PHASE TWO

Effective Teaching Techniques and Tools for Deaf and Hard of Hearing Adult Immigrants in ASL and English Bilingual and Bicultural College Programs

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The report was developed as a part of the Bow Valley College Deaf and Hard of Hearing Adult Learners Program. The other related two reports Phase I, and Symposium Report, were also developed.
Acknowledgement

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Funding: Calgary Learns

Bow Valley College: Internal Applied Research and Innovation Grant

Participants: Learners from Deaf and Hard of Hearing Programs in Bow Valley College

I wish to acknowledge the wonderful support I received from Audrey Gardner, Sarah Eaton, Ian Kennedy and Debra Russell. Thank you very much for your support throughout the research process.

I want to thank the students who participated in this research. Your knowledge and insight will help the field of Literacy for Deaf and Hard of Hearing Adult Immigrants to support language learning. Thank you for giving me the opportunity to work on this research project with you.

I want to express my gratitude to the Bow Valley College Applied Research and Innovation Center and Calgary Learns for funding this research project. The views and interpretations in this publication are those of the author and do not necessarily reflect those of the funders.
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Executive Summary

Bow Valley College Deaf and hard of hearing (DHH) adult learners program aims to improve best practices for DHH adult immigrants who are developing American Sign Language and English literacy skills.

The question was:

**What are the effective teaching approaches and tools for immigrant Deaf and hard of hearing adults in bilingual and bicultural literacy programs?**

In Phase one (2008), the researcher identified two effective teaching approaches, Conceptually Inaccurate Signs and Contact Signs, and two ASL-English bilingual tools, ASL Literature Series – Birds of a Different Feather and Norquest Reader 2 – Snow Dogs. They were collected from college programs serving DHH adult immigrant bilingual and bicultural programs similar to Bow Valley College.

In this second phase, the teacher as researcher and learners piloted these teaching approaches and tools. Participatory Action Research methodology was used on the basis of the research objectives which were to increase knowledge of effective teaching approaches and tools, empower learners to guide the research and to provide multiple opportunities to collect learners’ perspectives. It is important to note that Deaf and non-Deaf bicultural materials were not piloted.

Data were collected through teacher and learner reflections at the end of each pilot session. The external evaluator interviewed the students about their participation in the research and gathered their perspectives about what they learned. Learners also evaluated their participation in the research project.

The teacher as researcher and external evaluator analyzed the data. The teaching approach that worked well was Conceptually Inaccurate Signs. Contact Signs teaching approach did not work well. Both tools piloted ASL Literature Series – Birds of a Different Feather and Norquest Reader 2 – Snow Dogs supported ASL-English bilingual learning.

The themes that emerged from this report are:

- Using American Sign Language in peer to peer conversations and between teacher and learners to develop ASL and English literacy skills
- Using Bilingual Materials are Critical
  - The learners and teacher identified different components of effective teaching approaches and tools. They are the signer showing different
translations of various contexts surrounding the words, changing signing style and opportunities to explore different translation in-depth.

- Learner's educational experiences as they shared the impact of past experience about education, attending English as a Second Language classes without ASL foundation and their most important learning experiences at Bow Valley College
- Learner and teacher participation in the research which provided learners with a sense of leadership and being in control of their own learning

Based on the research evidence, there are some recommendations to improve the learning environment for DHH adult immigrant learners,

- American Sign Language should be incorporated as the language of instruction
- DHH learners should not be enrolled in mediated learning environments
- Recognize the equal status of American Sign Language and English
- Ensure that ASL and English are visible as much as possible
- Teachers should always continue to develop their translation skills

There are several recommendations to continue learning about ASL-English bilingual and bicultural education. They are:

- Further testing on which teaching approaches: Conceptually Inaccurate Signs or Contact Signs develop the learners' translations skills to bring meanings back and forth between ASL and English
- Description of the visual learning principle and what it means for best practice in DHH bilingual and bicultural programs
- Testing which teaching tools develop the learners' Deaf and non-Deaf bicultural awareness
Introduction

This project builds upon phase one which identified teaching approaches and tools used by educators in similar programs to Bow Valley College’s Adult learners program that value bilingual and bicultural (bi-bi) education. The results of this project can contribute to building knowledge and evidence in Deaf and hard of hearing (DHH) bi-bi education. Using a participatory action research approach, DHH immigrant learners in BVC’s program joined the research to test specific teaching approaches and tools and worked with the teacher (researcher) as a team.

