Lessons in Immersion Instruction from the American Indian Language Development Institute (AILDI)

Ivan Ozbolt
University of Oklahoma

Introduction

Every summer, participants at the American Indian Language Development Institute (AILDI) conclude their month of intensive training by performing a “microteaching” session, a hallmark of AILDI (McCarty, Watahomigie, Yamamoto, Zepeda, 2001, p. 373). Microteaching is a twenty-five minute lesson, in which one or several students teach a Native American Language lesson through “immersion”, that is without using any word of English. The microteaching session is now a major component of AILDI’s summer program, which has existed for thirty years. All participants have to conduct a microteaching lesson in order to get their certificate of completion.

The mandatory nature of the microteaching session is not surprising, given that AILDI’s mission is to promote the retention of Native American languages. Language immersion - which can be defined as a method of instruction where the target language is used as the language of instruction - is now recognized in the fields of language revitalization and Indigenous language education as the best way to progress towards fluency. In that regard, Indigenous educators have developed a strong interest for communication-based instruction methods in the classroom, instead of the traditional grammar-oriented formal methods, which rarely lead to fluency in the target language.

Today, the Native languages of North America are in a wide range of states of vitality. Some languages are still spoken by a substantial number of people and by all age groups, and are sometimes taught from preschools to universities. On the other hand, some languages have already lost (or are about to lose) all their fluent speakers, and some tribes have very limited means to teach their languages in school settings. Despite the large diversity of these language situations, it is safe to say that most Native American educators and language activists share an interest for language immersion, seen as the only way to recreate a natural context for language acquisition. In addition, children are seen as the biggest hope for the future, since their capacity for first and second language acquisition give them important advantages over adult learners. They have more brain plasticity, fewer inhibitions, and more chances of reaching Native-like fluency on the long term (Saville-Troike, 2006, p. 82). Anyone interested in teaching a language through immersion has a lot to benefit from the field of second language acquisition, even if this discipline generally deals with the acquisition of the world’s most spoken languages.

The language immersion course at AILDI

In June 2009, I was one of the ten students enrolled in the American Indian language immersion course at AILDI. Five students were females, and five were males. Eight of the students were Native Americans. The instructor was Jennie DeGroat, a first language speaker of Navajo, and a doctoral student in teacher education at Northern Arizona University. None of the participants were Navajo, which can be seen as a good thing since the goal of the course was to teach about immersion instruction, and have the students experience being in an environment where they did not know the target language. The class met for three hours, five times a week, during three weeks. The first half of each class (ninety minutes) was an immersion lesson in Navajo. The students were thus exposed to a total of twenty-two hours and thirty minutes, exclusively in Navajo. The ten students and the instructor sat down on chairs around a circle, to replicate the shape of a Hogan. For ninety minutes, no word of English was pronounced, and the instructor only taught us Navajo orally. After an hour and an half, we would do a short debriefing of our experience, switching back to English. We discussed our impressions from the immersion lesson, if we thought it was easy or hard, and if we understood what the
instructor had been trying to do (and what pedagogical techniques she had used). After a break, the second half of the course was devoted to discussing the readings assigned for the day, and how they related to the immersion session we had just experienced. It should be reminded that the goal of the course was not primarily to teach Navajo, but to provide strategies to teach in immersion settings.

As a 2009 AILDI participant, this paper is an opportunity for me to share my experience in Jennie DeGroat’s class. I have made connections between my personal experiences in the course, with research in second language acquisition. My objective is to situate classroom language immersion teaching in the wider context of language revitalization, and to suggest venues for future research. I also hope that my paper will give directions to future AILDI participants as to what to expect in the class. In the first part of this paper, I will describe in details the pedagogical practices taught in the course. In the second part, I will discuss some of the reasons that made the experience so successful to the participants, and suggest venues for future research.

A history of communication-based instruction methods

Using the target language as the language of instruction has a history in language education. We will review the main communication-based instruction methods that were developed through time. All of them go against the idea that a conscious understanding of the grammar is necessary for language acquisition to take place (Krashen, 1988, p. 16).

In 1977, James Asher developed the Total Physical Response (TPR), a method where the students respond with their bodies to the commands of their instructor. Through the context, the students are able to understand the message, and they learn new vocabulary through action. The advantage is that since they do not have to produce language at first, they can focus all their attention on comprehension (Asher, 2000).

