<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
<th>Description</th>
<th>ASHA Area</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artifact 1</td>
<td>Summer 2007</td>
<td>SPLH 764 Speech Aerodynamics final lab project</td>
<td>Phonation/Resonance</td>
<td>Student received 60/60 on the project; her performance was accurate and thorough, reflecting solid knowledge of</td>
</tr>
<tr>
<td>Artifact 2</td>
<td>Summer 2007</td>
<td>SPLH 864 Clinic performance evaluation</td>
<td>Social Language</td>
<td>Student received an &quot;A&quot; in clinic for the summer semester. Her practicum supervisor noted this student's ability to incorporate individual client needs into group therapy activities.</td>
</tr>
<tr>
<td>Artifact 3</td>
<td>Fall 2007</td>
<td>SPLH 860 Case Study evaluation assignment</td>
<td>Foundation</td>
<td>Student received 20/20 on this assignment; reflecting strong clinical report writing skills.</td>
</tr>
<tr>
<td>Artifact 4</td>
<td>Fall 2007</td>
<td>SPLH 864 Clinic performance evaluation</td>
<td>Articulation/Phonology</td>
<td>Student received an &quot;A&quot; in clinic for the fall semester. Her practicum supervisor described her performance as &quot;exceptional.&quot;</td>
</tr>
<tr>
<td>Student Evaluation</td>
<td>Spring 2008</td>
<td>SPLH 844 School Age Language Disorders Mid-term class project</td>
<td>Language Disorders</td>
<td>Student accurately determines diagnosis and makes appropriate recommendations for this case study assignment. Writing skills are excellent.</td>
</tr>
<tr>
<td>Advisor Evaluation</td>
<td>Spring 2008</td>
<td>Review of artifacts 1-4 &amp; student evaluation</td>
<td>Formative</td>
<td>I agree with this student's self evaluation place this student in a school setting for 1 school district that incorporates a dynamic school setting.</td>
</tr>
<tr>
<td>Plan of Action</td>
<td>Spring 2008</td>
<td>Meeting with student on 3/31/08</td>
<td>Formative</td>
<td>Report agreed upon plan of action for Y2</td>
</tr>
<tr>
<td>Weaknesses</td>
<td></td>
<td></td>
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<td></td>
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<td>------------</td>
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<tr>
<td>None</td>
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<td>none noted</td>
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</tr>
</tbody>
</table>

...of strengths and weaknesses. We will gain field study experience, using a basic assessment process in the elementary phase of program.
<table>
<thead>
<tr>
<th>Artifact 5</th>
<th>Summer 2008</th>
<th>SPLH 899 Thesis review of the literature and research plan</th>
<th>Language Disorders</th>
<th>Well written review of literature and research methods section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artifact 6</td>
<td>Summer 2008</td>
<td>SPLH 899 Prospectus</td>
<td>Language Disorders</td>
<td>Excellent presentation; able to answer questions of thesis committee; flexible with suggested modifications</td>
</tr>
<tr>
<td>Artifact 7</td>
<td>Fall 2008</td>
<td>pending</td>
<td>from grid</td>
<td>Summarize instructor comments &amp; own observations</td>
</tr>
<tr>
<td>Artifact 8</td>
<td>Fall 2008</td>
<td>pending</td>
<td>from grid</td>
<td>Summarize instructor comments &amp; own observations</td>
</tr>
<tr>
<td>Artifact 9</td>
<td>Fall 2008</td>
<td>course + description of artifact</td>
<td>from grid</td>
<td>Summarize instructor comments &amp; own observations</td>
</tr>
<tr>
<td>Student Evaluation</td>
<td>Fall 2008</td>
<td>Completed Dx &amp; Tx rubric</td>
<td>Summative</td>
<td>Summarize student comments</td>
</tr>
<tr>
<td>Advisor Evaluation</td>
<td>Fall 2008</td>
<td>Review of ALL artifacts &amp; student evaluation</td>
<td>Summative</td>
<td>Comment on whether you agree/disagree with instructor's observations. Comment on whether progression appropriate</td>
</tr>
<tr>
<td>Plan of Action</td>
<td>Fall 2008</td>
<td>Meeting with student on XX</td>
<td>Summative</td>
<td>Report agreed upon plan of action for completion</td>
</tr>
<tr>
<td>none noted</td>
<td></td>
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<tr>
<td>-----------</td>
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<tr>
<td>none noted</td>
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<tr>
<td>Summarize instructor comments &amp; own observations</td>
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<tr>
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<td>Summarize instructor comments &amp; own observations</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Summarize student comments</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

with student evaluation & add other, reass seems appropriate for stage in continuing education post graduation
File A

SPLH 764 Speech Aerodynamics - LAB Project Final

Completion of this 60-point lab project constitutes the final assessment for this seminar course. Please answer the following questions and send a copy of this file to smbarlow@ku.edu or you may turn in a hardcopy to Dr. Barlow's mailbox in SPLH no later than July 27th @ NOON.

1. Launch AEROWIN RT on your individual workstation and open the data file 'LAB Project Final.' Patient is a male adult, age 28, 10-year history of smoking (2 packs/day), exhibiting some signs of dyskinesia in the distal musculature.
   a. List the calibration scale factors for Pressure and Flow.
      i. PRESSURE Cal 10 cm H2O = 4.582 V (2 pts)
      ii. FLOW Cal 24 liters/minute = 2.059 V (2 pts)
         (460 cc/sec)

2. Provide an assessment of nasal cavity resistance. How do the measured values given in your data file compare to expected or 'normal values?' (6 pts)

   In regard to rest breathing and deep breathing, the patient's nasal cavity resistance values fall within the 2-3 ohm range, which is considered 'normal.' In regard to MA-MA-MA, toward the end of the sample, resistance values on /m/ are within the 2-3 ohm range, and resistance approaches 0 ohms on /a/, which is to be expected. In regard to /m/ sustained, nasal cavity resistance varies between nearly 2 ohms to nearly 3 ohms, which is 'normal.' So, overall, nasal cavity resistance in this patient seems pretty normal.

3. Provide an assessment of the aerodynamic variables of velopharyngeal port function for each test item. (2 pts each speech item)

   Pa-pa-pa In regard to the first sample, resistance during /p/ is very high (ie, 10,000 ohms), indicating good VP closure. Pressure is a little high on /p/ (ie, 10.56 cm H2O on average), but pressure can vary a good deal among normal individuals. Nasal flow on /p/ seems pretty negligible, averaging -6.03 cc/sec. In regard to the second sample, resistance during /p/ is still very high, and pressure is higher (ie, 11.11 cm H2O on average) than in the first sample. Flow on /p/ is even smaller, averaging -3.2 cc/sec.

   Pup-pup In the first sample, the first production of puppy has fairly normal values. Pressure is still quite high (13.16 cm H2O), and resistance varies from 600-10,000 ohms. In the second production; however, there is no resistance and virtually no pressure or flow. In the second sampling of puppy, resistance values are pretty normal (VP closure seems tight), but pressure is very high, reaching levels as great as 21 cm H2O. Airflow is pretty low, averaging 6.20 cc/sec.
Flow and pressure (on release) for the LR tasks were at least double the normal ranges with average flow ranging from 677.07-930 cc/sec and average pressure ranging from 14.89-16.14 cm H2O. Laryngeal resistance values, on the other hand, were below the normal range of 25-30 ohms up until the last sample in which the resistance value was 28.86 ohms. On earlier samples, resistance was as low as 18.15 ohms. In the case of the last sample, the speaker's rate was highly variable, as though he was making a conscious effort to alter his speech. In general, it seems as though the patient tries to compensate for poor resistance by creating a great deal of pressure and moving a great deal of air.

7. What is your clinical recommendation? (10 pts)

It appears as though the client may benefit from biofeedback using Aerowin software. Judging from the last PA token of laryngeal resistance, the client seems to be able to consciously alter his speech. Of course, some of the variations in the client's speech are probably due to his dyskinesia and may not be alterable with biofeedback. In a situation in which the client can actually be seen and talked with, it would be possible to clarify whether variations in speech are intentional or not. The client's perpetually high pressure is concerning and may be remedied with biofeedback; however, the increased pressure may be a compensatory strategy. Considering the client's smoking history and low laryngeal resistance, I would be concerned about swelling of the folds, as in Reinke's Edema. Endoscopy would be helpful in determining the existence of such swelling. Regardless, I would definitely recommend that the client stop smoking. Additional irritation of the vocal folds by smoking is only going to worsen the client's speech, and, after stopping smoking, the client's voice will probably improve some. The client's instances of hypernasality are also a concern. One way to decrease hypernasality might be to help the client to decrease his speaking rate so that he can achieve tighter VP closure.
In the first sample, the resistance values on /p/ range from 500-700 ohms, which is kind of low. Meanwhile, pressure on /p/ ranges from 16-20 cm H2O, which is very high. Flow is high as well, averaging 20.83 cc/sec. In the second sample, the resistance values on each /p/ range from 500-10,000 ohms, which demonstrates a great deal of variability in VP closure. Pressure ranges from 13-19 cm H2O. Nasal flow still seems kind of high, averaging 16.88 cc/sec.

In the first sample, nasal flow on the second /p/ in pamper is very high, ranging from 150-900 cc/sec. VP resistance, on average, is very low (ie, 197.83 ohms) while pressure on the first /p/ in pamper is around 14 cm H2O, and pressure on the second /p/ in pamper ranges from 8.5-10.5 cm H2O, which is closer to the normal range. In the second sample, on the first production of ‘pamper,’ the second /p/ has very high nasal flow, very low resistance and fairly average pressure. On the second production, the second /p/ has slightly higher pressure, good resistance (ie, 10,000 ohms) and low flow (-5.3 cc/sec). Some nasal airflow on the second /p/ in pamper is to be expected because of nasal assimilation; however, nasal airflow seemed excessive in this patient, particularly on the very first production of ‘pamper,’ perhaps due to the patient’s dyskinesia.

On average, for both samples, air pressure is high (13-14 cm H2O), airflow is a little high (10-13 cc/sec), and resistance is acceptable (in the 3,000 ohm range).


The second PA-PA-PA sample of the velopharyngeal tokens is faster than the first PA-PA-PA sample. The speaker produces about 3 PAs per second in the first sample and about 3.5 PAs per second in the second sample. In the sample with a faster speech rate, resistance is lower (averaging 6,601.51 ohms) than in the sample with a slower speech rate (averaging 7,162.45 ohms). This is because even normal speakers have poorer VP closure as they increase their speaking rate. When speaking rate is increased, the rate at which the VP must close and open is also increased. This makes tight closure more difficult to achieve.


