Writing Strategies for Learners who are Deaf

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This literature review explores teaching strategies that have been found to be effective in teaching writing to learners who are Deaf. It is the outcome of an Instructional Development Grant at NorQuest College. These strategies are being piloted with students who are Deaf and attending classes and one-to-one strategy sessions at NorQuest College in Edmonton. The results are included in the appendix of this document. Many thanks to Iona Thomas, who participated in piloting these strategies.

Contents

Background to the Project

"What disables Deaf people is not that they cannot hear, but that they cannot read and write." (Enns, 2006, p. 7)

Much research exists documenting the challenges facing learners who are Deaf as they try to build English language proficiency in the areas of reading and writing (see research syntheses in King & Quigley, 1985, and Paul & Quigley, 1994). At the Centre for Excellence in Learning Supports (CELS), academic strategists and instructional assistants provide one-to-one support to learners who are Deaf and enrolled in upgrading and skills training programs. Classroom teachers are also aware of the challenges unique to this group of learners. Many of the best practice strategies employed with hearing learners are also effective with learners who are Deaf, but some modifications to these strategies need to be implemented. In addition, the language learning needs of Deaf learners are similar to those of second language learners, so many of the teaching strategies used with this group of learners may also be helpful for learners who are Deaf.

This document outlines a number of instructional strategies in the area of writing that are effective with hearing and ESL students, with suggested modifications for learners who are Deaf. It also outlines some teaching strategies developed specifically for learners who are Deaf. The follow-up project to the creation of this document calls for classroom instructors, academic strategists, and instructional assistants to implement some of these strategies and report on their effectiveness. The results of our limited pilot are outlined in the appendix. The goal of these projects is to identify some best practice strategies that are successful with adult learners who are Deaf and incorporate them into our practice.

ESL, Bilingualism, and Deaf Learners

English language instruction for learners who are Deaf has undergone a number of dramatic shifts over the last 40 to 50 years. Prior to 1970, children were educated in "oral methods" where emphasis was on the development of hearing and speaking skills through amplification devices, lip reading, and the production of speech. Oral communication was emphasized over the development of literacy skills, as the

prevailing view of literacy development was that learners must first be taught to speak, then read, and then write. From the 1970s until well into the 1980s, simultaneous communication, which involves speaking and signing at the same time, became the accepted method of instruction. ASL signs were produced in English word order, supplemented with invented signs to designate grammatical markers and word endings. Evans and Seifert (2000) describe how English language instruction through simultaneous communication is like teaching French to English students by using French words communicated in English word order and inserting English grammatical endings (p. 2). Although simultaneous communication has fallen into disfavour with many educators, it is still practised in some educational settings.

Research demonstrates that learners who are Deaf and come from homes where the parents are also Deaf, consistently score higher on reading tests than their peers who come from homes of hearing parents. This has led to the conclusion that a strong grounding in ASL sets the stage for successful introduction of English literacy skills. ASL/English bilingualism and English as a second language (ESL) approaches for learners who are Deaf have gained prominence in the last 10 years. The details of a bilingual or ESL approach when working with learners who are Deaf are being strongly debated, but there is growing evidence that some bilingual teaching strategies hold promise for increasing literacy levels for this group of learners.

Using ESL teaching strategies with Deaf learners is a recognition that deafness is not a disability; rather, to be Deaf means that one belongs to a unique cultural and linguistic minority. English is a new language for these learners, and many of the strategies we employ to build language proficiency in ESL learners can be successful with learners who are Deaf. There are, however, a number of distinctions we need to keep in mind.

ESL for Deaf Learners	ESL for Hearing Learners
Instruction delivered in visual modality (sign language) and written language.	Instruction delivered in a combination of spoken English and written language.
First language has no written form.	Most spoken first languages have a written form.
Inconsistent first language exposure. Majority of learners who are Deaf are born into hearing families; exposure to sign language and English varies from one individual to another. With children, the educational emphasis was often to develop speech or ASL over English literacy skills. At NorQuest, we also see many learners who are Deaf who come to us from other countries. They may or may not be proficient sign language users in their native country, may not be proficient communicators in ASL, and have had no exposure to English before coming to Canada.	Fluent first language oral exposure although exposure to literacy in the first language will vary from one individual to another.
Exposure to English as a second language limited to written form. Often adults who are Deaf have little interaction with English outside the school environment unless they make a special effort to read on their own or interact with the hearing or Deaf community through writing (e.g., notes to hearing persons, email, text messaging).	Constant exposure to the oral form of the second language outside school. Adult second language learners with hearing need to make a special effort to practise literacy skills outside school.
Little connection between ASL and written form of second language.	Connection between oral and written form of second language.

General Strategies Applicable to Learners who are Deaf

1. Emphasize the value of the learner's first language (ASL or a signed language) to build motivation and a positive self-concept.

2. Recognize and monitor the "linguistic load" that learners bear as they build language proficiency. For example, a learner may be expected to demonstrate conceptual understanding by communicating his thoughts in sign language, which is then transcribed into English. The load of not only conceptualizing but producing grammatically and syntactically correct text may be too much to expect at one time. Offering support during the composing process may be appropriate.

3. Proponents of a bilingual approach argue that instructors should have a basic knowledge of the learner's first language in order to understand miscues that indicate the learner's language processing. They should also have an understanding of the values inherent in Deaf culture.

4. Recognize that language processes—listening, speaking, reading, and writing—may develop simultaneously and that literacy skills should not be delayed in favour of the development of listening and speaking skills. For learners who are Deaf, literacy skills need to be developed along with sign language communication skills.

5. Allow learners to translate. Again, a basic knowledge of the learner's first language is helpful, as instructors can help learners make comparisons between the two languages.