In 1983, Stephen Krashen developed the Natural Approach method, which resembles TPR, but gives more emphasis on students’ oral participation. The instructor always uses the target language (Krashen, 1988, p.20), talks about topics of interest to the students, and always does his or her best to help the students understand the message. Asher and Krashen’s methodologies became very popular among foreign language teachers in the United States. Until then, language instruction consisted almost exclusively of grammar-based approaches, where the target language was taught as a subject. In addition, Krashen’s methodology entails five hypotheses about the nature of second language acquisition, two of which are particularly relevant to the issues discussed here. The first one is that language acquisition takes place when learners are exposed to input they can understand (called the comprehensible input). The other hypothesis is that acquisition can take place when a learner’s affective filter is low, that is when they are neither anxious nor inhibited (Krashen, 1988, p.38). We will come back to these two hypotheses later and see how well they apply to the Language Immersion course offered at AILDI.

In 1997, Blaine Ray developed another communication-based method of language instruction, called Teaching Proficiency through Reading and Storytelling (TPRS). It is based on TPR, but in the context of storytelling. The instructor narrates a story using visual aids, involves students with comprehension checks, and repeats the story several times by increasing the difficulty and introducing more vocabulary. The idea of TPRS is that students will acquire the target language faster if they are exposed to more complex and multiple forms of comprehensible input, such as storytelling or reading (Ray & Seely, 1998, p. 3).

These communication-based instruction methods have also inspired people attempting to revitalize endangered languages. Through her work with Californian tribes, Leanne Hinton developed the master-apprentice program, which pairs an older fluent speaker with a younger language learner. They have to spend about twenty hours a week together, sharing daily activities (such as doing their laundry, cooking, grocery shopping, or playing games) while only communicating in the Native language. Cultural activities can also be incorporated to the Master Apprentice program, such as storytelling, singing, or even praying, especially if they provide exposure to authentic language use. Conversational fluency is attainable after three years of intensive work (Hinton, Steele & Vera, 2002).

If we consider TPR, TPRS, and the Natural Approach, I would say that Jennie DeGroat drew on all of these methods in her language immersion class. Since the Natural Approach is the most integrative and holistic of the three (Krashen, 1988, p. 17), it is safe to say that it was the most closely related to her methodology. Similarly, what we did in her class was very similar to the Master Apprentice program. The only difference was that we were ten students for one instructor, and the natural contexts for language use had to be simulated in a classroom environment.
Pedagogical practices learned in the language immersion course

I would now like to describe in details the pedagogical practices that are taught in the Language Immersion class. We will see that the learning activities revolve around the use of physical actions and visual aids, allowing the students to understand the messages. I will also describe specific techniques of instruction in immersion settings, and TPRS activities.

**Actions and visual aids**

Every morning, the students entered the virtual Hogan (made of the classroom chairs positioned in a circle), walked around clockwise and shook the other students’ hands while introducing themselves. The first things that students learned to say were *yá’át ééh* for hello, introducing themselves, and telling the others where they were from. Jennie DeGroat had drawn a map on the board to teach us the directions, and to make sure we could tell the others where we were from.

After the acquisition of basic vocabulary to talk about ourselves, we learned additional words, such as the names of common animals. A useful method for this was to have each student “be” an animal (by wearing a picture of that animal on their shirt), and responsible for remembering the vocabulary term in Navajo. Then, we played a few games where the students had to remember the other animal terms, especially a “one man out” game with a student standing in the middle of the others with a paper stick, and trying to “hit” the others. The only way for the other students to avoid being “hit” was to say the name of another animal, and the person with the stick had to go to that other student. We also played a game where two students from two opposing teams had to draw an object on the board and have one of their teammates guess the word before the opposing team. Overall, the few games we played had in common to be based on physical actions, and to make the students laugh while learning new vocabulary. I also remember that we learned to count from one to ten while performing a specific movement with our hands for each number. This technique helped us to memorize the words.

We had another exposure to the TPR when two Hopi language teachers visited our class and taught us a few commands in Hopi, such as “I walk over there”, “I sit down on the chair”, “I turn around”, and “I walk back the other way”.