VP resistance seems to decrease, on average, as a function of utterance complexity. This is because the more complex the utterance, the greater are the demands on the VP and the harder time the patient has in achieving tight VP closure. More coarticulation can be seen in more complex utterances. Factors such as vowel type in an utterance affect VP resistance.

6. Interpret the results obtained for laryngeal airway resistance. (10 pts)
As a graduate clinician participating in the Sertoma-Schiefelbusch Communication Camp, I worked primarily with three children ages 9-10 years. One of these children had Down's syndrome, another had a diagnosis of autism, and the third had cerebral palsy. All three had both social and expressive language goals, including participating in all camp activities, initiating with peers, responding appropriately, and using complete sentences.
<table>
<thead>
<tr>
<th>RESPONSIVE TEACHING STRATEGIES</th>
<th>USED? YES/NO</th>
<th>EXAMPLES/NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives camper many opportunities to initiate interactions with objects and people in camp activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes camper's individual styles and characteristics into consideration.</td>
<td>Absolutely !!!</td>
<td></td>
</tr>
<tr>
<td>Responds to camper's initiations in ways that maintain what he/she is doing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourages camper to build upon his/her ongoing communicative behavior with objects and people.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourages camper to use behaviors that are generally acceptable for the situation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives the camper many chances to produce and practice new communication skills.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses facilitative language strategies: open-ended questions, models, expansions, recasts etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses visual supports to enhance learning and participation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gets at camper's eye level to communicate.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using the report template provided (under documents on BB), write up the case history information. You should use the information provided to you in class. Please double-space your information.

It is important to write the information sequentially; refer to the report template for assistance. Take care to check your document for spelling and/or grammatical errors. Sometimes it helps to read your work aloud as an additional means of editing your own writing. Refer to the SPLH 860 homework grading rubric to see if your document meets expectations.

You participated in a group discussion about this information during class. Feel free to use your notes taken during this discussion. However, I expect your written report sections to be completed individually; do not complete this activity with other group members. Remember, this is a chance for you to practice YOUR professional writing skills.

Using the new information provided in class, update the case history section of your report. Develop at least 2-3 diagnostic questions (stated in the referral section of your report) that you plan to answer during your diagnostic assessment. Under the TEST PROCEDURES heading, please list and describe each of the tools that you plan to use during your assessment. Please double space your information.

Take care to check your document for spelling and/or grammatical errors. Sometimes it helps to read your work aloud as an additional means of editing your own writing. Refer to the SPLH 860 homework grading rubric to see if your document meets expectations.

You participated in a group discussion about this information during class. Feel free to use your notes taken during this discussion. However, I expect your written report sections to be completed individually; do not complete this activity with other group members. Remember, this is a chance for you to practice YOUR professional writing skills.
SPLH 860 Case Study Homework Assignment

#5

Using the report template provided (under documents on BB), write up the RECOMMENDATIONS section of your report. You should use the information provided to you in class. Please double-space your information. If no action is required, state as such and explain. If action is warranted, list the recommendations, justifying each and detailing implementation (who is responsible, when, where, etc.). For therapy recommendations, state probably frequency, duration. If these recommendations do not represent the most preferred action in this case, describe what qualifications have been introduced and why (e.g., financial constraints, transportation limits, etc.). Please note who should receive copies of this report under the cc: section.

It is important to write the information sequentially AND in a prioritized fashion; refer to the report template for assistance. Take care to check your document for spelling and/or grammatical errors. Sometimes it helps to read your work aloud as an additional means of editing your own writing. Refer to the SPLH 860 homework grading rubric to see if your document meets expectations.

You participated in a group discussion about this information during class. Feel free to use your notes taken during this discussion. However, I expect your written report sections to be completed individually; do not complete this activity with other group members. Remember, this is a chance for you to practice YOUR professional writing skills.

SPLH 860 Case Study Homework Assignment

#6

Using the edited sections of your first five assignments, re-write the final copy of the evaluation report for your case study. Please double-space your information. You should write this version in final form. This is your chance to walk through the report one more time, looking for missed grammatical and/or spelling errors. If you read it aloud, you may find sentences/paragraphs that are too wordy or confusing to the reader. You may find that you did not include enough information to justify your conclusions. Refer to the SPLH 860 homework grading rubric to see if your document meets expectations.

You participated in a group discussion about this information during class. Feel free to use your notes taken during this discussion. However, I expect your final written report to be completed individually; do not complete this activity with other group members. Remember, this is a chance for you to practice YOUR professional writing skills.
SPEECH-LANGUAGE
EVALUATION SUMMARY

NAME: Abigail Baker
KUMC#: 1234567
GENDER: female
DOB: 5/10/00
DOE: 8/10/07
ADDRESS: 123 ABC Road
Shawnee Mission, Kansas 66204
PHONE: 913-123-4567
RESP. PARTY: Susan and James Baker
RELATIONSHIP: Parents

REFERRAL

Abigail Baker, a 7-year, 3-month old female, was referred to the University of Kansas Medical Center Hearing and Speech Department for a comprehensive speech-language evaluation by her family physician, Dr. Jones. Abigail’s parents stated they were concerned because of her difficulty following directions, communicating her thoughts sequentially, paying attention and performing academically. In addition, Abigail’s parents stated that she has some behavior problems, including task refusal, inattention and attention-getting behaviors. Abigail’s teacher, Mrs. Louis, stated that she has difficulty with oral and written language.

Specific to this evaluation, the following questions are posed:

1. Does Abigail have a receptive and/or expressive language disorder?

2. Does Abigail have deficits in all areas of language, including syntax, semantics, pragmatics, phonology, and morphology?
3. What environments enhance Abigail’s communication abilities?

**HISTORY**

**Communication Skills**

At the time of the evaluation, Abigail lived with her adoptive parents and two adopted siblings, ages six and two, in Shawnee Mission, Kansas. Abigail recently was evaluated by a pediatric audiologist and found to have hearing within normal limits. Abigail had not received any speech-language intervention in the past.

When Abigail was adopted from Russia at 30 months of age, she was saying 10-20 single words in Russian, which is significantly fewer words than typically expected of children that age. After her adoption, Abigail was exposed only to English. Abigail’s parents reported that she currently speaks in short sentences that often contain many grammatical errors.

**Associated Factors**

Very little information about Abigail’s developmental history prior to her adoption is available. Abigail has a history of numerous upper respiratory infections and episodes of otitis media (fluid in the middle ear). Abigail has a medical diagnosis of Attention-Deficit Hyperactivity Disorder (ADHD): combined type, with significant inattention and impulsivity, treated with 10 mg of Adderall daily; however, her parents were considering changing her medication due to her recent weight loss and difficulty going to sleep at night.

A cognitive evaluation of Abigail was completed, and her non-verbal intelligence score (90) was in the lower end of the average range while her verbal intelligence score (75) was in the below
average range. At the time of this evaluation, Abigail attended the first grade at a private school. Her teacher, Mrs. Louis, reported that Abigail has problems with oral and written language and dislikes written language activities. In addition, Mrs. Louis reported that Abigail is most attentive and least impulsive before lunchtime and that she likes to be the center of attention and is socially immature. According to Mrs. Louis, Abigail currently is in a pre-primer for reading and requires individualized instruction; she has average math computation skills but difficulty with story problems. Additionally, according to Mrs. Louis, Abigail does not follow group instructions and does not ask for help when she does not understand instructions. Abigail’s parents stated that she has some behavioral problems, including task refusal, inattention and attention-getting behaviors. Mrs. Baker reported that Abigail is acting out in class frequently.

No family history of speech, hearing, or learning problems was reported; however, no information on Abigail’s biological parents is available.

TEST PROCEDURES

Tests administered during this evaluation include the following:

1. Oral and Written Language Scales (OWLS)
2. Test of Narrative Language (TNL)
3. Speech-language Sample
4. Oral Mechanism Examination
TEST RESULTS

Communication Skills

Language: The OWLS and the TNL were administered to Abigail as measures of language comprehension, oral and written expression, and narrative abilities. Please refer to the following tables for a summary of her performance on these measures.

**OWLS:**

<table>
<thead>
<tr>
<th>Test</th>
<th>Percentile</th>
<th>Standard Score</th>
<th>Confidence Interval (95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening Comprehension</td>
<td>5</td>
<td>76</td>
<td>+/- 13 63-89</td>
</tr>
<tr>
<td>Oral Expression</td>
<td>1</td>
<td>67</td>
<td>+/- 9 58-76</td>
</tr>
<tr>
<td>Oral Composite</td>
<td>3</td>
<td>71</td>
<td>+/- 7 64-78</td>
</tr>
<tr>
<td>Written Expression</td>
<td>1</td>
<td>65</td>
<td>+/- 8 57-73</td>
</tr>
</tbody>
</table>

Mean score = 100; standard deviation = 15.

**TNL:**

<table>
<thead>
<tr>
<th>Test</th>
<th>Percentile</th>
<th>Standard Score</th>
<th>Confidence Interval (95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative Comprehension*</td>
<td>&lt;1</td>
<td>5</td>
<td>+/- 2 3-7</td>
</tr>
<tr>
<td>Oral Narration*</td>
<td>&lt;1</td>
<td>4</td>
<td>+/- 1 3-5</td>
</tr>
<tr>
<td>Narrative Language Ability Index**</td>
<td>&lt;1</td>
<td>67</td>
<td>+/- 4 63-71</td>
</tr>
</tbody>
</table>

* subtest mean score = 10, standard deviation = 3
** test mean score = 100, standard deviation = 15

Analysis of Abigail's language sample revealed numerous grammatical errors, including errors on irregular plurals (e.g., mans, womans, etc.), errors on irregular past tense (e.g., goed), and omissions of auxiliary verbs (e.g., is, are, were). In addition, she over-uses indirect referents (e.g., those, these, that thing, etc.), perhaps because of a limited vocabulary. Abigail is speaking in 5-6 word sentences, which is significantly less than typically expected of children her age. A
7-year-old should have a large vocabulary (over 2,500 words), and most grammatical forms, including irregular plurals, past tense verbs, and auxiliary verbs, should be used appropriately.

Abigail performed more than 1.5 standard deviations below the mean on both the listening comprehension portion of the OWLS and the narrative comprehension portion of the TNL. Her performance was characterized by sequencing and comprehension errors; she incorrectly answers wh-questions about narratives and focuses on insignificant story details. Abigail's performance on these subtests indicates a significant delay in receptive language (comprehension), which results in her having trouble following instructions and understanding curriculum content in the classroom.

