ENVISIONING WHAT THEY CAN'T SEE

Tips and Tools for Teaching a World Language to Visually Impaired Students

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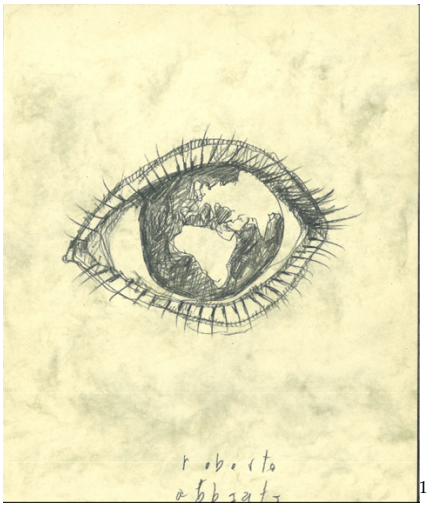 [1]

Research in second language acquisition on people with visual disability is relatively recent. Only a few decades ago, this theme was absent in the international sphere, despite the fact that in 1948, the Universal Declaration on Human Rights had already recognized the importance of providing education for all people, regardless of their physical, social, or cultural conditions. Furthermore, for a long time, the dominant educational trend was to provide an education that was called "special", therefore creating a parallel education system. It was not until the 1990s, specifically in 1994, at the UNESCO World Conference that, for the first time, the problem of inclusion and of special educational needs were addressed by the Salamanca Statement and Framework for action. However, so far, actions for inclusion have focused mainly on basic education. In higher education, the participation of people with disabilities has been a slower process.

Europe, South America, Russia, all have a vast literature about second language acquisition for Visually Impaired (VI hereafter) students whereas there has been much less in the U.S., and what has been published mainly

[1] Ringrazio l'artista Roberto Abbiati per aver gentilmente realizzato questo disegno appositamente per questo articolo.

focuses on case studies and results based on the application of specific methodologies for the teaching of a second language.

The research carried out so far has determined that: 1) for a blind person, the number of words they are able to associate with tangible objects is smaller, thus resulting in more difficulties for them in learning how to speak, since, in general, people tend to establish relationships between what they hear, see, and touch 2) in addition, people usually guide themselves by the gestures, movements, and the facial expressions of the persons with whom they are communicating to construct the specific meaning of what is said (Palmeros y Ávila G. et al., 2017); 3) in the case of second language acquisition, we normally rely on our background to make comparisons between the two languages in question. These possibilities are generally reduced in people with visual impairment, since there are not always enough elements to distinguish between concrete and abstract qualities, as well as to make comparisons between the mother tongue and the target language (Velasco, 2012). The counter-argument is found in Couper (1996) and Nikolic (1987), both of whom point to the fact that people with visual impairment demonstrate a high level of aptitude with regard to the learning of languages, given the increased development of their memory and auditory perception, which, to a certain extent, compensate for their lack of vision. I would add that this problem has more to do with the teaching methodology than with the way in which people learn.

Studies have also shown that when the special and unique needs of VI people are met, they can learn any foreign language like their sighted counterparts. These unique needs can be divided into three categories as equal treatment (Armstrong, 2011; Nikolic, 1987; Araluc, 2002), auditory input (Douglas et al., 2009; Röder, Rösle, & Neville, 2000; Weeks et al., 2000), and assisted technology (Douglas et al., 2009; Lowenfeld, 1973; Tobin, et al., 1997). Then there is the Computer Assisted Language Learning which involves several projects to enhance L2 learning.

EQUAL TREATMENT

The first critical thing that should be considered in the education of VI students is treating all disabled students equally no matter what their disability is (Araluc, 2002; Armstrong, 2011; Nikolic, 1987). The United Nations Convention on the Rights of Persons with Disabilities (CRPD, n.d.) indicates that: "state parties shall endure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others." This understanding should be gained by everyone but it is not

enough in order to provide equality. This is especially the case because, as my experience has demonstrated, equality is not something or a label that we can stick and apply, but is rather something that needs to be experienced and metabolized. In my opinion, the concept of equal treatment doesn't really concern the pedagogical tools we use, since they clearly have to be customized to meet the individual needs of the disabled student. Rather, it concerns the emotional approach we adopt towards the disabled student and toward the entire class. Equal treatment comes with its own risks since the instructor may often run the risk of using non-inclusive lexicon in the classroom that can lead us to infer that equal treatment is an experience that implies practice rather than being a label.

AUDITORY INPUT

Auditory input is one of the ways in which VI students gain information. Listening has been found to be more efficient for VI students when compared to reading (Tuğba Kamali Arslantaş, 2017). Confirming this hypothesis, several scholars have discussed a positive correlation between auditory input and superior performance (Douglas et al., 2009; Röder et al., 2000; Weeks et al., 2000). It is proven that in any educational setting, efficient listening skills help VI students develop reading skills and communication (Heward, 2000) using a variety of auditory tasks and ensures higher activation in the occipital cortex of blind people's brain.

ASSISTIVE TECHNOLOGY

Assistive technology has a major role in FL education of VI students especially in instantaneous access to information (Hersh & Johnson, 2008), individualized instruction (Tobin et al., 1997), and success (Koenig & Ashcroft, 1983; LaGrow, 1981). Assistive technologies developed for VI students allow them to access printed information are audio transcriptions and tactile methods. The most widespread techniques for showing textual information to the blind are speech synthesizers and Braille cell displays or Braille embossing printers (Shimomura, Hvannberg, & Hafsteinsson, 2010, p.297). VI people mainly use screen-reading software (text-to-speech technology) in order to access information on computer screens.

