland Educational Service Agency (ESA), as well as Marianne Titler, Tammy Hansford, Suzanne Raschke, Shannon Williams, and Nancy Mosher for their work on this document.

## References

- Oakland Schools Intermediate School District Severity Rating Scale for the Hearing Impaired (no longer in use).
- Colorado Individualized Profile for DHH (no longer available).
- [Allegheny Intermediate Unit Deaf/Hard of Hearing Support Program](http://aiu3.net/Level2.aspx?id=1286)  
(aiu3.net/Level2.aspx?id=1286)
- [Minnesota Department of Education Resources for Assessment of Students Who are Deaf and Hard of Hearing, 2008](http://education.state.mn.us/MDE/dse/sped/cat/dhh/index.htm)  
(education.state.mn.us/MDE/dse/sped/cat/dhh/index.htm)
- [Michigan Early On Child Outcomes Handbook, 2009](http://goo.gl/YAyuVS)  
(goo.gl/YAyuVS)

## Resources

- [Michigan Quick Reference Assessment Guide, 2018](http://www.mdelio.org/deaf-hard-of-hearing)  
(www.mdelio.org/deaf-hard-of-hearing)
- [Wyoming Severity Rating Scale for Students with Significant DHH Support Needs, 2015](http://goo.gl/eY5AnX)  
(goo.gl/eY5AnX)
- [Colorado Communication Rating Scales, 2010](http://goo.gl/d1gDgq)  
(goo.gl/d1gDgq)

## Student Profile

| A. Factors for Consideration<br>(Matrix)      | Points |
|---|--------|
| <b>I. Audiological Factors</b>                |        |
| <b>II. Language/Vocabulary</b>                |        |
| <b>III. Functional Listening Skills</b>       |        |
| <b>IV. Use of Amplification Devices</b>       |        |
| <b>V. Academic/Vocational Performance</b>     |        |
| <b>VI. Personal Adjustment and Transition</b> |        |
| Total Points A                                |        |

| B. Contributing Factors<br>(Optional)   | +/- .5<br>Points |
|---|------------------|
| <b>Student Cooperation</b>              |                  |
| <b>Additional Supports</b>              |                  |
| <b>Change in Program</b>                |                  |
| <b>Attendance/Challenging Condition</b> |                  |
| <b>Others</b>                           |                  |
| Total Points B                          |                  |

| Educational Impact Score         | Total |
|----------------------------------|-------|
| Total A +/- Total B (Optional) = |       |

|                                       |       |              |
|---------------------------------------|-------|--------------|
| Student Name:                         |       |              |
| Birth Date:                           | Age:  | Hearing Age: |
| Grade:                                | Date: | Eligibility: |
| School:                               |       |              |
| District:                             |       |              |
| Teacher Consultant/Itinerant Teacher: |       |              |
| Notes:                                |       |              |

| Total | Impact Score<br>Ratings | Guideline for Considering Range of Service<br>(in minutes/week) |
|-------|-------------------------|---|
|       | 0-8                     | <b>0-14 minutes/week</b>  |
|       | 9-16                    | <b>9-20 minutes/week</b>  |
|       | 17-24                   | <b>21-37 minutes/week</b>                                       |
|       | 25-32                   | <b>35-50 minutes/week</b>                                       |

When calculating the total Educational Impact Score, round up to the next integer.

This is NOT to suggest that all students must be seen weekly. This is only a guideline for the individualized education program (IEP) team to consider.

## Educational Impact Matrix for Students who are Deaf or Hard of Hearing (DHH)

### I. Audiological Factors

Audiological factors (medical) include the student's type and level of hearing as well as listening discrimination scores, as reported by an audiologist and/or an otolaryngologist/otologist.