The teaching approaches we tested were:

- Conceptually inaccurate signs
- Contact signs

The tools we tested were:

- ASL Literature – “Birds of a Different Feather”
- ASL-English Bilingual Material - Norquest Reader 2 – “Snow Dogs”

Research Question

The research question was:

What are the effective teaching approaches and tools for Deaf and hard of hearing adult immigrants in bilingual programs?

Research Background

Phase one utilized qualitative multiple case studies to identify effective teaching approaches and tools. The researcher interviewed literacy practitioners and observed their teaching approaches and tools in practice at three colleges in three different cities across Canada. Deaf education researchers were also surveyed. Results from phase one indicated a severe lack of evidence on teaching immigrant adults ASL and English as well as a limited body of knowledge on Deaf bi-bi education for all adults including immigrant adults at foundational learning/literacy levels.
Research Project Limitations

Not every student in the program was available to participate in the study. The project represents only a small pool of students who participated. Although there is a small number of participants, the PAR qualitative methodology allowed an in-depth study of the students’ perspectives. The selection of the participants was not based on standardized and linguistic based research which meant ASL literacy skills required were based on the teacher’s experience.

Objectives

The objectives of the study were:

- To increase knowledge of effective teaching approaches and tools
- To encourage the participation of learners in the decision making process to determine effectiveness of piloted tools and teaching approaches
- To expand curriculum and improve the learning environment of Bow Valley College American Sign Language for Deaf and Hard of Hearing Adult Learners program
- To host a Community Knowledge Exchange to share research results and to strengthen relationships with organizations providing services to Deaf adult immigrants

Participants

The project had three informants; two students and one teacher. One student, who is hard of hearing, is a multilingual learner. The student knows two sign languages (ASL and non-ASL), has skills in spoken and written Arabic language. This student is learning spoken and written English. Another student has sign language skills from their country of origin and American Sign Language. This student is learning written English. Both students are trying to develop proficiency in ASL and written English.

The teacher currently teaches at the DHH Adult Learners program at Bow Valley College and is the researcher in this project.
Criteria to Select Participants

Participants were invited based on status as immigrants, ASL and English level at BVC DHH program. The researcher scanned the list of all the DHH Immigrant students currently enrolled in American Sign Language for Academic Purposes. It was a course offered for DHH immigrant adult learners to continue develop literacy skills in ASL and English. They were learners with some ASL literacy and are learning English literacy skills. Only those students with this profile were invited to participate in the research project.

Invitation of Participants

A meeting, lasting approximately 30 minutes, was arranged to invite Deaf and Hard of Hearing Immigrant adult learners, to learn about the research. It was an opportunity, through the facilitation by the researcher, for open ended discussions, questions and answers about the project which included the following activities,

- Presentation and description of teaching approaches and tools collected in Phase I
- Description of Phase II objectives and research design and how their participation is foundational to the research methodology. Also, the role of the teacher as researcher and external evaluator were explicitly explained.

At this point in this meeting, the researcher left and another teacher with ASL and English skills who was not affiliated with the research and the Deaf and Hard of Hearing program carried on the meeting to:

- Identify interested students as participants
- Translate the consent form to participants in American Sign Language
- Collect participants’ consent
- Submit the consent form to the teacher as researcher.

Methodology

Participatory Action Research (PAR) was the methodology used. PAR research design is structured for multiple opportunities for participants to actively engage in decision making. Moreover, PAR is designed to create a space for learners and teacher as researcher to learn how they can collectively change the practices
themselves, and understand these practices and the situation in which they live and work (Kemmis & McTaggart, 2007). Central to change are the learners’ perspectives and about how and why the pilot teaching approaches and tools supported or did not support their ASL-English bilingual skills and learners’ feedback on what adaptations of the teaching approaches and tools needs to be made.

There are three phases of the PAR cycle: planning the research, act and observe, and reflect. A cycle denoted one pilot session. The teacher and learners tested two teaching approaches and two tools which meant there were four pilot sessions or four PAR cycles. At the end of these cycles, the external interviewed the learners.