6. Emphasize comprehension. Encourage learners who are Deaf to attend to meaning and what makes sense in context.

In interviews about writing conducted with learners who are Deaf and attending NorQuest courses in the winter of 2008, all students indicated that writing in English was important in their day-to-day life. It is their way to communicate with the hearing world, especially when other forms of communication are unavailable (interpreters,

gestures, lip reading). Students use writing to write notes to hearing people, to text message or email, to use a TTY, and to communicate on the job. If interpreters are unavailable or have not been booked for appointments, persons who are Deaf may rely on writing for job interviews, medical appointments, and interviews with their children's teachers. In addition, some adults reported that they use writing as a way to express their feelings through journals or diaries and to communicate with hearing friends. The majority of the students interviewed were dissatisfied with their writing skills. They indicated that they felt nervous and frustrated when asked to write.

Effective Approaches to Writing Instruction

Research with 325 children who are Deaf in grades 4–10 showed that writing instruction taught as a *process* is more effective than instruction where the focus is on the creation of a writing product (Kluwin & Blumenthal, 1992. pp. 41–53). Teaching writing as a process means instructing students to work through the same stages of composing that skilled writers employ. Generally, writing processes include a pre-writing or planning phase, composing, revising for clarity and organization, editing, and publishing. Far from being a linear sequence of stages or steps, a process approach is fluid and includes feedback throughout the creation of text. Learners are encouraged to use a variety of strategies as they create text. The focus is on the process of formulating and expressing ideas, rather than on the end product. Although research into the effectiveness of a "process approach" shows mixed results in terms of improved writing conventions (grammar and mechanics), a process approach leads to an emphasis on the thinking processes which accompany composing. A process approach leads to higher scores on aspects of writing such as content and ideas, organization, awareness of audience, and voice. In the study, a process approach to writing instruction often resulted in changes in grammatical complexity. The researchers indicate that this increased complexity may be a result of the students' greater sense of freedom of expression (Kluwin & Blumenthal, 1992).

"Writer's Workshop" is a well documented approach that incorporates a process approach to writing instruction. It is often used in K to 6 classrooms, but can be adapted to adult learning environments. Writing occurs on a daily basis and begins with a "mini-lesson" (5–10 minutes) of some aspect of the writing process. The next 2–3 minutes are devoted to gathering information on the status of individuals in the class. Students maintain a writing portfolio that contains writing samples at various stages of development. Learners then spend the next 20–40 minutes writing or conferring. The instructor confers individually with students, offering suggestions and feedback.

"Sharing and the Author's Chair" occur near the end of the session and can consist of oral sharing of completed works with the entire class, peer revisions, or editing.

An important aspect of a Writer's Workshop approach is that instructors also engage in writing, thereby modelling the process. More specific information on Writer's Workshop may be found on the following websites.

Saskatchewan Learning – Best Practices: Instructional Strategies and Techniques
http://www.saskschools.ca/curr_content/bestpractice/writer/index.html
This site is a good overview of Writer's Workshop with explanations of processes, sample organizational forms, and writing samples.

Annenberg Media Learner (part of the Annenberg Foundation, USA)
http://www.learner.org/resources/series205.html?pop=yes&pid=2204#
This link is to a series of videos on writers' workshops used in grades 3–5. The entire site is a collection of online resources to promote excellence in teaching.

Annenberg Media Learner
http://www.learner.org/resources/browse.html?discipline=4
This link is to a list of additional literature and language arts topics. You must sign on to become a member of the site, but access is free.

Books in NorQuest Library

Practical Ideas for Teaching Writing as a Process, edited by Carol Booth Olson

Write to Learn, by Donald Murray

Writing Without Teachers, by Peter Elbow

Writing Out Loud, by Deborah Morgan

The following sections of this document follow a process approach to teaching writing and discuss strategies found to be effective with learners who are Deaf. In general, they are exemplary best practice strategies used with any students who wish to improve their writing skills, but include some modifications for learners who are Deaf.

1. Pre-Writing

In interviews conducted with Deaf students at the College, students overwhelmingly indicated that they did make a plan, outline, or web before starting to compose. The challenge for learners who have limited English proficiency is that although they may have much to say about a topic, the ideas they can communicate are restricted by the vocabulary they know. Students with limited language proficiency may have command of basic English vocabulary, but do not have the breadth and depth of vocabulary knowledge to express complex ideas.

Spelling is another challenge facing learners as they develop outlines, webs, or plans before writing. Spelling requires a combination of phonemic awareness, morphemic awareness, and visual memory. As phonemic awareness has limited application for learners who are Deaf, these students rely on their knowledge of morphemes and visual memory for both word identification in reading comprehension and for spelling. Those who struggle with either skill are likely to have challenges with spelling; therefore, not only do some learners who are Deaf restrict their brainstorming to familiar vocabulary, but also to words they are able to spell.

What often results when learners use brainstorming to generate ideas for writing, are outlines or webs with minimal detail that include limited vocabulary.

Strategies

Brainstorm as a large group (classroom)

Typically, group brainstorming takes the form of recording all ideas generated by the group on a whiteboard or flip chart paper. Brainstorming with a large group can be effective, as there is synergy created by a free flow of ideas. One person's idea will prompt another to connect and contribute. In addition, brainstorming in a group should expose learners to a wider variety of vocabulary than they might generate on their own.

But researchers into the effectiveness of brainstorming as a strategy to create innovative ideas have found that large group brainstorming is not as effective as we might think. Group dynamics may create distractions that inhibit the free flow of ideas. In larger groups, individuals often conform to what others in the group are saying. This phenomenon is known as *group think* or *self-censoring*. Individuals' personalities affect brainstorming and some will desire to "please the teacher" or compete with other class members, or will feel anxious about expressing their opinions. Class members may feel social inhibitions and the dominance of some members.

In larger groups, brainstorming is often prematurely ended without reaching the potential mass of ideas necessary to achieve ideas of high quality. Despite these challenges, brainstorming in groups is still a preferred strategy for pre-writing. For large-group brainstorming, the following guidelines may be effective.

a. Promote the generation of a large quantity of ideas and refrain from evaluating ideas.

b. Include breaks during brainstorming. Individuals tend to "hit a wall" when it seems they can't think of any more ideas, but after a break they are often able to generate more ideas.

c. When the group "hits a wall" and appears unable to generate more ideas, return to categories that have not been fully explored or insert a new category into the web.

d. Instruct group members not to elaborate unnecessarily on ideas and to avoid "telling stories." These behaviours decrease the number of ideas generated by a group.

e. Change the venue of where the group brainstorms for creative ideas. To be removed from the physical space where "production" occurs has been found to promote a more relaxed and creative state of mind for brainstorming.

f. Alternate individual brainstorming with large group brainstorming. Use "brainwriting" or "electronic brainstorming" as a strategy (see following section).