| 0 Points   | 2 Points   | 3 Points   | 4 Points   | Points (0-4) |
|--|--|--|--|--------------|
| <input type="checkbox"/> Bilateral slight to mild hearing loss: 16-40 dB PTA<br><input type="checkbox"/> Unilateral hearing loss<br><input type="checkbox"/> Speech discrimination of 85% or above without amplification | <input type="checkbox"/> Bilateral moderate hearing loss: 41-55 dB PTA<br><input type="checkbox"/> Occasional middle ear problems<br><input type="checkbox"/> Aided speech discrimination 85% or above | <input type="checkbox"/> Bilateral moderately severe hearing loss: 56-70 dB PTA<br><input type="checkbox"/> Fluctuating hearing loss<br><input type="checkbox"/> Aided speech discrimination 70-84%<br><input type="checkbox"/> Frequent, manageable middle ear problems | <input type="checkbox"/> Bilateral severe to profound hearing loss: above 70 dB PTA<br><input type="checkbox"/> History of progressive hearing loss<br><input type="checkbox"/> Aided speech discrimination less than 70%<br><input type="checkbox"/> Chronic middle ear problems; difficult to manage<br><input type="checkbox"/> Auditory neuropathy |              |

### II. Language/Vocabulary

Language/vocabulary includes the level of language and vocabulary skills acquired as measured by standardized assessments and/or English Language Arts Core Standards. It also includes student's use of language for interaction with teachers and peers.

| 0 Points   | 4 Points   | 6 Points  | 8 Points   | Points (0-8) |
|--|--|---|--|--------------|
| <input type="checkbox"/> At or above age/grade level on standardized assessment<br><input type="checkbox"/> English Language Arts (ELA) core standards for Reading, Writing, Listening, Speaking, and Language scores more than or equal to 80% on age/grade level through 5th grade conventions<br><input type="checkbox"/> Participates, initiates, and sustains classroom and social interactions | <input type="checkbox"/> One year/grade level below on standardized assessments<br><input type="checkbox"/> English Language Arts (ELA) core standards for Reading, Writing, Listening, Speaking, and Language scores 70-79% on age/grade level through 5th grade conventions<br><input type="checkbox"/> Intermittently participates in classroom and social interactions without prompts | <input type="checkbox"/> Two years/grade levels below on standardized assessments<br><input type="checkbox"/> English Language Arts (ELA) core standards for Reading, Writing, Listening, Speaking, and Language scores 60-69% on age/grade level through 5th grade conventions<br><input type="checkbox"/> Participates in classroom and/or social interactions with prompts | <input type="checkbox"/> Three years/grade levels below on standardized assessments<br><input type="checkbox"/> English Language Arts (ELA) core standards for Reading, Writing, Listening, Speaking, and Language scores less than or equal to 59% on age/grade level through 5th grade conventions.<br><input type="checkbox"/> Rarely participates in classroom and/or social interactions, with or without prompts |              |



### III. Functional Listening Skills

Functional listening skills includes the student's ability to use listening skills in a variety of settings.

| 0 Points   | 4 Points  | 6 Points  | 8 Points   | Points (0-8) |
|--|---|---|--|--------------|
| <input type="checkbox"/> Understands connected speech<br><input type="checkbox"/> Understands concepts and vocabulary<br><input type="checkbox"/> Gains information<br><input type="checkbox"/> Follows conversational topics easily | <input type="checkbox"/> Obtains class content given cues about topic<br><input type="checkbox"/> Understands classroom vocabulary with support<br><input type="checkbox"/> Understands class content in small groups with minimal background noise | <input type="checkbox"/> Responds appropriately to familiar words and phrases<br><input type="checkbox"/> Responds appropriately to familiar routines<br><input type="checkbox"/> Understands part of class content in small groups and a quiet setting | <input type="checkbox"/> Develops auditory skills within closed sets<br><input type="checkbox"/> Understands single words and short familiar phrases supported with speech reading<br><input type="checkbox"/> Recognizes environmental sounds |              |

### IV. Use of Amplification Devices

Amplification devices may include hearing aids, cochlear implants, personal FM, classroom system, or other hearing assistive technology (HAT).