**Planning the Research**

This planning phase denoted the decision making process and it was facilitated by the teacher as researcher (TR). The TR invited with the participants to describe, in detail, and look at, the list of effective teaching approaches and tools collected from Phase I. TR identified which teaching approaches and tools were not used previously in class. TR and participants provided their input collectively to select which teaching approaches and tools to pilot. The principle criteria of which teaching approaches and tools to pilot was focused on ASL-English bilingual literacy skills. A schedule of pilot sessions was created at this phase.

**Data Collection**

There were three ways to collect data: observations (field notes), teacher and learner reflections and external evaluator interview with learners. The first two occurred in the pilot sessions as part of the PAR cycle. The other one occurred at the end of the PAR cycle.
**Act and Observe Phase**

Selected effective teaching approaches and tools were piloted in this phase. Data were collected through field notes (observations, quotations). The researcher wrote field notes at the conclusion of each pilot session. Opportunities were provided for learners to verify the field notes. The protocol for field notes was guided by literature review and discussions between the TR and external evaluator.

**Reflection Phase**

This stage involved the following activities,

- Reflections of the data collected, classroom learning, group discussions and self reflection on the teacher role,
- Reflections on the teaching approaches and tools and its impact on teaching practice and students' ASL and English language learning,
- Learner reflections about the piloted teaching approaches and tools,
- Scan of relevant literature to support reflections, and pose any questions for further inquiry.

The teacher as researcher captured the student’s response on video camera. Interviews were conducted at the end of each pilot session and varied approximately fifteen to thirty minutes in length. The pilot sessions were also videotaped; the teacher as researcher reflected upon what happened.

Reflection notes were discussed with the project supervisor and external evaluator. Notes and discussions about the reflection from the meeting were included as data.

**End of PAR Cycle**

**Interview with External Evaluator**

The external evaluator interviewed the learners at the conclusion of the pilot sessions. The purposes of the interview were to evaluate the research project, teacher as researcher’s role and how the teaching approaches and tools impacted their ASL-English bilingual learning. The teacher as researcher (TR) did not evaluate the project. However, the TR and external evaluator collaboratively discussed and determined the interview protocol. Moreover, if any revisions to the
protocol were required, the TR and external evaluator held meetings and documented what changes were made.

**List and Description of Piloted Teaching Approach and Tools**

<table>
<thead>
<tr>
<th>Pilot Session # (PAR cycle #)</th>
<th>Tool</th>
<th>Teaching Approach</th>
<th>Classroom Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td><em>Birds of a Different Feather: ASL Literature</em> DVD (ASL Text) + Book (English text to guide discussions about the literature.)</td>
<td>Conversations in ASL were used with learners to check comprehension about the story and develop sensitivity to sign production, facial expression and style of the signer. Special attention was placed on how role playing (narrator vs. character) operates in ASL with relevant eye gaze/body shifting behaviours.¹</td>
<td>Learner and teacher completed a wide range of activities including: comprehension check, language notes, background, literary questions, retelling and sharing similar personal experiences in relation to the characters from the story.</td>
</tr>
<tr>
<td>II</td>
<td><em>Norquest Reader 2 DVD + Book</em> (ASL Text and English Text are visible side by side at the same time) A random collection of fiction and nonfiction stories written by Deaf</td>
<td>Conversations in ASL were used with learners to check comprehension about the story and develop sensitivity to sign production, facial expression and style of the Signer. Special attention was placed on how role playing</td>
<td>Teachers checked for comprehension about how sign production and non-manual signals impacts meaning of the word in context. Learners shared</td>
</tr>
</tbody>
</table>