![Figure 1. AILDI students introducing themselves during the Language Immersion course. Photo Courtesy of Susan Paskvan (2009)](image1.png)

![Figure 2. Example of a TPR activity with two Hopi language teachers. Jennie DeGroat is in the middle. Photo Courtesy of Susan Paskvan (2009)](image2.png)
Besides physical actions, the other tool that Jennie DeGroat used to teach us new vocabulary was the use of visual aids. The Natural Approach for instance, draws extensively on the use of visual aids, and Krashen explains that they “supply the extra-linguistic context that helps the acquirer to understand and thereby to acquire” (1988, p. 55). It is with visual aids that we learned the basic kinship terms in Navajo. On several occasions, each student was assigned a specific kinship term, and had to address his or her classroom “relatives” by the appropriate terms. A green piece of paper referred to “mother” (shimá), a black piece of paper to “father” (shízhé’è), a dark blue piece of paper to one’s “older brother” (shínaai), and a light blue piece of paper to one’s “younger brother” (shitsili). In addition, the shape of the piece of paper was associated with a possessive pronoun: a circle referred to the first person possessive pronoun (shi-), a square to the second person possessive pronoun (ni-), and a rectangle to the third person possessive pronoun (bi-). Consequently, a green circle referred to shimá, “my mother”, and a black rectangle to bizhé’é, “his” or “her father”. As the pictures below show, a variety of visual aids and objects were associated with the same vocabulary terms. Overall, I have found this method very helpful in acquiring new vocabulary.

![Figure 3. Teaching kinship with visual aids. Photo Courtesy of Susan Paskvan (2009)](image)

Besides kinship terms, we learned some vocabulary associated with the natural environment, such as the words for sun, cloud, mountain, river, or the cardinal directions. For these latter, Jennie DeGroat hung on the classroom’s walls a piece of paper of a different color for each direction. As visual aids, she also used a few toys. Krashen recommends the use of objects in the classroom, to reproduce daily life situations (1988, p. 82). Having these visuals helped tremendously in acquiring new vocabulary in the classroom.

![Figure 4. Introducing new vocabulary with visual aids. Photo Courtesy of Susan Paskvan (2009)](image)

Specific instructional techniques
In addition to the learning activities I have described, teaching in immersion settings entails specific instructional techniques. Considering that according to the comprehensive input hypothesis (Krashen, 1988),
acquisition can only take place if language is understood, the clarity and appropriateness of input that the instructor gives to her students is critical. As such, Jennie DeGroat always articulated slowly, and looked at us while repeating a word several times. Like the other students in the class, I realized that it took me a lot of repetitions before I was able to remember a newly introduced word. Leanne Hinton for instance, recommends the “20 X 20 rule”, where a learner has to hear a word twenty times in twenty different contexts before acquiring it (Hinton & Hale, 2001, p. 184). I noticed that when the students had an easy time acquiring a word, but a harder time acquiring others, Jennie DeGroat would drop the “easy” one. For instance, as we were able to remember easily the Navajo word for “north”, she continued the exercise by only asking us about “east”, “south”, and “west”.

Communication-based methods assume that comprehension precedes production, as speaking becomes possible when the time comes (Krashen, 1988, p. 20, 56). TPR and the Natural Approach even recommend a “silent period”, in which the students should only focus on listening and understanding, and not try to speak (p. 35). The silent period can last from a few hours to a few months (p.20). I did not notice the application of the silent period in the Language Immersion class. It would have been technically impossible to put it in practice since we were only exposed to twenty-two and a half hours of language through a three weeks period, and Jennie DeGroat had us produce language from the beginning. However, it is true that comprehension always preceded production, and I never felt that we were forced to speak too early. Moreover, we always had to use the language we were acquiring in creative ways. For instance, after having learned the kinship terms, we had to talk about our families, instead of simply repeating sentences that could have been put together for us. Krashen did not believe that routines and dialog practices would lead to real acquisition (1988, p. 60), which characterizes the audio-lingual approach for instance. The pitfalls of too much routine are that it limits acquisition, by only teaching students to use language in predetermined ways.