For a more detailed discussion of brainstorming, see *Putting the Brain Back in Brainstorming,* by Paul B. Paulus (2006). Go to the ASAE & the Center for Association Leadership website at http://www.asaecenter.org/ . In the Search field, enter "brainstorming, Paulus."

Brainwriting or electronic brainstorming (classroom or one-to-one)

These strategies allow individuals to share ideas with a group through the exchange of ideas written on paper, or to share ideas through a computer network. Some of the social interaction dynamics that can interfere with the free flow of ideas in large group brainstorming are avoided in brainwriting or electronic brainstorming. One member of the group writes an idea, another reads it and adds feedback and his or her own idea, and then passes it on to another. In computer labs, students can contribute to a group discussion online through a threaded discussion. An added benefit of this strategy is that learners have time to generate and compose their ideas. This strategy is likely more effective with learners at advanced literacy levels. A limitation is that learners who struggle with spelling or lack of vocabulary may find it difficult to express their thoughts in text form. It may also be difficult for some learners to fully comprehend the ideas expressed by their classmates without the facilitative role of the instructor.

Grouping students in pairs to brainstorm (classroom)

Group hearing students with students who are Deaf. The hearing student scribes the ideas presented by the learner who is Deaf through her interpreter. Conversely, the learner who is Deaf scribes the thoughts of her hearing partner.

Instructors scribe students' ideas (classroom IA or one-to-one sessions)

One-to-one support during the process of generating ideas can be very helpful. Deaf educators who advocate a bilingual/bicultural approach contend that concept building and discussion should be conducted in the student's first language (ASL) so that the student can fully explore her thoughts on the subject. The facilitator of the discussion scribes key ideas in English (as a web, outline, or notes) for the learner during the discussion.

It may also be helpful to discuss and list vocabulary, idiomatic expressions, and phrases that the student may want to incorporate into her writing on a specific topic.

Use webbing software such as Inspiration to build a visual web (classroom or one-to-one sessions)

Inspiration software (www.inspiration.com) is widely used at NorQuest as a pre-writing/planning tool. Particularly effective for visual learners, it allows students to build mind-maps which can easily be reorganized, colour coded, and accompanied by graphics. Inspiration software includes numerous templates for a variety of writing assignments in language arts, including fictional writing, character webs, mythical journey, and writing directions. Instructors can also develop their own templates.

2. Build related vocabulary before writing.

Vocabulary knowledge is a significant predictor of reading comprehension in both hearing and Deaf learners. However, learners who are Deaf often have significantly limited vocabulary knowledge compared to their hearing peers, learn new vocabulary at a slower rate, and have difficulty developing vocabulary acquisition processes (Paul, 2003; Wauters, Marschuark, Sapere, & Convertino, 2008).

In interviews conducted with adult learners who are Deaf at NorQuest, all felt that they struggle with vocabulary. A particular challenge was a lack of diverse vocabulary and an imprecise or unclear understanding of new vocabulary. Several students mentioned that they found regular and systematic vocabulary instruction beneficial.

Strategies

Use a "knowledge model" of vocabulary acquisition.

Many of the vocabulary acquisition practices used with learners who are hearing or Deaf are not supported by current theory or research (Paul, 1996). The researcher points out that using a list of words that will be encountered in a reading activity, and asking learners to construct sentences using these words, implies that the word meaning is limited to what is shown in the reading activity. He advocates that instructors need to start with what the students already know about the target words and then use this information to expand students' overall vocabulary knowledge. This means that when teaching a target word, instructors discuss additional meanings of the word, its relation to other words or use in phrases, and its idiomatic and figurative use.

The "knowledge model" means that the "unknown" or "new" is **always** connected to existing knowledge. Another aspect of the knowledge model is that knowledge consists

of conceptual sets of interrelationships, not of independent lists of facts or information. Applying a knowledge model to vocabulary instruction means instructors build an in-depth knowledge of a target word by exploring a number of meanings, examples, uses, and associations rather than an isolated dictionary definition.

Build concept/vocabulary webs or charts.

Semantic mapping and features analysis go beyond linking a target word to its definition as many traditional vocabulary building activities do (e.g., worksheets, bingo, crosswords). Mapping or charting activities require students to make cognitive connections or relationship webs between target vocabulary and features related to the target word. Inspiration software includes numerous templates for a variety of writing assignments in language arts, including a vocabulary development template. The vocabulary helps to build depth of understanding of new vocabulary as the web around the word includes synonyms, antonyms, and derivations. Instructors can add categories, including phrases that incorporate the target word, idiomatic expressions, or related grammatical forms. The following graphic illustrates the use of concept/vocabulary webs or charts which not only successfully build comprehension of the target words, but also result in incidental learning of new and related vocabulary.