¹ Supalla, S and Bahan, B. (1994). *ASL Literature Series: Birds of a Different Feather & For A Decent Living*. DawnSignPress: United States of America. It is important to note that the authors define a signer as a literary artist.
<table>
<thead>
<tr>
<th>III</th>
<th><strong>Vocabulary Basics by Judith Nadell, Beth Johnson and Paul Langan</strong></th>
<th><strong>Conceptually Inaccurate Signs</strong></th>
<th>Teachers checked for comprehension about how sign production and non-manual signals impacts meaning of the word in context.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The book has a list of different vocabulary in which the meanings are impacted by how it is used in sentences.</td>
<td>The teacher provided different sign choices for an English vocabulary learner are not familiar with. Learners read new English vocabularies in context and choose the best sign that shows what the word in context meant. Teacher discussed the learners’ sign choices and checked for conceptual inaccuracy of learner's translation of meaning from English to ASL.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV</th>
<th><strong>Vocabulary Basics by Judith Nadell, Beth Johnson and Paul Langan</strong></th>
<th><strong>Contact Signs</strong></th>
<th>Teachers checked for comprehension of new vocabulary.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The book has a list of different vocabulary in which the meanings are impacted by how it is used in sentences.</td>
<td>Teacher provided direct translation, signing word by word using grammar structure of English. The teacher did not offer different sign choices of the word.</td>
<td></td>
</tr>
</tbody>
</table>
Understanding “signer”

The tools in this project use the role of a ‘signer’. A signer means a person who uses sign language, different from a speaker who vocalizes to literary artist who create cultural stories, poetry and visual performances using sign productions of American Sign Language. For the purposes of this report, the signer is defined broadly as a person, Deaf and non-Deaf, who use sign language. This includes signing in face to face conversations and using ASL literature in varying genres and literary art. The signer’s works are within the “manual”\(^2\) traditions of the Deaf community. This is not to be confused with the traditional view of interpreters in education in which the signer means a non-qualified interpreter.

Data Analysis

The TR and external evaluator analyzed the data collected and identified common themes from the teacher as researcher’s and learners’ perspectives and participation in the research.

In the first step, the teacher as researcher and external evaluator utilized colour codes to identify key themes and phrases. In the next step data was categorized according to these themes. The TR and external evaluator conducted these steps separately and independently. In the final step, they met and blended their analysis together. The TR and external evaluator re-examined the data for consistency and verification. The re-examination provided an opportunity to reflect on the research objectives and use of the participatory action research methodology. At this moment, the TR and external evaluator asked: Were the students empowered in this research project? What additional questions have emerged from the data analysis? Were the learners’ perspectives made clear?

These reflections were included in the preliminary findings. Several meetings between the TR and external evaluator were held to discuss the preliminary findings to produce the final report.

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Findings

Five themes emerged from the study which showed the important factors that impacted the effectiveness of the teaching approaches and tools tested.

**Theme 1: Learning Language through Conversations Using American Sign Language**

Through the learners and teacher co-participation, the teacher as researcher and external evaluator identified two related subthemes. Peer-to-peer conversations and unmediated conversations between learners and teacher in ASL were noted as significant as they impact the effectiveness of teaching approach and tools to support ASL and English language learning.

**Peer to Peer Conversations Using Sign Language**

Critical to effective teaching approaches and tools, as participants reported, were multiple opportunities to learn about language in peer to peer conversations. Learners talked with each other about how the signer used ASL grammatical features to express meaning, shared their understanding of the differences between ASL and English and talked about how to connect the two with their translations. They reported about this engagement.

Learners said:

"The discussions with my peers were really beneficial because, alone, it was difficult to express my thoughts and decide which sign to choose. With my Deaf classmates, we can talk about the different possible signs for a word and then we can agree which sign best fit the sentence we read."

"We discussed different views about a sign, theirs and mine, and then we decided which sign is the best fit for that sentence."

"We need language, ASL; it is easier to communicate our feelings, thoughts and emotions in ASL about what we learned."

Teacher said:

"Using American Sign Language in peer to peer conversation about language use was critical to the success of the teaching approach and tools. In these
conversations learners explored the content of the materials and its language, American Sign Language and English, in context supported their learning.”

“Conversations about the different translations among learners about the words, sentences or words and then determining which translation was appropriate to the context of the story was the most beneficial as it was observed that the students were engaged in this process. And, through this, the students have a sense of ownership with language, especially English. English texts are a phonetic based language and it could easily appear completely foreign and inaccessible to Deaf learners. With both texts visible, the students are, again, more engaged with learning how to use language. We talked about the two different signs and the student decided the meaning of the sign does not change context and what the signer wanted to say. Rather, it aligned with the context and the signer. I believe this decision-making from the use of their translation skills is an opportunity for the language to claim them and become a living part of them.”

