This short presentation will cover:

- What is SIFTER?
- How is SIFTER used?
- What could I do next?
- Any questions?

**What is SIFTER?**

The Screening Instrument for Targeting Educational Risk (SIFTER) was devised by Karen L. Anderson PH.D and published in 1989.

Dr. Karen Anderson (currently of Florida State University, USA) has specialized in Paediatric and Educational Audiology for over 20 years.

SIFTER is a subjective questionnaire and a very useful functional assessment tool. The purpose of the SIFTER is to identify and track hearing impaired students who might be educationally at risk by determining functional performance in comparison to their normal hearing peers. Functional performance would be defined as behaviours that contribute to the success of a student within the mainstream classroom (Anderson 2004).

The SIFTER is an immediate, user-friendly way to collect data in a variety of skill areas identified as essential for success in the classroom.

SIFTER is a series of three age-related educational screening inventories designed to indicate children with hearing loss who may be experiencing educational difficulties as a result of their hearing impairment.

The Screening Instrument for Targeting Educational Risk has three versions:

- Preschool SIFTER
- SIFTER (Primary) [These are provided with the handout.]
- Secondary SIFTER

Each SIFTER has three questions assessing functional performance in each of five content areas:

- Academics
- Attention
- Communication
- Class Participation
- School Behaviour

**How is SIFTER used?**

SIFTER has a scoring chart that will help the user compare how an individual performed in comparison to a large pool of young people with normal and impaired hearing whose teachers also completed the instrument.

The responses are plotted on a chart which indicates *pass, marginal or fail* for each of the five content areas. The SIFTER has been field tested and shown to have good content and score reliability (Anderson, 1989).

If a child fails in a specific area, they should be referred for further evaluation.
Scoring Example: The Secondary Sifter

In this example the data has been collected and statistical values have been shown.

### Screening Instrument for Targeting Educational Risk in Secondary Students

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</table>

Sam has not passed the first four content areas and has a marginal score in the last section.

Subsequent audiometry revealed deterioration in his conductive hearing loss.

Sam was referred to ENT and his teachers made aware of his circumstances.
The SIFTER has proved very valuable for evaluating ‘before and after’ scenarios to demonstrate the benefits of the introduction of support such as

- Hearing aid
- Cochlear implant
- FM radio aid system
- Soundfield system

“Although originally intended as a tool to help identify students at risk for listening problems, it has proven to be useful in establishing efficacy of interventions in the classroom. When used in a pre-test/post-test experimental design, any change in student performance as a result of classroom acoustic intervention can be documented.” Tharpe et al. (2003)

SIFTER has been used in a number of peer-reviewed academic studies

- Dancer et al. (1995) ~ unilateral hearing loss
- Bess et al. (1998) ~ minimal sensorineural hearing loss
- Tharpe et al. (2003) ~ FM systems
- Crandell et al. (2004) ~ room acoustics
- Most (2004) ~ effects of degree and type of hearing loss

There is a SIFTER ‘User’s Manual’ (Anderson 2004) that provides background information on the process used to develop the scale, the data obtained via field testing, and the scoring grid development process.

“SIFTER should only be used as a guide to teacher’s or teams and should not be used as the only criteria for when a child should be referred for additional services, or receive specialized support, modifications, or hearing technology…It should be used as only one piece of information among a variety of opinions, experiences, and collateral information that are relied upon when the functional status of a student with hearing loss is considered.” (Anderson 2004)

What could I do next?

Anderson developed an extension of the SIFTER, called the Listening Inventories for Education (LIFE) which was adapted for UK use as an Individual Hearing Profile (IHP) by the Educational Audiologist David Canning (LIFE-UK IHP 1998). LIFE-UK IHP retains a teacher self-report questionnaire, but also adds a self-report questionnaire that is completed by the student.

Copies of the SIFTER versions, a user manual, and the LIFE-UK IHP may be downloaded from David Canning (the Ear Institute, School of Audiology, University College London) at the website http://www.hear2learn.com/

Any questions?

We would be happy to answer any queries; the Audiology Committee can be contacted at audiology@batod.org.uk

Many thanks, Stuart Whyte BATOD Audiology Chair.
References


The above child is suspect for hearing problems which may affect his/her ability to listen, pay attention, develop language, follow teacher instruction and learn normally. This rating scale has been designed to sift out children who are at risk for educational delay and who may need further evaluation. Based on your knowledge of this child, circle the number that best represents his/her behavior. If the child is a member of a class that has students with special needs, comparisons should be made to normal learning classmates or normal developmental milestones. Please share additional comments about the child on the reverse side of this form.