Increasing the complexity of the input

The learning activities that I have described above allowed us to acquire basic vocabulary. It follows Krashen’s recommendation: “with more vocabulary, there will be more comprehension and with more comprehension, there will be more acquisition” (Krashen, 1988, p. 55). We went a step further by being exposed to more complex forms of language on a few occasions. The first one was through storytelling. Jennie DeGroat told us an animal story, and even if we did not understand every single word, we understood the general sense of the story because of the vocabulary we had previously acquired, and because of the visual aids. In another case, she directed us to draw a landscape by describing it to us. After having drawn our landscapes, she invited us to describe them in front of the other students. A last example of activity that allowed us to go beyond single words and produce language in full sentences was by singing a Navajo song, “Shi naashá”. In all these cases, we were able to understand and produce Navajo in more complex forms. Being able to integrate vocabulary that we had previously acquired was very rewarding.

Culture in the classroom

Another aspect of the Language Immersion course that I consider important to discuss is the fact that AILDI stresses the importance to teach languages in ways that are useful and meaningful to social and cultural needs. The movement to preserve endangered languages is in fact based on the idea to preserve cultures along
with languages. Second language acquisition research emphasizes the importance of teaching culture along with language, which has shown to be very beneficial to students: “Culture is the most important context for language learning” (Curtain & Dahlberg, 2004, p. 225). It also stresses the importance of acquiring communicative competence in addition to linguistic competence, which we can define as “what a speaker needs to know to communicate appropriately within a particular language community” (Saville-Troike, 2006, p. 186). In the case of language revitalization programs, we can see that acquiring communicative competence in the classroom represents a very unique situation, as the students are acquiring knowledge about their own culture, and not about one that is foreign and far away. Another implication is that depending on their cultural background, students will have different participatory styles in a classroom environment, as Frederick White has shown in his study of Haida language classes (White, 2008).

In the Language Immersion course at AILDI, the students were exposed to some forms of Navajo cultural knowledge that could be useful in order to use the language appropriately in the Navajo community. However, this knowledge remained fairly limited, just as our exposure to the language was. The students learned how to greet another person, how to shake hands, how to introduce themselves (where they are from, who is their family), and the rules for entering in a Hogan, walking around, and leaving. In addition, the students learned that the Navajos have four sacred Mountains that are geographical points of reference. The Navajo language also has classificatory verb stems that categorize objects by their shape and their movement. Overall, this exposure to Navajo culture was not very extensive, but it made the students realize the importance of incorporating culture in the Language Immersion classroom. Again, the goal is to teach students communicative competence along with the language, so they can use it appropriately in their community.

Success of the comprehensive input hypothesis

In the first part of this paper, I have described in details the pedagogical practices taught in the Language Immersion course at AILDI. I would now like to discuss the effectiveness of these methods to our acquisition of Navajo, while still relating my experience in the course to second language acquisition research.

Overall, I have found this approach to language learning very helpful and engaging. If we consider Krashen’s arguments, the Natural Approach to language learning is the best way to maximize the comprehensive input. Through my past experiences of being exposed to languages I was learning or did not understand, I felt too that the comprehensive input I received in Jennie DeGroat’s class was by far the most extensive and effective. For instance, I have been around fluent Navajo speakers, and realized that I could not understand very much at all, even less acquire new vocabulary. I have also taken courses in foreign languages where the instructors would rarely speak in the target languages, which seriously limited the amount of comprehensive input. Finally, I have studied with audio-lingual methods. They have their uses, but they do not recreate contexts for social interaction, and they do not provide the extra-linguistic clues that facilitate comprehensive input (such as visual aids or physical actions).

In the Language Immersion classroom, the students acquire new vocabulary by understanding the input through the context. With time, the instructor can increase the complexity of the input so that more acquisition can take place. This is what Krashen refers to as the “i+1” process (1988, p. 32): “in order for acquirers to progress to the next stages in the acquisition of the target language, they need to understand input language that
includes a structure that is part of the next stage", which can be facilitated “through context and extra-linguistic information”, such as “visual aids”. The implication of this is that students really need to understand, and the input really needs to be comprehensible. But again, since natural input is generally too complex for beginners, a classroom can in fact be a very good place for acquiring a second language, especially at the novice and intermediate levels (p. 56). To maximize the comprehensive input, the instructor can engage students by discussing topics they are already familiar with, and they will “use their knowledge of the world to help them understand” (p. 98). Students must be engaged and interested in the topic, and what is taught needs to be useful and have practical uses (p. 97). A good way to start can be to have the students talk about themselves and their families (p. 58), which is what we did in Jennie DeGroat’s class.