Vocabulary web built around the target word "dream" using a modified Inspiration vocabulary template
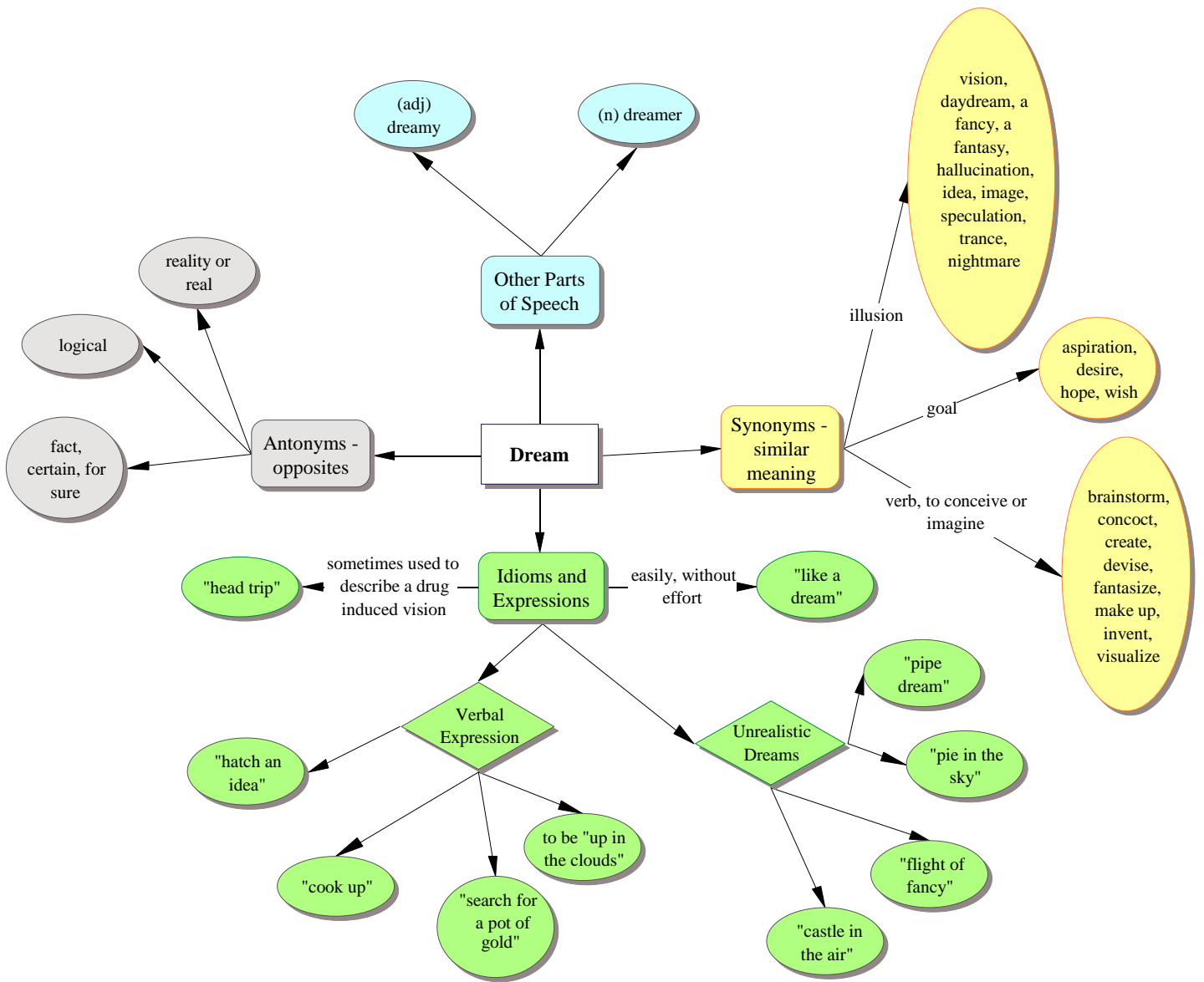
More Expressions
A dream come true (a wish that is fulfilled)
Sweet dreams. (Have a wonderful sleep.)
I wouldn't dream of it. (I would never do that.)

Chart to explore vocabulary related to various sports

	Boxing	Hockey	Football
What do you call the participants?			
What equipment is used?			
Where is this sport played?			
Which words describe the actions of the players?			
How do you score?			
What titles are given to the officials who control the game?			
What are the names of some famous participants?			

Repeated exposure to target words

In addition to developing an in-depth knowledge of a target word through tools like Inspiration or webbing, research has shown that the beneficial effects of vocabulary instruction are dependent on numerous exercises, experiences, and exposure to the target word. Some vocabulary workbooks used at NorQuest do attempt to address this need for repeated exposure, but do not incorporate a "knowledge model" of vocabulary acquisition nor promote in-depth and expansive comprehension of target words. A combination of all three strategies may address learners' needs and effectively build vocabulary.

3. Composing

As skilled teachers know, different types of writing require different organization. For example, narrative writing has a different form and structure than persuasive writing. Students need explicit instruction on the differences between these types of writing. The following web page from Westmount School, Edmonton Public Schools, contains useful information for writing teachers.
http://www.angelfire.com/wi/writingprocess/specificgos.html

The organization of writing for different purposes needs to be directly taught. Sometimes a graphic, mnemonic, or graphic organizer can help students organize their composition.

NorQuest students who are Deaf said that they often had difficulty understanding instructors' writing assignments or expectations. First of all, any writing assignment needs to be given to students in print form. Explanation of a writing assignment should be supplemented with a written outline of the assignment and a marking rubric. In addition, show several samples along with the explanations. Begin a collection of good student samples that can be shown to subsequent classes. Modelling the writing process with the whole group or in one-to-one sessions is effective. Once learners reach the stage when they are able to compose whole pieces on their own, allow them to hand in drafts of their work as they create it. They can then receive feedback *during* the writing process, and not simply at the end to obtain a grade.

Strategies

Group composition – modelling

As a class, in large groups or working one-to-one with a learner, model all aspects of the writing process to create a fully developed paragraph or a five-paragraph essay. Writers at beginning stages need to work on personally meaningful topics. As learners gain more experience expressing themselves in writing, the topics can be more analytical and abstract. The following steps can serve as a guide to composing as a group:

a. As a large group, analyze the writing topic. Highlight key words in the writing assignment.

b. As a large group, brainstorm ideas. Use software like Inspiration, a flip chart, or whiteboard to record responses. Build an in-depth web to demonstrate the importance of generating a wealth of ideas. Discuss additional ways of

generating ideas, such as conducting research, reading other works on the same topic, brainstorming in small groups or pairs, or free-writing.

c. Work as a group to organize brainstormed ideas. Discuss criteria for eliminating some ideas and accepting others. Use visual cues such as a variety of colours to identify different main ideas and corresponding details. Further develop brainstormed ideas: generate examples. Use graphics or graphic organizers to illustrate paragraph and essay structure (e.g., sandwich or hamburger to illustrate a paragraph or essay; graphic organizer for a compare and contrast essay).

d. Develop a first draft either orally with the whole group, or divide the class into smaller groups to build a first draft. Discuss the importance of considering the audience when writing, and how the audience influences tone and content. For learners who are writing essays, develop topic sentences for each main idea. Develop the main body paragraphs first. Discuss components of an introduction and work as a group to build an introductory paragraph. For students who are beginning to write paragraphs, focus on writing a topic sentence, supporting details, and a concluding sentence. Continue to work in small groups or as a large group to write the first draft in order to solicit ideas, model, and address questions.

e. Revise first draft. Focus on organization and how clearly the groups have communicated their main ideas. Discuss the possibility of requiring additional brainstorming to fully develop ideas.

f. Continue revising drafts as a group until everyone is satisfied with the content of the piece.

g. Edit the piece. Attend to grammar, syntax, spelling, and punctuation. Create mini-lessons for skills that need development, and facilitate extra practice. Add transition words and phrases.

h. Polish and publish the piece.