<table>
<thead>
<tr>
<th>Question</th>
<th>PRE-Academics</th>
<th>Attention</th>
<th>Communication</th>
<th>Participation</th>
<th>Social Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How well does the child understand basic concepts when compared to classmates (e.g., colors, shapes, etc.)?</td>
<td>ABOVE 5, AVERAGE 4, BELOW 3</td>
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<tr>
<td>2. How often is the child able to follow two-part directions?</td>
<td>ALWAYS 5</td>
<td>FREQUENTLY 4, SELDOM 3</td>
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<tr>
<td>3. How well does the child participate in group activities when compared to classmates (e.g., calendar, sharing)?</td>
<td>ABOVE 5, AVERAGE 4, BELOW 3</td>
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<tr>
<td>4. How distractible is the child in comparison to his/her classmates during large group activities?</td>
<td>SELDOM 5, OCCASIONALFREQUENT 4, FREQUENT 3</td>
<td></td>
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<tr>
<td>5. What is the child's attention span in comparison to classmates?</td>
<td>LONGER 5</td>
<td>AVERAGE 4, SHORTER 3</td>
<td></td>
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<tr>
<td>6. How well does the child pay attention during a small group activity or story time?</td>
<td>ABOVE 5, AVERAGE 4, BELOW 3</td>
<td></td>
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<tr>
<td>7. How does the child's vocabulary and word usage skills compare to classmates?</td>
<td>ABOVE 5, AVERAGE 4, BELOW 3</td>
<td></td>
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<tr>
<td>8. How proficient is the child at relating an event when compared to classmates?</td>
<td>ABOVE 5, AVERAGE 4, BELOW 3</td>
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<tr>
<td>9. How does the child's overall speech intelligibility compare to classmates (i.e., production of speech sounds)?</td>
<td>ABOVE 5, AVERAGE 4, BELOW 3</td>
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<tr>
<td>10. How often does the child answer questions appropriately (verbal or signed)?</td>
<td>ALMOST 5, ALWAYS FREQUENTLY 4, SELDOM 3</td>
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<tr>
<td>11. How often does the child share information during group discussions?</td>
<td>ALWAYS 5</td>
<td>FREQUENTLY 4, SELDOM 3</td>
<td></td>
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<tr>
<td>12. How often does the child participate with classmates in group activities or group play?</td>
<td>ALWAYS 5</td>
<td>FREQUENTLY 4, SELDOM 3</td>
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<tr>
<td>13. Does the child play in socially acceptable ways (i.e., turn taking, sharing)?</td>
<td>ALMOST 5</td>
<td>FREQUENTLY 4, SELDOM 3</td>
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<tr>
<td>14. How proficient is the child at using verbal language or sign language to communicate effectively with classmates (e.g., asking to play with another child's toy)?</td>
<td>ALWAYS 5, FREQUENTLY 4, SELDOM 3</td>
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<td>15. How often does the child become frustrated, sometimes to the point of losing emotional control?</td>
<td>NEVER 5, SELDOM 4, FREQUENTLY 3</td>
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</tbody>
</table>
TEACHER COMMENTS: (frequent absences, health problems, other problems or handicaps in addition to hearing?)

The Preschool S.I.F.T.E.R. is a SCREENING TOOL ONLY. The primary goal of the Preschool S.I.F.T.E.R. is to identify those children who are at-risk for developmental or educational problems due to hearing problems and who merit further observation and investigation. Analysis has revealed that two factors, expressive communication and socially appropriate behavior, discriminate children who are normal from those who are at-risk. The greater the degree of hearing problem, the greater the impact on these two factors and the higher the validity of this screening measure. If a child is found to be at-risk then the examiner is encouraged to calculate the total score in each of the five content areas. Analysis of the content area score may assist in developing a profile of the child’s strengths and special needs. The profile may prove beneficial in determining appropriate areas for evaluation and developing an individual program for the child.

SCORING
There are two steps to the scoring process. First, enter scores for each of the indicated questions in the spaces provided and sum the total of the 6 questions for the expressive communication factor and then the 4 questions for the socially appropriate behavior factor. If the child's scores fall into the At-Risk category for either or both of these factors, then sum the 3 questions in each content area to develop a profile of the child's strengths and potential areas of need.

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SCORING
There are two steps to the scoring process. First, enter scores for each of the indicated questions in the spaces provided and sum the total of the 6 questions for the expressive communication factor and then the 4 questions for the socially appropriate behavior factor. If the child's scores fall into the At-Risk category for either or both of these factors, then sum the 3 questions in each content area to develop a profile of the child's strengths and potential areas of need.
The above child is suspect for hearing problems which may or may not be affecting his/her school performance. This rating scale has been designed to sift out students who are educationally at risk possibly as a result of hearing problems. Based on your knowledge from observations of this student, circle the number best representing his/her behavior. After answering the questions, please record any comments about the student in the space provided on the reverse side.