**Success of the affective filter hypothesis**

Besides comprehensive input, the other aspect of the Language Immersion course that appeared to have worked exceptionally well was the students’ motivation and engagement. We really enjoyed our experience in the classroom. Even adults like to play games and have a good time! This relates to Krashen’s affective filter hypothesis. If the students’ attention is focused on the message and not on the form (Krashen, 1988, p. 55), and if they are interested in the topic being discussed, their affective filters will go down (p. 56), and language acquisition will take place. In Jennie DeGroat’s class, I observed that the students were very motivated because they were able to put the language in action right away. The efforts they were making for learning were rewarded immediately. If learning a language is rewarding and meaningful, it will increase students’ motivation.

This in turn relates to another aspect of language learning that is not directly part of the affective filter hypothesis, and which has to do with a student’s long-term motivation. I think that it is important for a learner to want to come back and “get more”. This has been the case for me in the Immersion class, and I really enjoyed being able to combine different words that I had learned (such as verbs and nouns) to make up new sentences. It is important for the learner to enjoy “playing around” with the language. Elaine Tarone (2000) for instance, has shown that there can be a relationship between language play and the process of second language acquisition, in that language play can lower down the affective filter, in addition to “involve the individual’s exploration of the unpredictability which can be generated from use of the language system” (p. 34). Krashen points out to the importance of strengthening students’ confidence, motivation, and self-esteem: “it is affectively satisfying to most students when they realize that their ability to express themselves in the target language is increasing” (1988, p. 97). If students enjoy their experience, their motivation and confidence will increase.

The affective filter hypothesis has important pedagogical implications. First, it means that the classroom needs to have a low anxiety level, so that the students feel comfortable expressing themselves. It also means that the students need to enjoy each other’s company and have a good relationship with their teacher (p. 21). All of these elements characterized Jennie DeGroat’s class. The classroom was stress-free because she never pressured us to give the right answers (p. 59), and we were not graded on our oral performances. Throughout the course, I did not notice any case of a student being embarrassed, nervous, or stressed out. Even when a student
had difficulties articulating the right answer, Jennie DeGroat never pressured him or her. Again, one of the main principles of the Natural Approach is for the instructor to help the students understand (Asher, 2000, p. 20), by focusing their attention on the message (Krashen, 1988, p. 127). Krashen advocates that the instructor’s mission is to help the students understand messages, so they should not force them to talk until they feel ready (p. 20).

**Limitations**

**Challenges**

Despite the overall excellent results of the course, I can see some limitations and implications to discuss. First, the conditions for learning in the Language Immersion classroom at AILDI were exceptional. It is important to recall that the students were individuals who are extremely (if not “extraordinarily”) dedicated to language learning and teaching. One question is to know if it would be possible to motivate other students to that extent.

Another element is that we were only ten students, and a language instructor in a regular classroom environment is likely to have more students than that. It would certainly be very challenging to check every student’s pronunciation in a larger classroom. I was wondering from my experience if being exposed to the other students’ pronunciation (who, as beginners, are likely to mispronounced words) would not be detrimental. According to Krashen, “it does a great more good than harm, as long as it is not the only input the students are exposed to. It is comprehensible, it is communicative, and in many cases, for many students it contains examples of i+1. These advantages will outweigh the problems which might be caused by errors in the input” (1988, p.97).

Another challenge is that teaching a language to adults or to children will entail different methodologies. The implications for students taking the Language Immersion course at AILDI is that they will have to use slightly different pedagogical strategies if they are to teach the language to children in their communities. They will not be able to rely solely on their experience as adult learners in Jennie DeGroat’s class.

**Implications**

One example of teaching strategy that will differ between adults and children concerns the mechanisms of second language acquisition. Krashen believes that it is important to teach the students about the mechanisms of second language acquisition, as they play out in language immersion (1988, p. 73-74). If students understand the process, it is likely to improve their experience and enhance their performance. I can confirm from my experience in the Language Immersion course at AILDI that understanding these mechanisms was helpful, since it made me more confident in my ability to succeed. This is because adults have more analytic ability compared to children (Saville-Troike, 2006, p.82), and it would be too difficult and unnecessary to teach children about the principles of second language acquisition.