Dictating or composing in ASL

In the hearing community, researchers are beginning to explore the strategy of students dictating to an instructor or peer as a bridge to independent writing and reading (e.g., Language Experience, photo journals). In education for the Deaf, it is recommended that the instructor video record a student communicating a first draft composition in ASL prior to writing the text. This allows students to use their first language to communicate their rough draft. Students can then watch their video and translate their composition into English. For learners at more basic levels, an instructor can scribe the composition into English, perhaps with the assistance of an interpreter.

Mnemonics, graphics, and graphic organizers to guide composition

More than half the students interviewed at NorQuest indicated that they had difficulty organizing their ideas. The following mnemonics may help students organize their thoughts as they compose text. Create posters or displays in the classroom to remind students of what they need to think about as they write.

C-SPACE – Generating content for story writing (MacArthur & Graham, 1993. pp. 671–681.)

C = characters

S = setting

P = problem or purpose

A = action

C = conclusion

E = emotion

PLEASE Strategy – Paragraph writing (Vaughn, Bos, & Schumm, 2003).

P = Pick the topic, audience, and paragraph type.

L = List information about the topic

E = Evaluate whether the list is complete and determine how to order the items in the list.

A = Activate your writing by starting with a topic sentence.

S = Supply supporting details in sentences, using items from list.

E = End with strong concluding sentence and evaluate the paragraph by revising and editing.

TREE Strategy – Essay writing (Vaughn, Bos, & Schumm, 2003).

T = Write a **topic** sentence.

R = Think of **reasons** to support the topic.

E = **Examine** your reasons.

E = Think of **ending**, or conclusion

DEFENDS (Ellis, 1993)

D   **Decide on goals and thesis.**

- Decide who will read this and what you hope will happen when they do.
- Decide what kind of information you have to communicate.
- Decide what thesis or opinion you need to communicate.
- Note your thesis and goals on your plan.

E   **Estimate main ideas and details.**

- Estimate at least two main ideas that will explain your thesis.
- Ensure the main ideas are different.
- Enter three supporting details for each main idea.
- Note your main ideas and supporting ideas on your plan.

F   **Figure best order for your ideas.**

- First, second, third – what order will best suit your ideas?
- First, second, third – what order will best suit the details for each main idea?

E   **Express the thesis in the first sentence.**

N   **Note each main idea.**

- Note the first main idea in a complete sentence.
- Note the supporting details that fit with each main idea.
- Expand each supporting detail—write more.
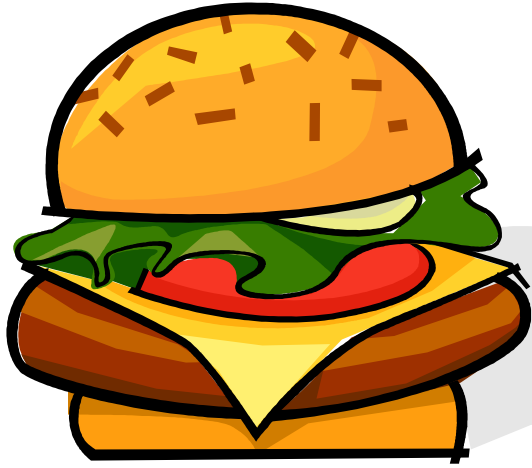- Write the next main idea.

D   **Drive home the message in the conclusion.**

- Restate your thesis in the conclusion.
- Use different words.

S   **Search for errors.**

- Find and correct any spelling, grammar, and punctuation errors.

Graphic Representation of an Essay

Introduction

- Hook, topic summary, thesis

Body Paragraphs

- Topic sentence, supporting details, concluding sentence

Conclusion

- Restate thesis, interesting observation

Graphic Representation of a Paragraph

Topic Sentence

- State your main idea or opinion.

Body

- Provide at least three supporting details to explain or illustrate your main idea.

Conclusion

- Restate your main idea in different words than those used in your topic sentence.

Graphic organizers to aid composing

The following web pages contain examples of graphic organizers that help learners organize their thinking and writing as they compose.

The "edHelper.com" site at:
http://www.edhelper.com/teachers/Miscellaneous_graphic_organizers.htm

The TeacherVision site is part of Family Education Network, Pearson Education Inc.
http://www.teachervision.fen.com/graphic-organizers/printable/6293.html

Compare and contrast graphic organizers

"readwritethink" is a website of the International Reading Association and National Council of Teachers of English. The following link is to a PDF of a chart for organizing "compare and contrast" exercises.
http://www.readwritethink.org/lesson_images/lesson275/compcon_chart.pdf

Learners can find numerous examples of Venn diagram templates on the Internet. These can be used to help learners organize their ideas.

4. Revising

In a process approach to writing, revising means that writers attend to their intended meaning, refocus on their audience, and rework their piece to ensure continuity and flow. During revising, writers will often identify where more detail or explanation is needed to clarify their thoughts. Revising also includes some refinement of syntax as the writer expands, combines, reworks, or eliminates phrases and sentences in order to more clearly communicate ideas.