Abigail performed two or more standard deviations below the mean on the oral expression and written expression portions of the OWLS and on the oral narration portion of the TNL. Her performance was characterized by numerous spelling, punctuation, and grammatical errors. Abigail is unable to develop her own story, even with support. These results suggest a significant delay in both oral and written expressive language (expression). This delay makes it difficult for Abigail to answer questions, complete assignments, and share information both orally and in writing in the classroom.

Based on classroom and playground observations, Abigail appears to have a delay in pragmatic (social) language skills as well, which makes conversing with peers and teachers difficult. Abigail has difficulty responding on topic when called on by her teacher, and she does not interact with her peers during small group activities or recess.

Articulation/Phonology:

Articulation is within normal limits based on classroom observation.
Voice/Fluency:

Informal observation across multiple contexts revealed a consistently hoarse voice. She demonstrated normal resonance and prosody. Numerous revisions to conversation were noted, but no secondary stuttering characteristics, such as eye-blink or facial grimace, were demonstrated. Therefore, revisions most likely can be attributed to Abigail’s expressive language delay rather than to a fluency disorder.

Oral Mechanism:

Structure and function of oral mechanism appear normal per informal observation.

Associated Factors

Classroom observation, coupled with Abigail’s diagnosis of ADHD, indicate that she has a hard time focusing her attention and controlling her impulses; these difficulties probably contribute to Abigail’s receptive, expressive and pragmatic language delays. In addition, Abigail may be lacking in social skills; no peer interaction was observed in the classroom or on the playground.

Validity of results is estimated to be strong based on the consistency between test results and classroom observation; however, validity may be weakened to a small degree due to Abigail’s difficulty focusing her attention.
IMPRESSIONS

Abigail demonstrates a moderate receptive and expressive language disorder characterized by difficulty following directions, understanding age-appropriate concepts and producing grammatical, age-appropriate sentences. In addition, Abigail demonstrates a mild pragmatic language delay characterized by difficulty responding on topic and peer avoidance. Language deficits are present across all contexts. Abigail also demonstrates consistent severe vocal hoarseness across all settings. It is positive to note that articulation is within normal limits.

Prognosis for acquisition of age-appropriate language skills is deferred until Abigail's rate of progress in speech-language therapy can be monitored over time. Negative indicators include lack of intervention to date, impulsivity, and inattention. Prognosis for vocal hoarseness is deferred until etiology is diagnosed.

RECOMMENDATIONS

1. The Baker family is encouraged to seek speech-language services for Abigail. It is recommended that Abigail participate in 30 minute long, individual language therapy sessions three times a week to focus on ameliorating receptive, expressive and pragmatic language skills.

2. The examiner will contact the family's physician, Dr. Jones, to discuss further referral to an ear-nose and throat doctor to address Abigail's vocal hoarseness.

3. The Baker family should consider what environment would maximize Abigail's learning. Features to consider include small class size and special education services personnel.
4. It is recommended that Abigail participate in individual activities with her parents to promote self-confidence, which may enable Abigail to practice her language skills more readily with adults and peers. These individual activities should be language-rich to promote further development of Abigail’s receptive and expressive language skills.

5. Abigail’s speech-language skills should be re-evaluated in six months to assess progress.

Speech-language services can be obtained through the public schools by contacting Ms. Janet Sanderson, the special education director for Sunnyside Elementary, at 913-123-4567. Services may also be obtained through several public service agencies, including the University of Kansas Medical Center Hearing and Speech Department and Children’s Mercy Hospital. For information regarding services at KU Med, clinic director Dr. Debora Daniels should be contacted at 913-456-7890. For information regarding services at Children’s Mercy, clinic director Ms. Susan Bentley should be contacted at 913-789-0123.

_________________________
Debora Daniels, Ph.D., L/CCC-SLP
Clinical Supervisor
Speech-Language Pathologist

_________________________
Graduate Clinician

Cc: Medical Records
   Hearing and Speech Dept.
   Baker Family
   Dr. Jones
Second Semester Contribution

December 12, 2007

During the course of the fall semester, I worked individually with a four-year-old boy with an articulation/phonological disorder at the University of Kansas Medical Center clinic. Treatment goals focused on increasing intelligibility. Specific goals included correct production of /k/ and /g/ in all word positions at the conversation level and correct production of /v/ and /l/ in initial position at the conversation level. A multiple oppositions approach was used.
SCORING: IMARY

At the start of the clinical experience, the supervisor indicates student's starting background/skill level based on initial meeting/discussion with student for the current semester; starting level may vary across clinical contexts within and across supervisors.
1. Limited to no clinical experience; no evaluation coursework; no relevant disorder coursework
2. Some clinical experience or relevant disorder coursework; has taken SPLH 860 or has some clinical evaluation experience
3. Has taken SPLH 860 AND has some clinical evaluation experience; has had multiple clinical experiences or coursework in the disorder area
4. Has had multiple courses and clinical experiences evaluating and treating a range of communication disorders

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<th>I. EVALUATION</th>
<th>II. TREATMENT</th>
<th>III. WRITING</th>
<th>IV. CONFERENCING</th>
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Weighting?
Adjusted Score: 3.97
GRAND TOTAL of I-IV: 3.97
MEAN Score: 3.97

ASSIGNED GRADE: A

- Professionalism and/or "pass/fail" items in writing significantly affected the grade
- Comments:

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Peggy Khayimi, MA/CCSP
12/20/07
Intercampus Program in Communication Disorders
Plan of Action

Student: [Name]  Advisor: Dr. Debby Daniels

Evaluation point: (circle 1) [Mid-Program/Formative]  End Program/Summative

Student Questions and Answers

1. What are your strengths in evaluating communication disorders?
   I have had a good deal of practice administering standardized assessments, and I believe I am pretty good at doing so. I am also pretty good at establishing rapport with the individual I am evaluating.

2. What skills would you like to improve in evaluating communication disorders?
   I would like to practice conducting dynamic assessments. Although I have learned about dynamic assessment in my coursework, I have no clinical experience with it. I would also like to improve my conferencing skills.

3. How do you plan to try to improve your abilities in the areas identified in #2?
   I hope to get some experience with dynamic assessment during my field study. When I begin my field study, I will ask my supervisor if she is comfortable with it. I think I should try to do some. In order to improve my conferencing skills, I need to practice more. I hope to get some experience with my supervisor, my summer practice, and my field study.

4. What are your strengths in treating communication disorders?
   Again, I believe I do a nice job of establishing rapport with my clients. I also do a good job of planning for my sessions; however, I am flexible and adapt the session to my client's needs.

5. What skills would you like to improve in treating communication disorders?
   I would like to become more efficient in my report writing. I would like to increase my use of evidence-based practice.

6. How do you plan to try to improve your abilities in the areas identified in #5?
   I think that taking detailed yet concise daily notes will allow me to be more efficient in my report writing. To increase my use of evidence-based practice, I need to plan ahead as much as possible so that I have time to research different approaches and strategies.

Submitted to Advisor on: 3/31/09
Meeting with Advisor on: 4/2/08

Strengths identified by the advisor:

is an excellent student. She has sought a diverse academic experience, and she is performing at an exemplary level in her clinical practices.

Weaknesses identified by the advisor:

1) has indicated a need to get more conferencing experience. I do not think this is an area of weakness, but one of a limited opportunity.

Agreed upon plan for remainder of program OR transition to CFY:

1) Make sure that future clinic assignments include an opportunity for multiple conferencing (e.g., ASTA clinic, Paediatric clinic, etc.).

2) Assist in obtaining FS placement where she can participate in dynamic assessment practice.
SPLH 844

Midterm Case Report

April 16, 2007

Based on the data set provided, I would diagnose Casey with a moderate language learning disability. According to Paul (2007), a learning disability involves an "unexpected difficulty, relative to age and other abilities, in learning in school" (p. 434). Paul goes on to explain that "unexpected is usually taken to mean that there is no obvious explanation of the child's difficulty" (p. 434). Classroom observation, standardized test results, and information obtained from parent and teacher interviews all indicate that Casey has great difficulty with language comprehension and expression, yet there is no obvious cause for her difficulty. She has no significant health concerns, normal vision and hearing, and appropriate classroom behavior. Casey does, however, have a history of early delays in receptive and expressive language, as well as a phonology disorder. Although she was discharged from speech-language therapy prior to kindergarten because all her skills were age appropriate, it is not surprising that her language difficulties persisted, though at a level not as easily detected. I would posit that Casey had a mild to moderate form of specific language impairment (SLI) as a young child. Tailal (as cited in Paul, 2007, p. 157) suggests that "many children with SLI 'change diagnoses' when they get to school age, not because the underlying nature of their problem changes, but simply because the demands of the school situation put stress on their ... language skills".

According to Paul (2007), children with SLI, particularly those with mild to moderate
impairment, often outgrow the most obvious aspects of their linguistic deficits before finishing preschool (p. 157). The remaining deficits surface only when complex language skills are required; however, these skills are the ones necessary for children to successfully learn to read, write, spell, and do math problems (Paul, 2007, p. 157-158). Thus, I hypothesize, that Casey's language problems never really went away; they simply manifested themselves differently as Casey aged. At the time of the present evaluation, Casey's underlying language problems presented themselves most obviously as learning problems. After all, the impetus for referring her for evaluation appears to have been her poor performance on a "practice" state reading assessment and low grades in all core subjects. Casey's low test scores, all of which fell between one and two standard deviations below the mean, and the fact that her level of impairment necessitates accommodations to allow her to function in the mainstream classroom indicate that her disability might be classified as moderately severe (Paul, 2007, p. 56).

Considering the severity of Casey's disorder, I would recommend an intense intervention plan. My recommendations would include both individual "pull-out" sessions with a speech-language pathologist and classroom-based intervention in collaboration with Casey's teacher. Children with LLD oftentimes demonstrate difficulties with syntax, semantics, and pragmatics (Paul, 2007, p. 436-441), so all three of these aspects of language would probably need to be targeted during intervention. Individual sessions would allow for Casey to receive intensive intervention focusing largely on syntax and semantics; whereas, classroom intervention would provide an excellent opportunity to work on pragmatics, as well as syntax and semantics. Classroom intervention would also provide opportunities for Casey to
generalize what she is learning in "pull-out" sessions. Collaboration between the speech-language pathologist and classroom teacher would promote sharing of strategies to support Casey's language development and enhance her classroom performance. Collaboration will also place the speech-language pathologist in a better position to pre-teach and review information taught in the classroom during individual sessions. All activities should be drawn from the general education curriculum. "Pull-out" sessions should occur at least twice a week for at least 20 minutes each. In-class intervention should occur at least once a week for at least half an hour. If possible, a resource teacher should also be enlisted to work with Casey in collaboration with the general education teacher and the speech-language pathologist. I agree with the frequency, and your referral to the resource teacher. I also would recommend school psych to rule in/out cognitive deficits. Another thought would be to include elementary guidance counselor (if available) to address social needs.