1. What is your estimate of the student’s class standing in comparison of that of his/her classmates?  
   - UPPER 5
   - MIDDLE 4
   - LOWER 3
   - MUCH LOWER 2
   - MUCH HIGHER 1

2. How does the student’s achievement compare to your estimation of her/her potential?  
   - EQUAL 5
   - LOWER 4
   - MUCH LOWER 3
   - MUCH HIGHER 2
   - MUCH LOWER 1

3. What is the student’s reading level, reading ability group or reading readiness group in the classroom (e.g., a student with average reading ability performs in the middle group)?  
   - UPPER 5
   - MIDDLE 4
   - LOWER 3
   - MUCH LOWER 2

4. How distractible is the student in comparison to his/her classmates?  
   - NOT VERY 5
   - AVERAGE 4
   - SHORTER 3
   - LONGER 2
   - MUCH LONGER 1

5. What is the student’s attention span in comparison to that of his/her classmates?  
   - NEVER 5
   - OCCASIONALLY 4
   - FREQUENTLY 3
   - ALWAYS 2
   - USUALLY 1

6. How often does the student hesitate or become confused when responding to oral directions (e.g., "Turn to page . . .")?  
   - NEVER 5
   - OCCASIONALLY 4
   - FREQUENTLY 3
   - ALWAYS 2
   - NEVER 1

7. How does the student's comprehension compare to the average understanding ability of her/her classmates?  
   - ABOVE 5
   - AVERAGE 4
   - BELOW 3
   - MUCH ABOVE 2
   - MUCH BELOW 1

8. How does the student's vocabulary and word usage skills compare with those of other students in his/her age group?  
   - ABOVE 5
   - AVERAGE 4
   - BELOW 3
   - MUCH ABOVE 2
   - MUCH BELOW 1

9. How proficient is the student at telling a story or relating happenings from home when compared to classmates?  
   - ABOVE 5
   - AVERAGE 4
   - BELOW 3
   - MUCH ABOVE 2
   - MUCH BELOW 1

10. How often does the student volunteer information to class discussions or in answer to teacher questions?  
    - FREQUENTLY 5
    - OCCASIONALLY 4
    - NEVER 3
    - ALWAYS 2
    - USUALLY 1

11. With what frequency does the student complete his/her class and homework assignments within the time allocated?  
    - ALWAYS 5
    - USUALLY 4
    - Seldom 3
    - NEVER 2
    - USUALLY 1

12. After instruction, does the student have difficulty starting to work (looks at other students working or asks for help)?  
    - NEVER 5
    - OCCASIONALLY 4
    - FREQUENTLY 3
    - ALWAYS 2
    - NEVER 1

13. Does the student demonstrate any behaviors that seem unusual or inappropriate when compared to other students?  
    - NEVER 5
    - OCCASIONALLY 4
    - FREQUENTLY 3
    - ALWAYS 2
    - NEVER 1

14. Does the student become frustrated easily, sometimes to the point of losing emotional control?  
    - NEVER 5
    - OCCASIONALLY 4
    - FREQUENTLY 3
    - ALWAYS 2
    - NEVER 1

15. In general, how would you rank the student's relationship with peers (ability to get along with others)?  
    - GOOD 5
    - AVERAGE 4
    - POOR 3
    - ABOVE 2
    - BELOW 1
**TEACHER COMMENTS**

Has this child repeated a grade, had frequent absences or experienced health problems (including ear infections and colds)? Has the student received, or is he/she now receiving, special services? Does the child have any other health problems that may be pertinent to his/her educational functioning?

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**The S.I.F.T.E.R. is a SCREENING TOOL ONLY**

Any student failing this screening in a content area as determined on the scoring grid below should be considered for further assessment, depending on his/her individual needs as per school district criteria. For example, failing in the Academics area suggests an educational assessment, in the Communication area a speech-language assessment, and in the School Behavior area an assessment by a psychologist or a social worker. Failing in the Attention and/or Class Participation area in combination with other areas may suggest an evaluation by an educational audiologist. Children placed in the marginal area are at risk for failing and should be monitored or considered for assessment depending upon additional information.

**SCORING**

Sum the responses to the three questions in each content area and record in the appropriate box on the reverse side and under Total Score below. Place an X on the number that corresponds most closely with the content area score (e.g., if a teacher circled 3, 4 and 2 for the questions in the Academics area, an X would be placed on the number 9 across from the Academics content area). Connect the X's to make a profile.