An interesting but to date not fully explored concept is that of a writer's "inner voice." Some hearing writers talk of revising by "listening to their inner voice," which plays back, manipulates, reworks, and experiments with text as the writer revises. The importance of this "inner voice" for revising has not been well researched and has interesting implications for ESL students who may think in their native language, as well as learners who are Deaf who may "think" in a different mode than their hearing peers.

Strategies

Research on revising compositions with learners who are Deaf is limited, but practitioner researchers such as Sharon Livingston advocate collaborative approaches where learners who are Deaf are challenged to consider the "higher order concerns" in written communication by conferencing with instructors. These approaches are more beneficial than directive approaches, where the emphasis is on sentence level errors. In a process approach to writing, correctness is not dismissed as being unimportant; rather, it is considered to be important in the later stages of composition. Of greater importance at the initial stages is the generation of a large quantity of high quality ideas, cohesion and organization, and consideration of the needs of an audience. Attention to precision and correctness is important, but should be addressed at the later stages of the writing process.

One recommendation for effective instruction that is promoted by proponents of Universal Design for Instruction is that instructors should provide specific feedback on a regular basis. Without any feedback on the effectiveness of communication "along the way" to creating written text, students are left to guess as to whether they are achieving the intended outcomes. Although feedback from fellow students can be helpful, students need direct feedback from their instructors as they work through their writing projects. (Burgstahler & Cory, 2008).

5. Editing

Grammar

Several learners interviewed at NorQuest mentioned that their exposure to grammar instruction began here at the College and that they had not had much formal grammar instruction in the past. Almost all reported that they had difficulty with grammar. They said they felt there were too many rules to remember and it was difficult to know when they had made a mistake. Research shows that when instructors *focus-on-form* and ask learners to articulate or demonstrate their understanding of a select or limited number of grammar concepts, the learners' command of grammar will improve.

An important distinction between ASL and English is that ASL uses space and simultaneity to convey similar concepts that in English depend on sequential transmission. For example, in ASL if I want to communicate that "I will teach you," the movement of my hand as I sign "teach" is from myself to you. I am using space rather than a distinct sign to convey the concept of subject and direct object (or pronouns). In

English, the sequence or position of words in a sentence is more rigid and requires pronouns and verb inflection for agreement between the subject and the verb.

In English, words are linear strings—letter combinations that are articulated and understood one sound at a time. We can produce only one sound at a time in speech. We can hear more than one sound at a time only if one is louder. Our language requires many words, as each has a specific function and the placement of words in linear strings is somewhat rigid. Although tone is a critical aspect of written language, we really have only words to convey our thoughts.

In a visual language like ASL, a variety of information can be communicated simultaneously. The sign itself communicates a concept and a sign can have different meanings depending on hand shape, location, and movement. The speed, intensity or deliberateness, repetition, and added facial and body movement all add or influence meaning. In a visual language like ASL, much is happening at the same time and all that is happening influences meaning.

The grammar and syntax of ASL are vastly different than those of English and are not simply a matter of different word order. Just as native English speakers may find it difficult to explain their intuitive use of correct grammatical structures, students who are Deaf also communicate subtle grammatical structures seemingly effortlessly. Although it is not a requirement, proponents of a bilingual approach to English instruction for Deaf learners believe that instructors should be culturally Deaf or at the very least be proficient in sign language. An understanding of the structure of ASL is very helpful for instructors who are attempting to make sense of the challenges that Deaf learners face as they attempt to use English code to communicate. For an interesting and reader-friendly discussion of sign languages in general and the structure of ASL, read *Talking Hands* by Margalit Fox, available at the NorQuest library.

Effective second language acquisition requires not only a focus on meaning, but also a focus on correct form. Direct instruction of grammar has been shown to improve a learner's ability to clearly communicate in English. This applies to hearing learners who are learning ESL, as well as the Deaf population who are learning to communicate in written English (Berent et al., 2005).

Strategies

Grammar practice supplemented with concept explanation in writing

This strategy is used at Gallaudet's intensive seven-week summer writing workshop for learners who are Deaf. It is based on work done by Bernadene Schlien from Georgetown University and Christina Bratt Paulston. Many of the materials are developed by staff in the Gallaudet Tutorial Centre, as they have found that many commercially available ESL texts are not suitable for learners who are Deaf. Learners participate in grammar exercises that illustrate a grammar challenge they commonly encounter. After completing a grammar concept exercise, students need to communicate **in writing** what grammar concept underlies the correct response. Students are given only a few exercises, and the emphasis is on their ability to express the meaning of the sentence and explain the grammatical construction in writing. (Goldberg & Bordman, 1974)

See the following link on grammar developed at Gallaudet University:

http://aaweb.gallaudet.edu/CLAST/Tutorial_and_Instructional_Programs/English_Works/Grammar.html

Focus-on-form instruction

Focus-on-form instruction is intended to draw a learner's attention to specific language forms within a natural communication context (reading or writing) so that he learns to "notice" the form as a prerequisite to processing and incorporating the correct form into writing. Some of the numerous ways for instructors to focus on form are listed here, but instructors need to limit the number of forms they will ask learners to attend to. As Berent et al. (2005) emphasize, "focus on *form* (singular) is crucially different from focus on *forms* (plural)" (p. 9).

Methods of calling attention to input
Emphasizing or flagging target structure to draw learners' attention to it
Flooding learners with examples of specific form within a natural context
Activities that result in the production of a specific form
Interaction that calls for learners to articulate their understanding of target form that is evident in the text
Highlighting, bolding, or underlining target form within a natural context
Offering clear examples and explanations

(Adapted from Doughty and Williams [1998] in Berent et al, 2005.)

The National Technical Institute for the Deaf at Rochester Institute of Technology has developed an intensive grammar course for learners who are Deaf and who are testing at lower levels of English language proficiency tests. A focus-on-form approach is used to build skills in the following grammatical forms and structures, which seem to be particularly problematic for learners who are Deaf (Barent et al., 2005. p. 9).

- Present simple tense
- Past simple tense when used in combination with other tenses
- Present progressive (continuous)
- Past progressive (continuous)
- *That* clause – e.g., She thought that he was coming for dinner.
- Adjective clause (who, that, which) – e.g., The course that he hated the most was science.
- Modal verbs (will, can, might, should) – e.g., He might take a grammar course.
- Infinitives (to + verb) – e.g., He likes to fish.
- Present perfect (has/have + past participle) – e.g., He has studied at NorQuest for two terms.