Unmediated Conversations between Teacher and Learners Using Sign Language

The learners reported that direct conversations with the teacher using ASL impacted the effectiveness of the teaching approach and tools. Learners revealed:

“*It is very important to have a Deaf teacher who is a teacher and Deaf. In-depth conversations with a Deaf teacher supported my deep thinking and language use in ways not done via interpreters and a non-Deaf teacher who does not know ASL.*”

“*Having a Deaf teacher and Deaf peers facilitates conversations among diverse language users. It supported the framing of a strong Deaf identity and confidence in language learning not available in my classes with an interpreter.*”

The teacher said:

“*American Sign Language as the language of instruction helped negotiations about the meanings of the words (signed or in English print) in the teaching tools we tested. It really helped learners to incorporate their life experiences when we talked about what the words mean. It gave them an understanding of how the context influences meanings*”
Theme 2: ASL-English Bilingual Materials are Critical

The teacher and learners tested two bilingual teaching tools:

- ASL Literature Series – "Birds of a Different Feather"
- Norquest Reader Two, “Snow Dogs”

The learners emphasized that bilingual materials were critical to support their acquisition of ASL and English and that they should be incorporated at all times throughout their education. Their perspectives suggested that there was a significant relationship between ASL skill and English literacy.

Components for Effective Bilingual Teaching Tools

Learners identified components of effective ASL-English bilingual teaching tools. Components of these teaching tools were how the signer presented different translations to maintain interest and variety, changed the signing style to show different characters, and gave opportunities for learner critical examination of different translations of the same English phrase or words. Also learners stated they learn best when ASL and English texts were presented at the same time.

Learners said,

“"I liked Birds of a Different Feather. It helped me learn ASL because it is more visual and it includes facial expressions, emotions and many other things. It helped me to understand the picture of the story. ”

“Norquest Reader 2 should have more facial expressions. I am more engaged when the Signer shows the emotions of the story. The signer in Birds of a Different Feather was just perfect but it needs to add some sentences, perhaps closed captioned so I can see what the English equivalent for the signs.”

“Seeing English and ASL text at the same time was very helpful”

“Well translated stories are very important things interesting. Signers who do not use facial expressions or ASL grammar properly make it boring.”

“Sometimes, the signer does not translate the story into ASL very well. I talked with my classmates and we came up with a better ASL translation of the story. We choose this translation because it gave us a better picture of the story.”
The teacher as researcher also identified components:

"It was observed that the signer has important skills to get the Deaf students hooked on literature, especially in bilingual teaching tools. They may be: (1) Creative use of the signing space (2) Signer knowledge of cinematic technique to support storytelling and (3) Skilful use of ASL grammar to get the students motivated about language learning. This was missing in some of the translations in NorQuest Reader 2 stories but this opened up a space for learners to share different translations of the stories."

"ASL Literature forms keys to motivation and learning of subtle aspects of ASL grammar"

"I believe learners can discover their voice in their translation practices more than reading translations from a signer. It would be interesting if there is a rule for translating stories from English to ASL or ASL to English. I do not think there is a general fixed rule but an ongoing practice as long as we are engaged in reading ASL and English. Students commented during the pilot session that 'it does not matter which sign is chosen, it is important how the sign helped you visualize the story and whether it fits the story'."

**Theme 3: Identification of Effective Teaching Approaches to Support ASL and English Language Use**

The teacher and learners piloted two teaching approaches:

- Conceptually Inaccurate Signs (CIS)
- Contact Signs

The purpose of these teaching approaches was to teach learners how the context surrounding the words and sentence impacts the meaning, both familiar and unfamiliar words. Learners did not only learn about the meanings of words but they learned how to translate meaning back and forth between ASL and English without changing the context. The teacher used a resource, "*Vocabulary Basics*" by Judith Nadell, Beth Johnson and Paul Langan which has a list of vocabularies in which its meanings are impacted by the context. It was used while using CIS and contact signs teaching approaches. The teacher and learners reflected on these teaching approaches. The learners also shared their perspectives in interviews with the external evaluator.
Data revealed that CIS supported ASL and English literacy skills and Contact Signs were not conducive for language learning.