<table>
<thead>
<tr>
<th>CONTENT AREA</th>
<th>TOTAL SCORE</th>
<th>PASS</th>
<th>MARGINAL</th>
<th>FAIL</th>
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<tbody>
<tr>
<td>ACADEMICS</td>
<td>15 14 13 12 11 10</td>
<td>9 8</td>
<td>7 6 5 4 3</td>
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<tr>
<td>ATTENTION</td>
<td>15 14 13 12 11 10 9</td>
<td>8 7</td>
<td>6 5 4 3</td>
<td></td>
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<tr>
<td>COMMUNICATION</td>
<td>15 14 13 12 11 10 9</td>
<td>10 9 8</td>
<td>7 6 5 4 3</td>
<td></td>
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<tr>
<td>CLASS PARTICIPATION</td>
<td>15 14 13 12 11 10 9</td>
<td>8 7</td>
<td>6 5 4 3</td>
<td></td>
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<tr>
<td>SOCIAL BEHAVIOR</td>
<td>15 14 13 12 11 10 9</td>
<td>9 8</td>
<td>7 6 5 4 3</td>
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# Secondary S.I.F.T.E.R.

**Screening Instrument For Targeting Educational Risk in Secondary Students**

By Karen L. Anderson, Ph.D.

This scale has been designed to screen for educational risk in secondary students that have hearing loss. The effects of hearing impairment are frequently invisible. Regular monitoring of performance can assist in determining if a student is successfully accessing verbal instruction in the typical classroom. Based on your observations and familiarity with this student, circle the number that best represents his or her behavior.

### Student’s Information

- **Student’s Name:** __________________________
- **Grade:** ________
- **School:** __________________________
- **Student typically uses amplification?** Yes No
- **Type:**
- **Class:** __________________________
- **Teacher:** __________________________
- **Date:** ________

### Academics

<table>
<thead>
<tr>
<th>1. How does the student’s general foundation skills (i.e., reading level) compare to the difficulty of work expected in class?</th>
<th>Above</th>
<th>Average</th>
<th>Below</th>
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### Attention

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<tr>
<th>2. How does the student’s ability to summarize and draw conclusions about information presented in class compare to his/her class peers?</th>
<th>Above</th>
<th>Average</th>
<th>Below</th>
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### Communication

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<thead>
<tr>
<th>3. How does the student’s demonstration of academic skill growth compare to class peers/expectations?</th>
<th>Above</th>
<th>Average</th>
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### School

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<thead>
<tr>
<th>1. When called upon and asked a question, how often does the student appear to have been attending to teacher instruction? (he/she appears to understand the basis of the question)</th>
<th>Always</th>
<th>Often</th>
<th>Rarely</th>
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### Behavior

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<tr>
<th>2. How successful is the student at avoiding distraction by noises, visual distractions, personal items, or activities unrelated to class instruction?</th>
<th>Always</th>
<th>Often</th>
<th>Rarely</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>3. How does the student’s attention to detail compare to class peers/expectations (avoiding careless mistakes)?</th>
<th>Above</th>
<th>Average</th>
<th>Below</th>
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<tr>
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<td>2</td>
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## TEACHER COMMENTS

Has the student had frequent absences or experienced health problems? Does the student receive special services? Does the student have any problems that may be pertinent to his/her educational performance?

## THE SECONDARY SIFTER IS A SCREENING TOOL ONLY

Students scoring in the failing range have scored in a manner consistent with students that scored at greater than one standard deviation below the mean compared to a group of 97 secondary students (40 with normal hearing, 57 with hearing impairment). Students scoring in the marginal range have scored similar to test group students scoring below the mean and –1 standard deviation. Scores falling within both PASS and MARGINAL range occur within the broad range of normal performance as compared to the test group. Students scoring in the pass range have scored in a manner consistent to those in the test group who were at or above the group mean. Any student failing this screening in a content area as determined on the scoring grid below should be considered for educational accommodations or services specific to improving the student’s access to instruction and success in the regular classroom.

## SCORING

Sum the responses to the three questions in each content area, and record in the appropriate box under Total Score below. Place an X on the number that corresponds most closely with each content area score (e.g., if a teacher circled a 3, 4, and 2 for the questions in the Academics area, an X would be placed on the number 9 across from the Academics content area). Connect the X’s to make a profile.

<table>
<thead>
<tr>
<th>CONTENT AREA</th>
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<tr>
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<td>13 12 11 10</td>
<td>9 8</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>ATTENTION</td>
<td>15 14</td>
<td>13 12 11 10</td>
<td>9 8 7</td>
<td>6 5 4 3 2 1</td>
</tr>
<tr>
<td>COMMUNICATION</td>
<td>15 14 13</td>
<td>12 11 10</td>
<td>9 8</td>
<td>7 6 5 4 3 2 1</td>
</tr>
<tr>
<td>CLASS PARTICIPATION</td>
<td>15 14 13</td>
<td>12 11 10</td>
<td>8 7</td>
<td>6 5 4 3 2 1</td>
</tr>
<tr>
<td>SCHOOL BEHAVIOR</td>
<td>15 14 13</td>
<td>12 11 11</td>
<td>10 9</td>
<td>8 7 6 5 4 3 2 1</td>
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