Casey's language deficits will have a huge impact on her performance in the classroom, as evinced by her current low academic performance in all core subjects. Kansas State Curriculum Guidelines for Reading put forth by the Kansas Board of Education (2003) include indicators stating that fourth graders should be able to do all of the following: use context clues and knowledge of word structure to determine the meaning of words or phrases, interpret figurative language, identify the connotation and denotation of new words, make inferences and draw conclusions based on information in the text, retell main ideas and events as well as supporting details, follow directions explained in technical texts, and interpret and respond to various aspects of a text. These tasks almost certainly will prove extremely difficult for Casey.

2Kansas State Curriculum Guidelines for Writing (2003) state that fourth graders should be able
to write for a variety of audiences, contexts, and purposes, including narration, exposition, technical explanation, and persuasion. When writing for these various purposes, fourth graders should use transitions, specific nouns, powerful verbs, and vivid adjectives; choose appropriate words and phrases for purpose and audience; use grammatically correct sentences that vary in length and structure; recognize an incomplete thought; use correct spelling even with more difficult words; use standard writing conventions; and write compact sentences or phrases that make the point clear. Although only a limited sample of Casey’s writing was provided with the data set, it is clear that she will have great difficulty with many of these indicators. While reading and writing are the two areas most obviously affected by language deficits, other areas, including science and math, are also affected by language learning disabilities. According to the Kansas State Curriculum Guidelines for science (2003), a fourth grader should be able to use language to describe, classify, critique, analyze, define, compare and contrast, communicate results, and work with others to solve problems. These tasks will, at the very least, seriously stress Casey’s language skills. Kansas State Curriculum Guidelines for math (2003) require fourth graders to use language to explain their reasoning, solve real world problems (i.e., word problems), generate real world problems, state the probability of an event, and describe rules, transformations and geometric figures. These indicators likely will prove difficult for Casey as well. In addition to all of these difficulties, it is clear that Casey will struggle in the classroom simply because she is unable to understand oral and written instructions.

As indicated above, I would target syntax, semantics, and pragmatics in intervention. Initially, I might target one aspect of each of these areas of language that seems to have the greatest impact on Casey’s classroom performance. A goal for syntax might be two-pronged
and target both the comprehension and use of relative clauses, which, according to Kuder (as cited in Paul, 2007, p. 436), give children with LLD particular trouble. In behavioral terms, I might write this goal as follows: 1 Case will demonstrate comprehension of relative clauses by correctly responding to comprehension questions following hearing and/or reading sentences containing relative clauses with at least 80% accuracy on three consecutive occasions. In regard to expressive language, a goal might be written as follows: 2 Case will use relative clauses in structured tasks with at least 80% accuracy on three consecutive occasions. Before terminating either of these goals, I would check for generalization to natural contexts.

A goal for semantics might target vocabulary development. Catts and Kuder (as cited in Paul, 2007, p. 437) found that children with LLD have small vocabularies that are restricted to high-frequency, short words. Vocabulary from the curriculum would be targeted in order to support what is being taught in the general education classroom. In this case, I would probably prioritize comprehension, so a goal might be written as follows: 3 Case will demonstrate comprehension of target vocabulary words at the conclusion of a weeklong focus period by scoring at least 80% on a vocabulary test requiring her to match target words with written definitions. A goal such as this may continue to be targeted throughout the year with different vocabulary each week.

Casey’s social isolation indicates that she may have great difficulty with pragmatics, so intervention also would focus on improving her social interactive abilities. According to Pearl (as cited in Paul, 2007, p. 441), children with LLD experience rejection by peers and have difficulty developing reciprocal friendships and gaining admittance to social groups. The provided data set indicates that this may be the case for Casey. According to observational
data, Casey does not initiate during structured or unstructured school contexts; thus, increasing her initiations might be a reasonable treatment goal. Such a goal may be written as follows: Casey will initiate conversation with a peer with a frequency averaging at least once every five minutes during unstructured activities at school.

As indicated in the preceding paragraphs, data will be collected both inside and outside of the speech-language therapy room. In regard to the syntax goal, data will initially be collected in structured tasks during "pull-out" time, but, before terminating the goal, the speech-language pathologist would need to observe Casey comprehending and using relative clauses in the natural environment. Paul (2007) suggests that direct intervention for a target should be discontinued when the use of the target form exceeds 50% in unstructured conversations (98). Thus, the syntax goal might be terminated when Casey demonstrates both understanding and using relative clauses in 50% of all opportunities in a conversational speech sample. Paul (2007) goes on to suggest that, once terminated, targets should be monitored every few months in spontaneous speech samples to see if use of the target increases (98). In regard to the semantics goal, data might be gathered in the classroom during routine pre-treatment and post-treatment vocabulary tests given to all students in collaboration with the classroom teacher. Between pre-treatment and post-treatment tests, the speech-language pathologist would take data on Casey's understanding of the vocabulary words during their individual session. In regard to the pragmatics goal, data will be gathered in the natural environment as Casey interacts with her peers in unstructured activities, such as lunchtime or recess. Additionally, data might be gathered during small group activities when the speech-language pathologist is working in the classroom. Subjective and objective data should be
gathered for each goal targeted during each session ("pull-out" and collaborative instruction).

In order to assess overall changes in Casey's language skills, I might have her parents and her
teacher complete a questionnaire with a 7-point Likert scale asking them to rate Casey's
performance on various communication behaviors, especially as they relate to learning. At the
end of the semester or the end of the school year, I would have them fill out the same
questionnaire to see if positive changes are occurring.

Casey is certainly at risk for not achieving adequate yearly progress (AYP) on the state
assessments. As mentioned above, indicators from the state curriculum guidelines will, in many
cases, prove very difficult for Casey. State assessments are based on these indicators;
therefore, Casey is at great risk of not achieving AYP. Because there are so many different
indicators that will be tested on the state assessments, I would try to teach Casey some specific
skills and strategies that she can apply in multiple contexts. 1 For example, I would teach Casey
about word roots and affixes to enhance her ability to define unknown words. These word parts
would be targeted in activities centered on Casey's textbook reading. When a target root or
affix is encountered, the possible meaning of the word part will be explored in context. I would
then formally define the word part, and Casey and I would try to think of other words
containing the target. We would create a word part dictionary with definitions and examples.

2 In addition to word parts, I would work on inferencing skills, which should prove valuable not
only on the reading assessment but also on science and math assessments. I would first work
on inferencing skills by presenting texts orally and in writing paired with visual supports to aid
Casey's inferential comprehension. I would draw Casey's attention to important features in the
pictures and pair these features with verbal clues in the text. As Casey became adept at
inferencing with visual support, I would remove the visual support but continue to draw her
attention to the verbal cues. In addition to root words and inferencing, I would work on
signal words, as they would improve Casey's understanding of assessment instructions as well
as assessment texts. I would work on these by locating three to five target signal words in
Casey's textbooks. I would have Casey try to figure out the meaning and function of the word
from context. If necessary, I would define the word and explain its function. I would then have
Casey try to put the word in a few sentences. Finally, I would have Casey read the target word
in a novel context and have her explain what the sentence means. By targeting these skills that
can be useful in multiple contexts and content areas, I would prepare Casey for the state
assessments as efficiently as possible. 

Comment [D9]: Great idea!
Bibliography


Predictors of the Acquisition of Verbal Communication in Young Children with Fragile X Syndrome

Submitted to the graduate degree program in Speech Language Pathology and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Master's of Science.

prospectus
Semester 4

Chair

Committee members

Date defended:
The Thesis Committee for ... certifies that this is the approved version of the following thesis:

Predictors of the Acquisition of Verbal Communication in Young Children with Fragile X Syndrome

Committee:

Chairwoman

Date approved: _____
Brief Overview

Fragile X syndrome (FXS), which is caused by the mutation of a gene on the X chromosome, is the most common known cause of inherited intellectual disability. The level of disability resulting from FXS ranges from learning disabilities to severe mental retardation. FXS is also the most common known cause of autism. Delays in speech and language development are common symptoms of FXS (National Fragile X Foundation, 2006). This retrospective study will investigate predictors of the acquisition of verbal communication skills in young children with FXS. The present study is part of a larger FXS research project conducted by Dr. Nancy Brady and Dr. Steve Warren in conjunction with researchers at the University of North Carolina Chapel Hill concerning family adaptation to FXS. Children were about two years, six months old when entering the study and about five years, six months when exiting the study. Predictors to be examined will encompass a variety of developmental domains, including cognitive, social, behavioral, and communicative skills. Communicative skills to be examined will include different types of gestures, different communicative functions, and overall rates of nonimitative communication. Predictive information will be derived from standardized test scores and video analysis. Outcomes to be examined will include standardized test scores, mean length of utterance, and number of different words used. Identification of predictors of the acquisition of verbal communication skills in children with FXS will suggest possible areas of prelinguistic intervention with this population.

Chapter 1: Introduction

Language Development among Young Children with Fragile X Syndrome
Research on the language development of children with FXS is fairly limited and, historically, has focused primarily on school-age children. The majority of children with FXS are still in the early stages of language development by the time they turn three, and some may not be talking at all yet. Roberts, Hatton, and Bailey (2001) reported that a sample of 26 young boys with FXS used their first spoken words at 28 months of age on average with a range of 9 to 88 months, indicating a severe delay in the onset of spoken language among many children with FXS.

Roberts, Mirrett, and Burchinal (2001) found that, in children with FXS, receptive language developed more quickly than expressive language, which developed at about one third of the rate of typically developing children. Thus, expressive language is an area of particular concern for children with FXS.

**Fragile X Syndrome and Autism**

Because males only have one X chromosome, they are usually more affected by FXS than females (Hagerman, 2007, p. 28). Autism occurs in about 25-33% of males and in about 5-15% of females with FXS (Hagerman, 2007, p. 34). Philofsky, Hepburn, Hayes, Hagerman, & Rogers (2004) found that children with FXS who also have autism have more severe receptive and expressive language impairments than children who only have FXS.