**Conceptually Inaccurate Signs is an Effective Teaching Approach in ASL and English Bilingual Learning**

Using Conceptually Inaccurate Signs (CIS), the teacher translated the word using different sign choices and the learner made a decision on which sign accurately matched with the meaning in context. The study revealed that CIS was a useful approach. It engaged learners to explore meanings of words in context. Also, the study showed that the CIS teaching approach would not work well for learners without a foundation of ASL.

Learners said,

"Because of CIS, I am able to understand the word in context better than before."

"With all the signs we have come up for words in context, it helped improve my English reading a lot."

"I can figure out the meaning of the word better because I can find the meaning in sign language."

The teacher commented,

"Language sometimes appears foreign when taken literally, however when one looks past the words and see the meanings of words in its context using sign language, the learners have had improved confidence with translating meaning back and forth between ASL and English."

"It was observed that Conceptually Inaccurate Signs improve reading tremendously as they became more critical about the translations – sign production in relation to words in context. The learners shared that they did not have this opportunity in mediated ESL classes."

**Contact Signs Did Not Support ASL and English Bilingual Learning**

Contact Signs is a teaching approach which contains a mix of ASL and English. The signs used in Contact Signs came from ASL but they were used in an English grammatical order. The teacher signed each print word and did not use certain elements of English language such as the words: is, are, am, was, were, the, -ing, -
ed. The teacher signed or finger spelled each word and then we talked about meanings of words in context.

This teaching approach worked well in some of the other programs however, in this study, contact signs teaching approach was not helpful.

Learners reported that,

"It is just confusing because it is not language. It is not English and it is not ASL. It did not support my language learning”

Teacher observed that,

"It did not make sense to learners and it did not support their acquisition of either ASL or English.”

"It looks like ‘bad interpreting’ to learners where they cannot figure out the meaning in either language.”

**Key Theme 4: Educational Experiences**

The participating learners came from different countries and their educational experiences were varied. The external evaluator interviewed the student about their experiences in school.

**Impact of Past Experience about Education**

Participants reported that their past educational experience in the early years had an impact on their view on the link between sign language and literacy skills. They often were not allowed to use sign language and this affected their ability to even think about entering college and incorporating bilingual education.

"If I used sign language, I was made to feel stupid, ashamed or was even physically punished.”

"Bow Valley College is a safe place but it took some time to know that and trust that we would not have similar experiences here.”

**Attending English as Second Language Classes with a Lack of ASL Foundation**

The participants had previous and current experience in English as a Second Language (ESL) courses. The language of instruction in ESL courses was not ASL but
spoken English. Deaf students were provided with a sign language interpreter to mediate learning. Learners indicated that learning English was not conducive without American Sign Language. The learners emphasized that ASL should be the language of instruction where the teacher and learner share the same language to support their bilingual education.

Learners said:

“*I was not able to relate to the teacher.*”

“*I felt intimidated to try to participate.*”

“*ESL classes did not allow me to build confidence to use language.*”

**Most Important Learning Experience at Bow Valley College**

External evaluator asked the student what was the most important part of their educational experience. The learner-participants said,

“*Being able to learn ASL*”

“*If my ASL improves, my English will improve*”

“*Having a Deaf teacher meant the bond/identity was created from the beginning – I never felt the sense of connection to a hearing teacher*”

“*My learning accelerated once I was in Brent’s class*”

“*Direct learning, teacher to student, was much faster for me to pick up language than mediated interpreted education*”

**Key Theme 5: Participation in Research**

The external evaluator guided the learners to evaluate their participation in the research project. They revealed that their participation was a new experience; it empowered them to say what they liked and didn’t like. Both participants want to be teachers in the future and saw the value of research and hope to do the same in their classrooms.

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3 Brent David Novodvorski is the instructor for the ASL for Academic Purposes at Bow Valley College. It is a course for learners with ASL literacy skills who are acquiring English. American Sign Language is utilized to support their acquisition of English.
Learners spoke of...

"..A sense of leadership by being able to give feedback to the teacher."

"...Being in control – like I was the boss of my own learning."