Learners at NorQuest indicated that the selection of correct verb tense is difficult, as are correct syntax or word order. The correct order of strings of adjectives and adverbs was also identified as an area of difficulty.

Go to the English Works page on the Gallaudet University website at http://tip.gallaudet.edu/englishworks.xml . Under "Grammar" and then "Parts of Speech," are charts that outline "The Royal Order of Adjectives" and "The Royal Order of Adverbs." This site offers many clear explanations of grammar concepts that are problematic for learners who are Deaf.

Students who are Deaf also struggle with correct word order. The following strategy may be effective for students who need to practise correct syntax or word order.

Sentence structure strips

In Reading Recovery programs, learners generate written messages with support of their instructors in a one-on-one situation. The instructor writes the learner's message on a sentence strip. The instructor cuts apart words or word parts and places the pieces in random order. The learner is instructed to reconstruct the sentence. During the process, the instructor points out the use of visual, meaning, and syntactic sources of information as the learner strategically completes the task (King-Fullerton, Brill, & Carter, 2003).

Editing checklist

A helpful strategy for any student, not only those who are Deaf, is to develop a personalized editing checklist. As you or the student discover a pattern to errors in grammar, punctuation, spelling, or sentence structure, list the individual's error in a Duo-Tang folder or on heavy bond paper that is kept in the student's writing binder. Each time the student creates a writing sample, she should consult the editing checklist to ensure she is checking for her personal "editing challenges." A sample editing checklist and template follow.

Sample Editing Checklist

My Editing Checklist

Error	Rule	Example
The man **had been changed** in his attitude when he was in the Yukon with his dog.	When I write about a story, I should use the present tense to retell something that happened in the story.	The man **changes** his attitude when he **is** in the Yukon with his dog.
I **wondering**	Double-check words that end with "ing." If they are acting as verbs (action) they need to include a helping word in front. I need to decide if the verb is present, past, or future, and then pick the right form of the verb "to be."	I **was wondering**.
I noticed his lips **was** getting dry.	Look at the subjects, or nouns, of sentences. The verb that comes after must be either singular or plural to match the subject or noun.	I noticed his lips **were** getting dry.

My Editing Checklist

Error	Rule	Example

6. Increasing Writing Practice

Learners who struggle with writing are reluctant to practise a skill that is frustrating and difficult for them. But as with reading comprehension and so many other skills, practice is essential to skill building and development. Learners who are Deaf were asked to outline writing activities or teaching strategies that they felt were helpful as they attempted to build writing skills. They said that they wanted lots of writing practice and many writing assignments. Daily or regular journal or diary writing was helpful; relevant and practical writing assignments were useful and positive; encouraging and specific feedback were also helpful.

Strategies

Interactive writing

Interactive writing in which Deaf learners and teachers converse in written English on TTY, text messaging, through chat or online threaded discussions, or through dialogue journals are helpful strategies that promote writing practice. Communicating regularly using email is also effective. Dialogue journals and other interactive writing strategies encourage the meaningful use of language. They also act as venue for building rapport with students, a concrete sample of writing progress, and a tool for building cognitive skills.

Functional writing

Functional writing includes the meaningful use of ASL and English by incorporating actual home and workplace issues that face Deaf adults or adult learners in general. Letters to the editor, the school news or creative writing publication, or letters to administrators of the college on issues of importance are examples of functional writing. Through interactive writing activities, instructors may glean some ideas for functional writing activities.

7. Assessing Writing

Students at NorQuest were asked what strategies they found were not helpful as they strived to build writing skills. Several mentioned that inappropriate feedback was a major challenge. They mentioned that having corrections made to their work without an explanation was not helpful. They also mentioned that they were sometimes given feedback but didn't understand the instructor's explanation. Often, very little specific feedback was given and students were left wondering how the instructor determined their mark. Even the use of a rubric needs to be supplemented with specific feedback on the writing sample in order for the evaluation to be of benefit to the student.

Some students even said they felt they had been abused and bullied for attempting to express their opinions in writing. Students need positive, regular, and ongoing feedback. They need instructors to be able to correct and explain writing errors.

John Albertini (1994) outlines several considerations when assessing writing and emphasizes that instructors make a shift from evaluating the writing *product* to ongoing evaluation of the writing *process*. He says that not all writing should be formally evaluated and advocates for evaluation of only parts of writing (e.g., introductions, support of main ideas or conclusion, content, organization, vocabulary, mechanics). He also advocates for instructors to involve students in the assessment of their own writing through conferences, interviews, and writing portfolios.

Strategies

Assessment rubrics

Many writing rubrics are readily available. A writing rubric should be presented to learners before they begin a writing assignment so that it is clear what the instructor will be looking for. A number of essential elements of writing should be assessed. To provide support throughout the writing process, instructors should incorporate several writing conferences as the writers refine their work. For an excellent example of a writing rubric that has been used with learners who are Deaf, see the Laurent Clerc National Deaf Education Center website. Go to http://clerccenter.gallaudet.edu and type Writer's Workshop in the search menu. You will see a description of a Writer's Workshop and a number of forms and templates that are helpful to assess writing.

Students may find the following checklist helpful for monitoring their writing.

	Writing Checklist
	I read or listened to the teacher's directions carefully.
	I set up a schedule for when I would work on my paper.
	I found a place to work that suited my learning preference.
	I thought about who would read my paper.
	I tried to remember everything I already knew about the topic before I stated to write.
	I got more information than I needed before starting to write.
	I started planning my paper before I actually started writing it. I used only the best ideas.
	I organized my paper before starting to write.
	I thought about what I wanted to accomplish as I wrote.
	I thought about the reader as I wrote.
	I continued to develop my plans as I wrote.
	I checked what I wrote to make sure the reader would understand it.
	I asked other students, the teacher, or my family members to read my work and check whether they understood my main ideas.
	I used Spell Check, Grammar Check, and a dictionary to edit my work.
	I rewarded myself when I finished my paper.