**Gesture use in typically developing children**

By about 12 months of age, gestures become a primary means of communication for the typically developing child. Gestures including giving, showing, and reaching appear when children are about 8 months old, and pointing appears when children are about 12 months (Brady, Bredin-Oja & Warren, 2007, p. 174). In typically developing children, pointing at distal locations has been shown to predict subsequent language development (Brooks & Meltzoff, 2008, p. 217). That is, children who pointed during an assessment completed when children
were 11 months old had significantly faster vocabulary development through two years of age than did children who did not point during the assessment. Butterworth and Morisette (1996) found that age of pointing onset predicts gesture use and sound comprehension at 14.4 months. Specifically, children who began pointing at a younger age produced more gestures and understood more animal sounds at age 14.4 months than children who began pointing later, which indicates that pointing may be an important predictor of receptive and expressive communication development. According to Brady et al. (2007), pointing appears to be crucial in the transition between communicating about the immediate environment and communicating about distal events, as mature forms of pointing allow a child to communicate about distant objects.

**Gesture use in children with Fragile X Syndrome**

Little research has been devoted to prelinguistic communication in children with FXS; however, one study by Roberts, Mirrett, Anderson, Burchinal and Neebe (2002) found that a sample of 22 children with FXS between 21 and 77 months with a developmental age younger than 28 months demonstrated a significant delay in both conventional gestures and distal gestures. Considering the high rate of autism in children with FXS, findings in relation to gesture use in children with autism should also be considered. According to Brady et al. (2007), disturbances in gesture development is a primary prelinguistic characteristic of children with autism. Children with autism have been found to have large deficits in their use of conventional gestures when compared to typically developing children and moderate deficits compared to developmentally delayed children (Wetherby, Watt, Morgan & Shumway, 2007). In addition, autism has been found to be associated with a decreased variety of social interaction gestures used in 9-12 month old infants (Colgan et al., 2006).
Prelinguistic Predictors of Language Growth in Children with Developmental Disabilities

According to McCathren, Warren and Yoder (1996), the following four variables appear to be closely related to language development: babbling, development of pragmatic functions, vocabulary comprehension, and the development of combinatorial and symbolic play skills. The development of pragmatic functions is of particular interest in the present study. Smith, Mirenda, and Zaidman-Zait (2007), in a study of 35 children with autism between 20 and 71 months whose initial expressive vocabularies were less than 60 words, found that the number of gestures to initiate joint attention used by a child upon entrance into the study was associated with rapid expressive vocabulary growth over a two year time period. Rate of prelinguistic communication has also been demonstrated to be a good predictor of language growth in children with developmental disabilities. Calandrella and Wilcox (2000) found that rate of prelinguistic communication in a group of developmentally delayed children between 17 and 38 months was significantly correlated with rate of symbol use, rate of different symbol use, and receptive and expressive language scores on a standardized assessment 12 months later. Certain types of gestures have also been demonstrated to be good predictors of language development in children with developmental disabilities. Brady, Marquis, Fleming and McLean (2004) found that, in a group of 18 children with developmental disabilities and vocabularies of ten or fewer words, the children’s level of gestural attainment, rate of communication, and parent response contingency were significant predictors of language development over a two year period. Specifically, Brady and colleagues found that the presence of pointing during a relatively brief assessment predicted rate of change in the child’s expressive language, as well as the child’s initial level of expressive language. None of these studies focused particularly on children with FXS.
The present study will investigate prelinguistic predictors of language growth specifically in children with FXS who are non-verbal at about age two years, six months. Some of these children will also have autism diagnoses. Unlike many of the studies examining communication in children with FXS, females with FXS will be included. The present study will investigate the role of several communication skills, including gesture use, overall rate of non-imitative communication, and pragmatic function, in predicting the successful development of verbal communication skills three years later. These communication skills will be examined in the context of natural interactions. In addition, standardized test scores reflecting cognitive, behavioral, and social skills will be examined as potential predictors of language growth.

Chapter 2: Research Study

Methods

Subjects

Participants were young, nonverbal children (26 males and 9 females) with FXS living in the United States. Participants were approximately two years, six months when they entered the study and approximately five years, six months when they exited the study. Participants came from a variety of social, racial, and ethnic backgrounds. Recruitment efforts included advertising at national conventions, using a national research registry, networking with FXS family support groups, and advertising via a FXS parent list serve.

Data collection

In the context of the larger FXS study conducted by Brady and Warren in conjunction with researchers at the University of North Carolina Chapel Hill, data were gathered when children entered the study at approximately two years, six months, as well as at 18 month intervals until
the children were approximately five years, six months. Data included the results of several standardized measures, including the Mullen Scales of Early Learning, the Vineland Social Maturity Measure, the Childhood Autism Rating Scale, and the Carey Temperament Scale. In addition, video recordings were made of each child interacting with his or her mother in both structured and unstructured settings, including book reading, making and eating a snack, free play, and activities of daily living.

The present project is primarily concerned with data points one and three. In regard to time period one, the following standardized measures will be examined: the Vineland Social Maturity Measure, the Childhood Autism Rating Scale, and the Carey Temperament Scale. Video recordings for time period one will also be examined. Five minute samples from each of the aforementioned parent-child activities (i.e., book reading, making and eating a snack, free play, and activities of daily living) for period one will be analyzed to determine each child's overall rate of gesture use, the different functions of each child's communicative acts, and the different types of gestures the child used. Gesture use in general and the functions of each child's communicative acts have already been coded as part of the larger FXS study. All communicative acts were designated as serving one of the following functions: social interaction, joint attention, or behavior regulation. Additional coding of gesture types will need to be completed as part of the present study. Gesture types to be examined will include both deictic and representational gestures, including the following: pointing from a distance, pointing while touching the indicated object, taking an adult's hand and leading them to a desired object, reaching for an object, pushing away an adult or object, giving an object to an adult, showing an object to an adult, pantomime, and conventional gestures, including waving, shrugging shoulders, shaking head, etc. Ten percent of all video recordings will be coded separately by a second coder for reliability purposes. Training of the secondary coder will consist of reading a
coding manual and practicing coding the gestures of children from the larger FXS study who did not qualify for the present study due to the child having too many words. When the secondary coder has independently coded 3 videos of such children with 85% agreement with the primary coder, the secondary coder will be considered a reliable coder.

Time period three communication outcomes to be analyzed will include receptive and expressive language scores from the Mullen, number of different words used, mean length of utterance (M.U), and overall rate of communication. The latter three pieces of data will be obtained from five minute samples of parent-child interactions in the previously mentioned contexts.

Hypotheses

Hypothesis 1: that higher rates of intentional communication at time one will be associated with higher rates of communication, higher language scores on the Mullen Scales of Early Learning, and a greater number of different words used at time three.

Hypothesis 2: that a greater variety of gestures at time one will be associated with higher measures of expressive language at time three.

Hypothesis 3: that the presence of pointing at time one will be associated with more developed expressive language skills at time three.

Hypothesis 4: that a higher frequency of communication for joint attention purposes will be associated with more developed expressive language skills at time three.

Hypothesis 5: that autism diagnoses will be associated with lower scores on all measures of expressive language at time three.
Behavioral Coding

The Observer XT by Noldus will be used in the coding of parent-child interaction videos, as well as in the analysis of all video recorded data. Gestures in general and points in particular have already been coded in all parent-child interaction video recordings using The Observer; therefore, coders will need only to locate the points in the video indicated to contain child gestures by previous coders in order to code the types of gestures used.

Behaviors to be coded specifically for the present study include both deictic and representational gestures. According to Bates (as cited in Iverson & Thal, 1998, p. 60), deictic gestures are those that establish reference by calling attention to or indicating an object or events. Deictic gestures can be divided into contact and distal gestures. Contact gestures to be coded include taking an adult by the hand, pointing while touching the object indicated, tapping an indicated object, pushing away an adult or object given, and giving an object to an adult.

Distal gestures to be coded include pointing from a distance, reaching for an object, and showing an object to an adult. Representational gestures, according to Crais, Day Douglas and Campbell (2004), establish reference and indicate a particular semantic content.

Representational gestures can be divided into object-related and conventional gestures. Object-related gestures are semi-iconic, as this type of gesture indicates some specific feature of the object indicated (Acredolo & Goodwyn, 1988, p. 452). Pantomime will be coded as an object-related gesture. Conventional gestures represent an action or concept rather than a specific concept (Crais, Day Douglas, & Cox Campbell, 2004). Conventional gestures to be coded include waving, shrugging shoulders, making a “shh” gesture, shaking/nodding head, expectantly displaying an upturned palm (as if stating, “give it to me”), displaying two upturned palms (as if asking “where”), signaling come here by wiggling one or more fingers of an upturned palm,
clapping, covering mouth as if surprised, crossing arms to show resistance, and patting a chair (as if requesting "sit by me"). Gestures were only coded as communicative if they were accompanied by adult attention and joint reference.

Analysis

A multiple regression analysis will be used to determine if children's overall rate of intentional communication, use of a variety of gestures, use of pointing, rate of communication for joint attention, and autism diagnosis predict expressive language development, as determined by overall rate of communication, MLU, number of different words used, and expressive language scores on the Mullen.

Chapter 3: Discussion

Discussion

These results will likely have implications for early intervention decisions. For example, results may suggest that a greater focus on teaching gestural communication may prove beneficial for nonverbal children with FXS. These results will also guide future research in prelinguistic communication intervention.
References


Philofsky, A., Hepburn, S. L., Hayes, A., Hagerman, R. J., & Rogers, S. J. (2004). Linguistic and
cognitive functioning and autism symptoms in young children with fragile X syndrome.