| 0 Points  | 2 Points   | 3 Points   | 4 Points  | Points (0-4) |
|---|--|--|---|--------------|
| <input type="checkbox"/> Amplification devices not prescribed<br><input type="checkbox"/> Identified/amplified more than one year ago<br><input type="checkbox"/> Independent use and care<br><input type="checkbox"/> Reports functioning status of personal amplification devices and/or hearing assistive technology (HAT) with 90% accuracy<br><input type="checkbox"/> Uses amplification at home and school | <input type="checkbox"/> Limited knowledge of amplification devices<br><input type="checkbox"/> Identified and amplified in last 6-12 months<br><input type="checkbox"/> Needs occasional assistance with use and care<br><input type="checkbox"/> Reports functioning status of personal amplification devices and/or HAT with at least 75% accuracy<br><input type="checkbox"/> Uses amplification at school but not at home | <input type="checkbox"/> Declines use of amplification devices<br><input type="checkbox"/> Identified and amplified within last 6 months<br><input type="checkbox"/> Needs regular assistance with use and care<br><input type="checkbox"/> Reports functioning status of personal amplification devices and/or HAT with at least 50% accuracy<br><input type="checkbox"/> Uses amplification inconsistently at home and/or school | <input type="checkbox"/> Does not benefit from amplification devices<br><input type="checkbox"/> Identified and amplified within last 3 months<br><input type="checkbox"/> Needs daily assistance with amplification<br><input type="checkbox"/> Reports functioning status of personal amplification devices and/or HAT with at least 20% accuracy<br><input type="checkbox"/> Uses amplification at school less than 50% of day |              |



## V. Academic/Vocational Performance

Academic/vocational performance includes the level of academic progress and/or career-related learning as well as the student's need for accommodations or modifications.

| 0 Points  | 2 Points   | 3 Points   | 4 Points   | Points (0-4) |
|---|--|--|--|--------------|
| <input type="checkbox"/> Advanced/Proficient on state assessment for ELA/writing<br><br><input type="checkbox"/> State or district testing indicates no interference with educational and/or vocational performance<br><br><input type="checkbox"/> General education teacher reports development of skills necessary to meet 80% of core standards.<br><br><input type="checkbox"/> Has no IEP or 504 accommodations | <input type="checkbox"/> Partially Proficient on state assessment for ELA/writing<br><br><input type="checkbox"/> State or district testing indicates minimal impact on educational and or vocational performance<br><br><input type="checkbox"/> General education teacher reports development of skills necessary to meet 70% of core standards<br><br><input type="checkbox"/> Has IEP or 504 accommodations supporting listening, hearing, and access to instruction | <input type="checkbox"/> Partially Proficient/Not Proficient on state assessment for ELA/writing<br><br><input type="checkbox"/> State or district testing indicates moderate impact on educational and/or vocational performance<br><br><input type="checkbox"/> General education teacher reports development of skills necessary to meet 60% of core standards<br><br><input type="checkbox"/> Has content modifications and accommodations | <input type="checkbox"/> Not Proficient on state assessment for ELA/writing or on Alternate State Assessment<br><br><input type="checkbox"/> State or district testing indicates significant impact on educational and/or vocational performance<br><br><input type="checkbox"/> General education teacher reports development of skills necessary to meet 50% of core standards<br><br><input type="checkbox"/> Has significant content modifications and numerous accommodations |              |

## VI. Personal Adjustment and Transition

Personal adjustment and transition includes the level of self advocacy for technology and/or accommodations as well as skills necessary for transitions including graduation and/or change of levels.

| 0 Points  | 2 Points   | 3 Points  | 4 Points   | Points (0-4) |
|---|--|---|--|--------------|
| <input type="checkbox"/> Advocates for technology and accommodations independently<br><br><input type="checkbox"/> Knows and uses resources for access in familiar and novel settings | <input type="checkbox"/> Advocates for technology and accommodations with minimal support<br><br><input type="checkbox"/> Knows and uses resources for access in familiar settings | <input type="checkbox"/> Advocates for technology or accommodations 1-2 times per week with prompts<br><br><input type="checkbox"/> Uses few resources for access in current setting and needs support to adjust to new setting | <input type="checkbox"/> Does not advocate for self with or without prompts<br><br><input type="checkbox"/> Needs information and training for access in new setting |              |