Teacher said:

"Through participation with the learners in this project, I learned the importance of developing a visual principle of learning which incorporates the learners' perspectives about what tools and approaches worked well for them. The learner's perspectives provide a framework in bilingual and bicultural education that is evidence based."
Conclusion and Recommendations

The participatory action research examined the teacher’s and students’ perspectives about what are the effective teaching approaches and tools to support DHH adult immigrant learners ASL and English literacy skills. The teacher and learners piloted two teaching approaches and two ASL-English bilingual tools. We found that (1) Conceptually Inaccurate Signs, (2) ASL Literature Series – “Birds of a Different Feather” and (3) Norquest Reader 2 worked well for our learners. However, the Contact Signs teaching approach did not work well.

Overall, the objectives of this project were achieved. They were to:

- Increase knowledge about effective teaching approaches and tools
- Encourage learner participation in the decision making process to determine effectiveness of piloted teaching approaches and tools
- To expand curriculum and to improve the learning environment
- To host a community knowledge exchange to share research results and to strengthen relationships with organizations providing services to DHH adult immigrants

From the data in the study, we learned that the components of effective teaching approaches and tools are:

- DHH students talking with each other in ASL about what they learned
- Unmediated conversations using ASL between students and teacher
- Learning about different signing styles
- Showing different translations that emphasize context surrounding words
- Use of ASL literature to learn subtle aspects of ASL grammar
- Creativity and skill of the signer

We learned that through learner participation and input with decision making, they:

- Developed a sense of leadership in the DHH literacy community
- Contributed to developing bilingual and bicultural programs on a foundational level

Recommendations to improve the learning environment for DHH adult immigrant learners are:

- Incorporate American Sign Language as the language of instruction
- Non-enrollment of students in mediated learning environments
• Recognize the equal status of American Sign Language and English
• Ensure that ASL and English are visible as much as possible
• Continuous development of teacher translation skills

Recommendations to continue learning about ASL-English bilingual and bicultural education are:

• Further testing for which teaching approaches, Conceptually Inaccurate Signs or Contact Signs develops the learners translations skills to bring meanings back and forth between ASL and English
• To establish description of the visual learning principle and what it means for best practice in DHH bi-bi programs
• To continue testing which teaching tools develop the learners' Deaf and non-Deaf bicultural awareness

**Symposium**

The research finding was shared at the “Literacy for Deaf Immigrants: A Symposium for Collaboration and Learning” on May 11th, 2009 at Bow Valley College. We invited different literacy practitioners, community leaders and agencies serving Deaf and Hard of Hearing adult immigrants. The report about the symposium is available as part of this series.
References


Referential Websites:

http://www.ccsdeaf.com/indexe.html

http://www.listen-up.org/oral/a-v.htm

http://www.agbell.org

http://www.deafculturecentre.ca
Appendices

A: Reflection Questions

Below are the questions for student reflections at the end of pilot session, please note that

1. What are your impressions about today's session?

2. What strikes you about today's session?

3. What did you like about this teaching approach?

4. What did you not like about this teaching approach?

5. How important is this teaching approach for your learning? Why?

6. How does the teaching approach impact your view ASL and English literatures?

7. Were your discussions with your peers helpful to understand the concept about the word?

8. How do you like the teaching approach compared to sign by sign for word by word?

9. How does the teaching approach improve your language learning?

   a. Reading skills?

   b. Communication skills?

   c. ASL literacy skills?
Hello participants,

Bow Valley College is a Learning College in which its primary goal is to continually improve teaching and learning. Numerous research projects have been completed to support this goal. I successfully completed a study which involved visits to different literacy programs in Vancouver, Toronto and Edmonton. During my visit, I interviewed with teachers and surveyed Deaf education researchers and they shared which teaching approaches and learning materials helped their learners improve their American Sign Language-English skills.

Your program was awarded a research project to improve your education experience. I have designed a project to allow you to test the teaching approaches and learning materials that I collected from other teachers and researchers. I will make some questions to help you provide your feedback on why it helped or did not help your ASL-English skills. Your involvement and feedbacks will be used to build the program and pave the path towards improved ASL-English learning.

The teaching approach and tools will be tested during your classroom time. What you say about it will not impact your mark in the course. You and I will set up a time together to test and you will pick which teaching approach and tools to use.

I have a consent form for you to sign. The Deaf Interpreter will sign what it says.

If you have any questions about the project, please feel free to ask me to repeat or say it in a different way.

I look forward to working with you,

Brent David Novodvorski