Predictors of the Acquisition of Verbal Communication in Young Children with Fragile X Syndrome

Nancy Brady, Advisor

Language Development among Young Children with FXS
- Past research has focused on school-age children
- Boys with FXS speak their first words at 28 months of age on average (Palmore, Hagerman, & Bailey, 2001)
- Receptive language develops more quickly in children with FXS than expressive language
- Expressive language develops at one-third the rate of typically developing children (Hagerman, 2001)

FXS and Autism
- Males more affected by FXS than females
- Occurs in 23–33% of males with FXS
- Occurs in 5–15% of females with FXS
- Children with FXS and autism have more severe receptive and expressive language delays than children who only have FXS (Hagerman, Hagerman, & Bailey, 2004)

Gesture Use in Typically Developing Children
- Pointing at distal locations observed in 11-month-olds predicted faster vocabulary development (Baldwin & Mervis, 2000)
- Age of pointing onset predicted gesture use and sound comprehension at 14.4 months (Baldwin & Mervis, 1998)
- Pointing may be important in the transition between communicating about the immediate environment and communicating about distal events (Baldwin, Keelan, & Waterman, 2001)

Gesture Use in Children with FXS
- Roberts, Milliron, Anderson, Burchinal, and Neebe (2002) found that a sample of 22 children with FXS between 21 and 27 months of age had a developmental age younger than 18 months demonstrated a significant delay in both conventional gestures and distal gestures.
- Disturbances in gesture development are a primary prelinguistic characteristic of children with autism (Bower, 1987).
- Children with autism have been found to have large deficits in their use of conventional gestures when compared to typically developing children and moderate deficits compared to developmentally delayed children (McKee, Watt, Nargis & Swetsky, 2003).
- Autism has been found to be significantly associated with a decreased variety of gestures used (Kopp, 2002).
Prelinguistic Predictors of Language Growth in Children with Developmental Disabilities

- Pointing during a brief assessment predicted rate of change in children's expressive language development (Shuva, Marcus, Feinberg & McLennan, 2004)
- Rate of prelinguistic communication is a good predictor of language growth (Cavetter & Moore, 2003)
- Pragmatic functions closely related to language development (Rutter, Beren & Year, 1980)
- Gestures to initiate joint attention found to be associated with rapid expressive vocabulary growth over a 2-year period (Cowan, Wimmer & Lec转变 Cov, 2007)

Present Study—Subjects

- Nonverbal children with FXS
- 26 males
- 9 females
- From around the country
- Recruitment
  - Advertising at national conventions
  - National research registry
  - Networking with FXS family support groups
  - FXS parent list serve

Present Study—Data Collection

- Video Recordings
  - Book reading
  - Making and eating a snack
  - Free play
  - Activities of daily living
- Standardized Measures
  - Mullen Scales of Early Learning
  - Vineland Social Maturity Measure
  - Childhood Autism Rating Scale
  - Carey Temperament Scale

Present Study—Data Collection

- Analysis of video recordings
  - Overall rate of gesture use (already coded)
  - Different functions of communicative acts (already coded)
  - Different types of gestures used (yet to be coded)

Present Study—Data Collection

- Reliability Coding
  - Ten percent coded separately by a secondary coder
  - Training of secondary coder
  - Reading a coding manual
  - Practicing coding the gestures of children from larger FXS study
  - 85% agreement with primary coder for 3 videos

Present Study—Data Collection

- Time period 3 outcomes
  - Number of different words used
  - Mean length of utterance
  - Overall rate of communication
  - Receptive and Expressive Language Scores from Mullen

Developing Coding Manual
**Present Study—Hypotheses**

- Hypothesis 1: that higher rates of intentional communication at time one will be associated with higher rates of communication, higher language scores on the Mullen Scales of Early Learning, and a greater number of different words used at time three.
- Hypothesis 2: that a greater variety of gestures at time one will be associated with higher measures of expressive language at time three.
- Hypothesis 3: that the presence of pointing at time one will be associated with more developed expressive language skills, as demonstrated by the use of a greater number of different words, a higher MLI, and higher expressive language scores on the Mullen at time three.
- Hypothesis 4: that a higher frequency of communication for joint attention purposes will be associated with more developed expressive language skills at time three.
- Hypothesis 5: that autism diagnoses will be associated with lower scores on all measures of expressive language at time three.

**Present Study—Behavioral Coding**

- Types of Gestures to Be Coded
  - Direct (establish reference by drawing attention)
  - Distal
  - Representational (establish reference AND indicate a particular semantic content)
  - Object-related
  - Indicate specific feature of object indicated
  - Conventional
  - Represent an action or concept

**Present Study—Analysis**

- Multiple Regression Analysis

**Discussion**

- Implications for Intervention Decisions
- Guide Future Research in Prelinguistic Communication

**References**

- Koehler, A. S., 
- Grelach, M., 
  Parman, H., 
- Koehler, A. S., 
- Grelach, M., 
  Parman, H., 
- Koehler, A. S., 
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- Grelach, M., 
  Parman, H., 
- Koehler, A. S., 
- Grelach, M., 
  Parman, H., 
References


Questions/Comments/Concerns?

Thank you!
December 11, 2008

For my field study experience I worked with a speech-language pathologist based at Elementary School in , Kansas. We primarily provided services to preschool-age children who only had speech and/or language goals on their IEPs. These services were provided in a variety of settings, including community preschools, home daycares, school-based early childhood programs, and the speech therapy room. The majority of the students received intervention in group situations; however, some students received individual intervention services. Goals focused on improving speech-sound production, improving vocal hygiene, increasing understanding of basic concepts, increasing receptive and expressive vocabulary, and increasing use of various grammatical structures. Approximately 25 preschoolers received our services. In addition, we provided pull-out group intervention to 3 first graders working on articulation and language goals. Several evaluations were also completed. Depending on areas of concern, language, articulation/phonology, voice and resonance were assessed. Evaluations consisted of standardized testing, a parent interview, and observation. I also participated in early childhood child find screenings consisting of play-based assessment.
FIELD STUDY EVALUATION
SUMMARY SHEET

Student Name: ___________________________________________________________________
Clinical Mentor: ___________________________________________________________________
Date of Experience: 8-25-08 to 10-17-08 ________________________________________________
Site: USD 231 _______________________________________________________________________

GOALS DEVELOPED AT MIDTERM EVALUATION:

1. Increase opportunities to share evaluation results with parents.
2. Increase opportunities for parent interaction, via October Parent Teacher conferences

Your grade for the semester is obtained by equally weighting two different areas of abilities, clinical
practice and clinical competencies.

Sum of shaded boxes ___ divided by 27 = ____ (Clinical Practice)
Sum of non-shaded boxes ____ divided by 24 = ____ (Clinical Competencies)

\[
\frac{\text{CP}}{\text{CC}} = \frac{\text{Sum}}{\text{Total}}
\]

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<td>4.0-4.49</td>
<td>3.5-3.99</td>
<td>3.0-3.49</td>
<td>&lt;3.0</td>
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LETTER GRADE

GRADE FOR SEMESTER: ___A______
Contact Hours Earned: _______________________________________________

Comments:

"Consistently demonstrated excellent behavior management skills, understanding of developmental milestones for speech and language as well as cognitive, motor and social development appropriate for the preschool population that was her primary target. She was able to engage individual students and small groups in age appropriate activities, target specific goals and still enjoy the students.

"Obviously has a great deal of knowledge in the area of speech and language. She is able to relate that knowledge in a parent friendly manner as well as add insights on current research to our S.L.P. conversations. I learned a great deal from __________ She will no doubt be definite asset to our profession no matter what area she pursues.

Field Study Site Mentor:
ASHA number: ____________________________
Date: 10-16-08
You have been assigned an article to review. The article is available either in the resource room or on Blackboard as a PDF file. You are to turn in the article with your review. Be sure to use APA format. You will need to summarize the article, critique it and describe how you will or will not use the information in it and why or why not. You will then prepare a 1 page handout for your classmates that includes at least 3 salient points from the article. Your article review should be no more than 5 double spaced pages.

### Article Review Rubric

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<tr>
<td>Uses APA format</td>
<td>APA format not used</td>
<td>APA format with more than 3 errors</td>
<td>APA format with 3 errors</td>
<td>APA format used with 1-2 errors</td>
<td>APA format used with no errors</td>
</tr>
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<td>Conventions</td>
<td>More than 3 spelling or grammar errors</td>
<td>3 spelling or grammar errors</td>
<td>2 spelling or grammar errors</td>
<td>1 spelling or grammar error</td>
<td>No spelling or grammar errors</td>
</tr>
<tr>
<td>Article summary</td>
<td>Not accurate or missed key points, insufficient detail</td>
<td>Accurate but lacks sufficient detail</td>
<td>Inaccuracies and/or missed more than one key point</td>
<td>Accurate but missed 1 key point</td>
<td>Accurate with all key points</td>
</tr>
<tr>
<td>Critique of article</td>
<td>Does not evaluate content or evidence presented</td>
<td>Evaluation not clear</td>
<td>Comments on but does not evaluate content or evidence</td>
<td>Evaluates content or evidence but not both</td>
<td>Evaluates content and evidence presented</td>
</tr>
<tr>
<td>Future use of information</td>
<td>Not included</td>
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<td>Clear but not specific</td>
<td>Clear and specific</td>
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<tr>
<td>1 page handout for classmates with at least 3 salient points</td>
<td>No handout prepared</td>
<td>Handout includes no salient points</td>
<td>Handout includes 1 salient point</td>
<td>Handout includes 2 salient points</td>
<td>Handout includes 3 or more salient points</td>
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You did a good job. 30/30
A Review of June E. Downing's Inclusive Education for High School Students with Severe Intellectual Disabilities: Supporting Communication

University of Kansas
Summary

In the article *Inclusive Education for High School Students with Severe Intellectual Disabilities: Supporting Communication* (2005), June E. Downing outlines why inclusive education for students at the secondary level is important and why relatively few students with severe disabilities experience inclusive education. In addition, she describes a variety of strategies that can be used to support secondary students in inclusive settings and how peers play a critical role in the success of inclusion at this level. Downing also advocates for a collaborative and integrative approach to intervention and outlines some implications of such an approach to inclusion for service providers. Finally, Downing makes suggestions for future research in this area.

According to Downing, inclusive education for secondary students with severe intellectual disabilities is not only best practice but also the students' legal right. One of the greatest benefits of inclusion to students with severe disabilities is the opportunity to interact with a number of competent and responsive communication partners. Peers also act as good communication role models. In comparison, specialized classrooms for students with severe disabilities tend to be adult-dominated and primarily focused on meeting students' basic needs.

Challenges to the inclusion of students with severe intellectual disabilities include modifying the curriculum, effective teaming of professionals, attitudinal barriers, and a focus on symbolic representation. According to Downing, even the most abstract course content can provide learning opportunities when analyzed and carefully modified. In order for successful modification to occur, special educators, general educators, paraprofessionals and peer tutors will need to share information and work together to develop a unified approach to support the student with disabilities. In working with general educators, special educators may need to explain how students with severe disabilities can benefit from being in general education classrooms. In addition, special educators may need to explain that a student's lack of effective communication skills is not an adequate reason to deny services and
that research does not support the practice of waiting for presumed readiness skills to develop to begin helping students to become effective communicators. Finally, all educators need to recognize that all students have the need and the potential to communicate, even if they may not be able to do so symbolically.