I think that ninety minutes of language immersion every day represents a good amount of comprehensive input, and could produce some descent command of a language. But I don’t know how well it would work on the long term, and if formal instruction could help in complementing language immersion. Krashen explains that the Natural Approach is especially good for beginner and intermediate students (p. 56). However, at a more advanced level, classroom input might become too limited, at which time language learners might reach a point of fossilization (which means that their linguistic competence in their second language ceases to improve, despite a continuous exposure to comprehensive input). A possibility to overcome fossilization would be to leave the classroom and only interact with fluent speakers of the language. While this would be possible if the target language is Navajo, it would be a real challenge for other Native American languages that have very few fluent speakers left. This is of course, one of the biggest issues in language revitalization.

**Conclusions**

After having discussed the pedagogical practices learned in the Language Immersion course at AILDI, and the effectiveness of these methods on the students’ acquisition of Navajo, I would now like to conclude my paper by suggesting venues for future research projects.

**Language revitalization and second language acquisition**

Throughout this paper, I have shown that the Language Immersion course at AILDI is very much
Inspired by previous communication-based instruction methods, and that concepts from second language acquisition research can be useful when analyzing the teaching of an endangered language in a classroom environment. Both language revitalization and second language acquisition share the goal of producing new fluent speakers of languages. Today, very few Native American children are still learning their ancestral languages as their first languages. Even immersion or bilingual education programs represent contexts of second language acquisition, if the main language children hear at home is English. Second language acquisition research recommends using the target language as the mean of teaching academic subjects. Similarly, the ancestral language can be used to teach cultural knowledge and values (Berlin, 2000, p. 17; 2006, p. 265).

Despite these similarities, few studies have been conducted about endangered languages in the field of second language acquisition. One reason could be that learning a world language and an endangered language still entail important differences. Haida linguist Frederick White even called for a new research paradigm, which he named “Ancestral Language Acquisition” (White, 2006, p. 104). One major difference is that it can be an issue for second language learners of endangered languages to have access to fluent speakers. It is even more difficult to have access to fluent speakers who are also trained in language teaching, and even more so using the immersion techniques I have described in this paper. But without comprehensive input, there can be no language acquisition. A correlated issue is that second language speakers of endangered languages will one day be the only speakers left of those languages, and it is already true in some cases (Hinton & Hale, 2001, p. 189). Contrarily to immigrants, Indigenous communities cannot look back to their homelands to rediscover aspects of their language and culture that they might have lost (Berlin, 2006, p. 257).

If we now consider the affective filter hypothesis, there appears to be a lack of research on the psychology and motivation of learners of endangered languages. What is their perspective? What difference does it make that their ancestral languages are endangered? We know from the affective filter hypothesis that acquisition takes place if learners are relaxed and feel good about their learning experience. One motivational issue can be that learning an endangered language does not provide any direct economic benefit, so people can only have an integrative (instead of an instrumental) motivation for learning, because they want to identify with the group speaking that language, or who once spoke that language (Bennett, 2006, p. 276). For all these reasons, I believe that more research on the role of motivation could be very useful. Learning an endangered language involves unique challenges, which can easily discourage students. If we understood better the process of successfully learning an endangered language, it could enhance the learners’ motivation.

Language socialization in the classroom

Another venue that I see for future research would be to study further the role of culture in the classroom. Again, Native American children learning their ancestral language in a classroom environment are not just learning any culture; they are learning their own. For this reason, it could be very interesting to look at their learning experience from the perspective of language socialization. Language socialization can be broadly defined as the ways children are socialized through the use of language, as well as how they are socialized to language and its use (Schieffelin & Ochs, 1986). Since the goal of language revitalization efforts is to reverse language shift and keep a language alive, it would be interesting to study language socialization in this context. Currently, there is a lack of research looking at the efforts to reintroduce heritage languages into daily use (at home and in school), and how language socialization practices play out in these contexts.

One research project could be to study the language socialization of young learners of Navajo in formal instructional settings, such as immersion schools. For instance, in a Navajo immersion classroom, what is uniquely Navajo about the pedagogical practices, and how are children socialized to become Navajo citizens? What role does their immersion instruction in school play in the context of their larger language socialization in the Navajo community? Does the fact that they go to immersion schools change the socialization strategies of their parents, including the languages they choose to speak to their children? Do language immersion programs encourage parents to reintroduce or maintain the use of the traditional language at home, or do they make them think that language revitalization is being taken care of by the schools?
References

Other useful references