Appendix

Results of Piloting Effective Writing Strategies for Learners who are Deaf

Upon completing our literature review of writing strategies that research indicated were effective for learners who are Deaf, our academic strategists and one classroom instructor agreed to pilot some of the strategies outlined in our literature review and report back on their effectiveness. Although generalizations on the overall effectiveness of a strategy cannot be made based on our small sample size and limited time to utilize the strategy, we were able to identify whether a strategy showed promise, appeared to merit further trials, needed modification, or was challenging to implement. At the end of one term, we gathered to share our observations. What follows is a summary of our discussion.

Approaches to Writing

Writing as a process: in both the classroom environment and one-to-one strategy sessions, writing is taught as a process.

Prior to beginning writing assignments, many students—including those who are Deaf—struggle to understand the assignment. A key to generating effective pre-writing is an in-depth discussion of the writing topic. Models or samples of the writing assignment are extremely helpful to students.

Pre-writing strategies were found to be very important and Inspiration software, which is visually appealing, was effective. Because of their limited English proficiency, students who are Deaf often find it difficult to generate large numbers of ideas and to explore ideas in depth in English. One instructor who is Deaf has tried videotaping a student as he "brainstorms" in ASL about his thoughts on a topic. The instructor then asked the student to view the video and transcribe the ideas into English. This approach was very time consuming, but did yield positive results.

The classroom instructor and the hearing strategist did not feel videotaping the brainstorming phase was a feasible strategy in most integrated classrooms or in strategy sessions where the instructor did not communicate in ASL. There are usually no more than two students who are Deaf in an integrated classroom, and brainstorming or generating ideas for writing topics with the whole group is done in English. In higher level English classes, students independently generate ideas for writing assignments.

The hearing academic strategist suggested that students should video record the brainstorming that occurred in strategy sessions. There was resistance to this idea from students. These students felt too self-conscious to be video recorded. Consequently, the strategist found that recording key words or phrases communicated through an interpreter as a student brainstorms on a topic was an effective way to pre-write. As the student discussed the topic with the strategist, the strategist recorded key words and phrases. These were given to the student to help him/her build a first draft. To address organizational concerns, strategists and instructors found that writing templates or blackline masters were helpful tools. In addition, mnemonics for organizing sentences within paragraphs were helpful. The following are two examples of commonly used mnemonics:

SEES

S – Make a statement.

E – Explain what you mean by your statement.

E – Describe an example.

S – Summarize.

IDQC

I – Introduce your idea.

D – Discuss what you mean.

Q – Include a quote that illustrates your idea.

C – Comment on the quote and how it fits or extends your idea.

Students generally composed their first draft on their own using the pre-writing that was generated with assistance and organizational tools. They then brought their writing to a strategist or instructor for revisions.

A key aspect of revisions was to clarify the writers' intended meaning. Students who are Deaf often used incorrect or imprecise vocabulary to express their thoughts in English. Sentence structure errors, including word order, also impeded their ability to communicate their thoughts. All participants in our pilot noted that it was easy for

students as well as instructors to quickly focus on editing challenges. It was important that students and instructors first focus on determining the writer's intended meaning before attending to editing. One-on-one time was essential to identifying the writer's intended meaning and there is recognition that this is difficult for classroom teachers to provide. When instructors attempt to offer constructive feedback through writing, students struggle to understand the instructor's suggestions.

Peer revising is as challenging for students who are Deaf as it is for hearing students. Students are reluctant to criticize the work of their peers. In addition, they often lack the skills they are being asked to assess. The most effective strategy for revising identified by our group was one-to-one conversation focussed on clarifying the writer's meaning.

Editing concerns that include grammar, syntax, and punctuation errors are common for students who are Deaf. The challenge for instructors is to identify "where to start." It is helpful if a pattern of errors can be identified. The correction for the error can then be explicitly taught. Errors that seriously affect the writer's intended meaning—for example, word choice or syntax errors—should be addressed first.

An effective editing strategy is the use of verb conjugation charts as reference tools. The charts should be uncluttered, large, and focus on one tense at a time. Reminders of editing rules can be included on an editing checklist. Students are encouraged to consult their editing checklist to remind themselves of errors they frequently make. Modelling of correct sentence structure, grammar, or punctuation generalizations is effective. Our pilot group also noted that instructors should focus on correcting one kind of error at a time when a student begins editing. The instructor needs to suggest specific and directed changes.

Vocabulary

Knowing and choosing appropriate words to express ideas is a major obstacle for students who are Deaf. Our pilot group noted that common words often cause great difficulty in reading comprehension and writing. The pilot group agreed that a key factor in vocabulary development is the motivation of the individual. Students have to embrace the responsibility to learn new vocabulary and implement a strategy. Some vocabulary building tools identified by piloters include online resources such as www.thesaurus.com and Google images. Creating concept maps and using a personal dictionary are also somewhat effective. Knowing the basic vocabulary to discuss a topic is helpful for students and can be part of pre-writing. Using visual strategies such as

pictures, the ASL dictionary, or Internet sites can be effective. The following references are used by the NorQuest instructor who is Deaf:

1. ASL Video Dictionary and Inflection Guide (RIT/National Technical Institute for the Deaf, Rochester, NY). This site is not available off-campus.
   https://www.ntid.rit.edu/dig/logon/ASLVDIG_Main.cfm

2. ASL University (U.S.)
   http://www.lifeprint.com/

3. Handspeak (Canadian site)
   http://www.handspeak.com/

Writing Practice

All of the piloters agreed that students require more writing practice. Writing is often used as a testing tool rather than as a learning tool in the classroom, especially at the high school level. Students approach the act of writing with fear that they will do it incorrectly. They are not used to being asked to express their opinions or ideas in English writing. In an integrated classroom, it is difficult for instructors to take the time to individualize writing feedback. When feedback is offered, it is usually in writing, which students may not comprehend. In one-on-one situations like strategy sessions, they are able to receive individualized attention, but progress is still slow and all efforts are time consuming. Whenever possible, instructors need to challenge students to write often and write more.

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