Downing describes how to identify communication opportunities in the general education classroom. She suggests that a systematic analysis of the school environment would be helpful in determining the best opportunities to teach communication skills. In general education classes, opportunities exist for students to demonstrate their knowledge, and students with severe intellectual disabilities should also have these opportunities; however, specific opportunities must be created and prepared for in advance. Greetings and farewells also provide opportunities for students with significant disabilities to develop communication skills. Although these interactions are brief, they are important because they represent initial openers for more prolonged contact and are expected forms of etiquette. Students should also have the opportunity to reject when in general education classrooms. Because students with severe disabilities have little control over what happens in their lives, it is particularly important that they be provided with opportunities to express their preferences. On a related note, students should also have the opportunity to make requests. While many natural opportunities for requesting occur throughout the day, team members may need to create opportunities for requesting as well. Students with severe disabilities should also have the opportunity to comment. Downing suggests conversation books as a good way to facilitate commenting for some students. Positive peer reactions are very important in reinforcing commenting.

Communication for any of the aforementioned reasons may take the form of any number of modalities. Multiple modes of communication will be necessary for most students, especially if they are nonverbal. The most appropriate type of communication aid for a student is dependent on his or her wants and needs, as well as his or her physical, sensory, and cognitive demands and the demands of the
environment. AAC systems must allow for a student’s continued growth and development. In addition, AAC systems must allow students to convey age-appropriate messages that are interesting to others.

Peer interaction is critical to the success of inclusion at the secondary level. In addition to serving as good communication role models, peers can be trained to be responsive communication partners. Peer tutors may be useful in introducing students with severe disabilities to the rest of the class and in supporting them in their interactions. Peers of any kind will likely need some training in recognizing unconventional means of communication and in responding in a facilitative manner. A communication dictionary may be useful in guiding peers in interpreting the unconventional communication of students with severe disabilities. Peers can also model the use of the student’s AAC system and help to create opportunities for the student to communicate.

Downing recommends a collaborative and integrative approach to intervention. She suggests that each team member’s unique perspective allows for the creation of a holistic program that accurately reflects the student’s needs and desires. As with all teams, effective communication is essential. Team members need to know expectations for the student, strategies to be used, and plans to generalize skills. All team members should be involved in the decision-making process. Supportive program administrators are crucial to the development of a highly effective team.

Downing emphasizes the importance of building on what students can do and not waiting for certain cognitive skills to develop before providing quality communication intervention. Communication skills acquired in high school are probably going to be needed by students to live, work and participate in recreational activities in their communities as they transition into the adult world.

According to Downing, future research is needed to determine the most effective methods of instruction for secondary students with severe disabilities. She suggests that research should examine the relationship between communicative competence in high school and outcomes after leaving high school. Downing also recommends that future research look at the most efficient ways to make use of
individual team members' knowledge. Future research should also further examine how to most effectively utilize peers.

Critique

The information provided in Downing's article is of great value to all educators working with individuals with severe intellectual disabilities at the secondary level. Downing provides evidence in support of inclusion for these students and challenges various attitudinal barriers and mindsets that limit the use of inclusion. In addition, she provides several practical strategies for effectively implementing inclusion that render the task a little less intimidating.

Downing provides a great deal of research to support her assertions. Additionally, she provides detailed examples as to how inclusion has been implemented for three students with severe intellectual disabilities. Although none of the studies she cites are described explicitly, the volume of research that she cites indicates that her assertions are probably valid. However, educators working with students with severe intellectual disabilities would certainly benefit from exploring some of the literature cited by Downing, and, of course, researchers in this area would be wise to thoroughly explore the literature.

Future Use

Although I do not plan to work with students at the secondary level, I do believe that the information provided in this article will be highly useful to me in my future career. The strategies that Downing describes for implementing inclusion with individuals with severe intellectual disabilities are applicable across grade ranges. Preschoolers and third graders and sixth graders also need to have opportunities to share their knowledge, greet, request, reject, and comment. The curriculum and daily lessons will need to be analyzed in order to determine how to create opportunities for communicating for all of these functions. Numerous modes of communication should also be considered for students with severe disabilities regardless of age. Communication tools such as communication books and communication dictionaries would be as useful to younger children as to high school students. Peer
interaction and a collaborative team approach to intervention are also crucial to successful inclusion regardless of grade level. I would train the classmates of my students to recognize nontraditional forms of communication and to be highly responsive to this communication. I would also encourage efficient communication between the student's team members so that we may best meet his or her needs and desires. Perhaps most importantly, I will follow Downing's recommendation not to wait for presumed readiness skills to develop prior to helping my students to become effective communicators.
Reference

Handout for *Inclusive Education for High School Students with Severe Intellectual Disabilities: Supporting Communication* by June E. Downing

1. Inclusion in high school general education classes
   a. Challenges
      i. Curriculum modification
      ii. Teaming
      iii. Attitudinal barriers, including the practice of waiting for presumed readiness skills to develop prior to working with students on becoming effective communicators
      iv. Focus on symbolic representation instead of multiple modes of communication

2. Strategies to support communication skill development in inclusive high schools
   a. Specific communication opportunities:
      i. Sharing information/knowledge
         1. Specific opportunities must be created
         2. Must modify expectations of the activity
         3. Must provide student with the necessary materials
      ii. Greetings/farewells
         1. Represent an opener for prolonged contact
         2. Expected form of social etiquette
      iii. Rejecting
         1. Opportunities should be created for students to let their preferences be known
         2. Teach appropriate ways to express rejection
      iv. Requesting
         1. Natural opportunities
         2. Created opportunities
      v. Commenting
         1. Conversation books can support socio-communicative skills
         2. Reinforcement through peers' reactions
   b. Multiple modes of communication needed to meet diverse individual needs
   c. Educators must support a student's unique means of communication
      i. Students should have access to AAC systems that allow for their continued growth and development
      ii. Most appropriate aid depends on:
         1. Student wants/needs
         2. Student's physical, sensory, and cognitive abilities
         3. Demands of the physical and social environment
   d. Age-appropriate messages
      i. Appropriate topics for age group
      ii. Appropriate phrases for age and cultural group

3. Peer involvement is critical to the success of inclusion
   a. Train peers to recognize unconventional communication
   b. Train peers to be responsive communicators
   c. Peers serve as communication role models

4. A collaborative and integrative approach to intervention is needed
   a. Members' different perspectives allow for a holistic program to address the students' needs and desires
   b. All members should be actively involved in decision-making
   c. All members need to be aware of:
      i. Expectations for the student each day
      ii. Specific intervention strategies to be used
      iii. Plans to generalize skills
<table>
<thead>
<tr>
<th>Skill</th>
<th>Novice&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Minimal Experience&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Moderate Experience&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Program Completion&lt;sup&gt;4&lt;/sup&gt;</th>
</tr>
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<tbody>
<tr>
<td>Establishes appropriate, measurable TX goals and objectives</td>
<td>Inaccurate and Inefficient</td>
<td>Partially accurate, slow</td>
<td>Accurate</td>
<td>Accurate and Efficient</td>
</tr>
<tr>
<td></td>
<td>Student does not identify individualized treatment goals and/or objectives and does not consult relevant evidence. This student requires constant direct instruction.</td>
<td>Student identifies one or more areas for treatment; however, targeted areas may or may not be appropriate to client needs and may not be based on relevant evidence. This student does not write measurable treatment goals and objectives. This student requires consistent direct instruction.</td>
<td>Student identifies one or more appropriate areas for treatment, but requires assistance in writing measurable goals and objectives and/or finding or applying relevant evidence. This student requires consultation from faculty and intermittent direct or specific instruction.</td>
<td>Appropriate, measurable treatment goals and objectives are obtained efficiently and are based on available evidence. This student operates independently with student-initiated consultative guidance as needed.</td>
</tr>
<tr>
<td>Selects appropriate materials and procedures</td>
<td>Absent</td>
<td>Partial Selection</td>
<td>Complete Selection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student is unable to select TX materials and procedures independently and does not consult relevant evidence. This student requires constant direct instruction.</td>
<td>The student independently selects at least one appropriate TX material or procedure; or the student selects inappropriate materials/procedures or those without supporting evidence. The student requires consistent direct instruction to modify selected materials/procedures.</td>
<td>The student independently selects appropriate TX materials and procedures and finds/applies relevant evidence with intermittent consultation. Student requires assistance in recognizing need to alter materials/procedures based on past client performance.</td>
<td></td>
</tr>
<tr>
<td>Arranges environment suitable to client, family, and observers</td>
<td>Absence of Preparation</td>
<td>Partial Preparation</td>
<td>Adequate Preparation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Despite provision of supporting resources, student is not prepared to discuss relevant factors related to arrangement of the treatment environment. This student requires constant direct instruction and/or supervisor consistently suggests modifications to environmental arrangements during treatment planning.</td>
<td>Student is partially prepared to discuss relevant factors related to arrangement of the treatment environment, but still needs assistance in applying information to the individual client. The student may be unaware of need to make modifications for treatment. This student requires consistent direct instruction.</td>
<td>Student independently arranges therapy environment, but does not account for relevant factors that may interfere with optimal client performance and/or observation by family and supervisor. Student requires assistance in planning modifications for treatment based on reflection on past sessions. Intermittent consultation is required.</td>
<td></td>
</tr>
<tr>
<td>Develops plan for data collection</td>
<td>Inaccurate and Inefficient</td>
<td>Partially Accurate</td>
<td>Accurate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student is unsure of what skills to monitor in intervention. The student is unaware of the need to collect data measuring client progress. This student requires constant direct instruction.</td>
<td>The student partially or incorrectly identifies skills to be monitored in intervention. This student requires consistent direct instruction.</td>
<td>Student identifies appropriate skills for data collection but requires direct assistance from supervisor to develop data collection plan. Student may need assistance identifying new or unfamiliar tools as well as additional/modifed adaptations. Intermittent consultation required.</td>
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<tr>
<td>IMPLEMENTATION</td>
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<tr>
<td><strong>Skill</strong></td>
<td><strong>1. Novice</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td><strong>2. Minimal Experience</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td><strong>3. Moderate Experience</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td><strong>4. Program Completion</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
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<tr>
<td>implements appropriate treatment procedures</td>
<td><em>Treatment procedures not implemented</em>&lt;br&gt;Does not implement treatment procedures. The student requires constant direction and modeling of the strategies needed and when to implement them.</td>
<td><em>Treatment procedures implemented inappropriaely or inconsistently</em>&lt;br&gt;The student implements treatment procedures but they may not be appropriate for the client or are not consistently used. The student can implement strategies with ongoing instructions and support. The support provided is specific and direct.</td>
<td><em>Some treatment procedures implemented appropriately</em>&lt;br&gt;The student is able to implement some treatment procedures with general direction but still requires direct instructions for others. Needs support of clinical faculty to make changes based on client performance and/or faculty feedback.</td>
<td><em>Appropriate treatment procedures implemented</em>&lt;br&gt;Implements appropriate treatment procedures consistently and can independently make changes based on student performance and/or clinical faculty feedback.</td>
</tr>
<tr>
<td>Uses appropriate activities and materials in sessions</td>
<td><em>Does not use appropriate activities and materials in sessions</em>&lt;br&gt;Does not use appropriate activities and materials with client. Is not able to select and use materials without constant direction from faculty.</td>
<td><em>Uses some appropriate activities or materials in sessions</em>&lt;br&gt;Uses some appropriate activities or materials but not both. Uses materials and/or activities that he/she is familiar with rather than what is appropriate to client. Requires ongoing support, direct instruction, and explanation from faculty.</td>
<td><em>Uses some appropriate activities and materials in sessions</em>&lt;br&gt;Uses some materials and activities that are appropriate during sessions but not all used are appropriate to the client or adapted to meet their needs. The student requires consistent feedback and some direct instruction.</td>
<td><em>Uses appropriate activities and materials in sessions</em>&lt;br&gt;Consistently uses materials and activities that are appropriate for client needs. Self-initiated consult from faculty.</td>
</tr>
<tr>
<td>Anticipates and reacts to personal needs of clients; recognizes cues from clients (verbal and nonverbal)</td>
<td><em>Does not anticipate or react to needs of client</em>&lt;br&gt;Is courteous and respectful but focuses more on self and the task at hand than on client's and/or family's needs and concerns. Is not able to recognize cues from client.</td>
<td><em>Reacted but does not anticipate needs of client</em>&lt;br&gt;Is less focused on self and is able to react to but not anticipate personal needs of client. Can identify needs after the fact but not during session. May be able to anticipate personal needs of familiar clients.</td>
<td><em>Anticipates and reacts to some needs of client</em>&lt;br&gt;Is able to anticipate and react to most personal needs of a variety of clients. Is not always able to recognize subtle, nonverbal cues from client.</td>
<td><em>Anticipates and reacts to needs of client</em>&lt;br&gt;Is able to anticipate and react to personal needs of a variety of clients. Recognizing overt and subtle verbal and nonverbal cues from client.</td>
</tr>
<tr>
<td>Modifies and adapts strategies and activities according to client needs</td>
<td><em>Does not modify or adapt strategies or activities</em>&lt;br&gt;Does not recognize need to modify activities. Continues with planned activities even when it is not appropriate based on client response. The student requires constant direct instruction.</td>
<td><em>Modifies activities but not strategies</em>&lt;br&gt;Recognizes need to modify activities based on client's performance/participation and intervention goals, but selected modification may not be appropriate or need direct faculty support for appropriate modification.</td>
<td><em>Modifies or adapts some strategies and activities</em>&lt;br&gt;The student can modify some, but not all activities and strategies based on client's performance/participation and intervention goals. The student is not able to articulate factors that influenced the need to modify and adapt. Consistent consultation from the faculty is needed.</td>
<td><em>Modifies and adapts strategies and activities</em>&lt;br&gt;Relates modifications and adaptations to the client's performance/participation and their intervention goals. Is able to articulate factors that influenced the need to modify and adapt. Student operates independently with self-initiated consultation from faculty.</td>
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IPCD Treatment Knowledge & Skills for MA SLP

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<td>Partially accurate, poorly justified, narrow</td>
<td>Accurate, limited justification, narrow</td>
<td>Accurate, well justified, comprehensive</td>
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- **Collects appropriate baseline and post-intervention data**
  - The student collects appropriate baseline and post-intervention data and is able to articulate the importance of the data to client gains in communication as well as the factors influencing the choice of data to collect. Student operates independently with consultation from faculty when requested.

- **Does not collect baseline or post-intervention data**
  - The student is not aware that baseline and post-intervention data are needed or the relationship of these data to the client's goals. The student requires constant direct instruction.

- **Collects appropriate baseline or post-intervention data**
  - Collects appropriate baseline or post-intervention data but is not able to articulate why the data are important. The student needs consistent, direct instruction to understand and collect appropriate data.

- **Collects some appropriate baseline and post-intervention data**
  - Collects appropriate baseline and post-intervention data for goals. The student can articulate why it is important to collect the data but not the factors influencing the choice of data to collect. Consistent consultation from faculty is needed.
<table>
<thead>
<tr>
<th>Skill</th>
<th>1. Novice&lt;sup&gt;1&lt;/sup&gt;</th>
<th>2. Minimal Experience&lt;sup&gt;2&lt;/sup&gt;</th>
<th>3. Moderate Experience&lt;sup&gt;3&lt;/sup&gt;</th>
<th>4. Program Completion&lt;sup&gt;4&lt;/sup&gt;</th>
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**General Evaluation**

1. Novice
   - No treatment coursework, no clinical treatment experience
2. Minimal Experience
   - Either has taken SPLH 862 OR has clinical treatment experience
3. Moderate Experience
   - Has taken SPLH 862 AND has clinical treatment experience
4. Program Completion
   - Has had multiple courses and clinical experiences treating numerous aspects of communication in a variety of settings.
Intercampus Program in Communication Disorders
Plan of Action

Student: ________________________  Advisor: ________________________

Evaluation point: (circle 1) Mid-Program/Formative  End Program/Summative

Student Questions and Answers
1. What are your strengths in evaluating communication disorders?
   I have a good deal of experience administering standardized measures and conducting naturalistic observation. I administer standardized measures efficiently and gather additional information to use in treatment planning.

2. What skills would you like to improve in evaluating communication disorders?
   Most of my evaluation experience deals with children. I could improve my knowledge and skills in evaluating adults. In addition, I could familiarize myself with language measures for older children.

3. How do you plan to try to improve your abilities in the areas identified in #2?
   I do not plan to work with adults in the near future, but, if I decide to work with adults, I could explore my employer's assessment tools, observe others' administering assessments, or search for research on various tools. In regard to learning more about language assessment tools for older children, I could do the same tasks mentioned above.

4. What are your strengths in treating communication disorders?
   I establish good rapport with all of my clients. I also individualize my lessons depending on each client's likes and needs. In addition, I modify my plans online to adapt to the client's needs.

5. What skills would you like to improve in treating communication disorders?
   I think that I could always be a little more creative in my lessons. In addition, I lack experience in collaborating with other disciplines.

6. How do you plan to try to improve your abilities in the areas identified in #5?
   Colleagues are excellent resources for coming up with new ideas. The internet also offers a plethora of ideas I could use in working with my clients. In regard to collaboration, I have already read numerous articles and book chapters on the matter. Now I need to gain some practical experience. I might also observe other professionals who work collaboratively and discuss the process with them.

Submitted to Advisor on: 12/4/08
Meeting with Advisor on: 12-8-08

Strengths identified by the advisor:
- Academic knowledge, both breadth & depth
- Variety of clinical experiences
- Excellent written & oral communication skills
- Excellent time management skills
- Good understanding of developmental disabilities
- Terrific problem solving skills
- Flexibility & adaptability to stressful clinical situations

Weaknesses identified by the advisor:
None identified

Agreed upon plan for remainder of program OR transition to CFY:
- One thing might consider is asking for CFY supervisor to provide her & school district resources available for working with middle school & high school students
- Could use professional development opportunities (e.g., ISHA, ASHA, school district sponsored events) to supplement her knowledge of communication disorders in older students

Student Signature: ____________________________  Advisor Signature: ____________________________
Plan of Study

Semester Plan of Study
Your advisor will send you an
electronic copy of your plan of study
after your first advising appointment.
Please click edit links, browse to the
version on your computer, change the
title to the current semester, delete
this blurb, and save link. Each time
your plan of study is updated, you
need to upload the current version to
your portfolio.

Mid-Program Evaluation

- Date self-evaluations uploaded
to portfolio: 3/31/08
- Date action plan e-mailed to
  advisor: 3/31/08
- Date of advisor
  conference: 4/2/08
- Date final action plan uploaded
to portfolio: 4/2/08

Diagnostic Self-Evaluation
Click edit links, browse to your
completed diagnostic self-evaluation,
delete this blurb, and save link.

Treatment Self-Evaluation
Click edit links, browse to your
completed treatment self-evaluation,
delete this blurb, and save link.

Action Plan

End of Program Evaluation

- Date self-evaluations uploaded to
  portfolio:
- Date action plan e-mailed to advisor:
- Date of advisor conference:
- Date final action plan uploaded to
  portfolio:
- Date entire portfolio turned into
department on CD with this portfolio
  print out (triggers Do-All form):

Click edit box. Insert the dates indicated
above. After ALL dates have been
entered, delete these instructions.
Click Save.

Semester 1 Artifacts

- Coursework artifact 1: SPLH 764
  Speech Aerodynamics,
  Phonation/Resonance, diagnostic
- Clinic artifact 1: Schiefelbusch
  Communication Camp, Social,
treatment

Artifact 1
Artifact 2

Semester 2 Artifacts

- Coursework artifact 1: SPLH 860
  Evaluation, foundations, diagnostic
- Clinic artifact 1: KUMC,
  articulation/phonology, treatment

Artifact 1
Artifact 2

Semester 3 Artifacts

- Artifact 1: SPLH 844 Language
  Disorders School Age, receptive-
  expressive language, diagnostic &
treatment

Artifact 1

Semester 5 Artifacts

- Artifact 1:

Click edit box. Insert the number and
name of the course OR the name of the
clinic(s) for your artifact. Identify the
ASHA Knowledge Area for each artifact.
Indicate whether each artifact involved
diagnostic or treatment skills or both.
Delete these instructions. Click Save.

Artifact 1 Description
Click edit links, browse to your
completed artifact description sheet for
your first artifact, delete this blurb,
and save link.

Artifact 1
Click edit links, browse to your first
artifact, delete this blurb, and save
link.
Diagnostic Self-Evaluation
Click edit links, browse to your completed diagnostic self-evaluation, delete this blurb, and save link.

Treatment Self-Evaluation
Click edit links, browse to your completed treatment self-evaluation, delete this blurb, and save link.

Action Plan
You ONLY need to upload the FINAL action plan. You will e-mail your initial action plan to your advisor. Your advisor will update and finalize this plan during your face-to-face conference. Your advisor will e-mail you the FINAL action plan. Click edit links, browse to your completed diagnostic self-evaluation, delete this blurb, and save link.