Under the Assistive Technology umbrella there are several projects that assisted VI students in their learning. The article "Foreign language education of visually impaired individuals: a review of persuasive studies," by Tuğba Kamali Arslantaş from the Department of Special Education of Aksaray University in Turkey, highlighted a few useful technological tools:

1. Computer Assisted Vocabulary Learning (CAVL)
2. Accessible Language Learning for Visually Impaired People (ALL VIP): a project to teach English and German to VI students. It developed learning material using haptic design and 3D sound. The screen was no longer needed and was replaced by a joystick. This project was important in showing the possibility to create an interactive language learning software for VI learners.
3. English Language Learning for Visually Impaired Students (ELLVIS) was a follow up and improvement of the Accessible Language Learning for VI People. (ALLVIP)
4. The vocational English training for visually impaired people (VET 4VIP): a project that used talking/tactile technology in foreign language learning.
5. Mobile Language Learning for Visually Impaired Students (MoL LVIS): a German language learning application for the blind based on the results of all the above-mentioned projects. It stands for a tandem learning approach in which a partnership is contemplated between native tandem partners. These partners assist each other through a live real time experience in a language course without a classroom or paper-based materials.

For those who want to further their understanding on teaching the visually impaired, Andrew Leibs's *Field Guide for the Sight-Impaired Reader* (1999) is the only book-length study of education for the blind to devote a section to foreign language learning. The author encourages students to take control of their own education and to be forthcoming: "Once you introduce yourself to new teachers and describe your dyability in a forthright manner, you will receive more than assistance — you will have a chance to develop relationships that add efficiency and joy to schoolwork. Department meetings or memos flagging your entry into a new grade […] might leave some teacher not knowing what to expect or how to react. The initiative you take to let them know as a person will make them eager to help" (86). Leibs highlights the fact that "foreign language classes present a paradox for sight-impaired students. For the most part, all students enter beginning classes on the same level; there is so much vocal participation (listening and repeating) that does no tax the eye, and until advanced courses, there is little outside reading. Yet there are conjugation-lined placards, pronunciation charts with tiny accent marks over indecipherable letters, and a teacher writing tense construction or particles across the blackboard." (90) In addition, the *Field Guide…* provides an opportunity to re-

flect on the ability to negotiate between rights and responsibilities. Liebs notes that students should not separate the two, but understand instead how to be responsible for their own rights. For example, Leibs reminds students that they "have the right to choose which version of combination of versions suits their needs." (88) However, they "also have the responsibility to be sure these works end up in (your) hands" (88). The act of advocating for themselves allow students to 1. take control of their education 2. develop their "blind skills" and be aware of their acquired critical independence and autonomy.

MY STORY

In the fall of 2018, I designed and taught a college-level Italian language course with a blind student whom, for the purpose of this paper, we will call Teddy. Being inexperienced about this new challenge, I started researching the topic of teaching a world language to visually impaired students. I gathered a bibliography and contacted a colleague in York, England, who had worked extensively with blind students, and then I was basically on my own.

Since the very beginning, I was aware that the main goal was to provide an experience as close as possible to that of the other students, to maintain the course requirements, and give, where feasible, the visually impaired student the same or similar choices and options. As I started this journey, I discovered a variety of potential approaches and methodologies to use and/or modify, and along the way I learned what worked and what didn't.

There are two elements, besides a very well-organized course, that are fundamental: the Office of Disability Services (ODS) that works behind you — a lack of support will increase the limitations for any positive learning outcomes — and the help of an assistant in the classroom at all times. I was fortunate to have the ODS of my institution support me in the decision-making process. It was a successful and productive joint effort.

Initially, I tried to make sense of something that was unfolding before my eyes by making a clear distinction between the logistical limitations and difficulties of creating a syllabus, and the emotional and psychological ones. I tried to rationalize and divide the issues in a twofold approach: what I had to structure logistically and methodologically, and what I had to implement emotionally and psychologically.

LOGISTICAL IMPLICATIONS

The logistical side entailed having a detailed syllabus of the course and all the written material translated into Braille. Before the semester

began, I met with the ODS, and we worked together on the academic calendar, marking all the dates by which I had to submit in advance all the composition guidelines, quizzes, the midterm, the final, as well as group and individual projects. This step demanded that I have a very clear trajectory in mind, both pedagogically and content-wise. Needless to say, this kind of strategy left very little margin for improvisation. The creation of assessments was also a crucial component of the syllabus. I usually tailor activities to the students' current needs and proficiency level. Having Teddy in the classroom reduced that freedom and limited my flexibility to modify the assessments. Instead, I created assessments that were as balanced as possible—not too simple, not too challenging. In retrospect, I learned from Teddy that this is a necessary strategy since, if I decided to modify his assessment at the very last minute, I could make all the necessary changes as long as I orally guided him throughout the test. Every assessment, translated into Braille, was then completed by Teddy on a computer and sent to me via email. Unlike the other students, who got their assessment back with comments, revisions, suggestions, etc., with Teddy the correction and feedback processes involved a one-on-one meeting in which I orally pointed out each section of the assessment, highlighting and clarifying every mistake and making my suggestions orally. Teddy took notes on his computer.

It is crucial that the logistical component of the syllabus envisioned for blind students included the support of a learning assistant — a classmate or another Italian student is the ideal candidate — who worked with Teddy in the classroom. The role of the assistant enabled me to introduce extemporaneous teaching material at the very last minute in the form of a hand-out or slide show, which was described to Teddy by the learning assistant. She sat with him in every class, assisted him with any potential new material brought to class — readings, images, videos, etc., helped Teddy with any visual material shown in class or prepared at home, and coordinated with Teddy's activities outside the classroom.

PSYCHOLOGICAL AND EMOTIONAL COMPONENTS

In addition to the rational component that clearly helped to give a solid structure to the course and limit unexpected incidents, there is an emotional and psychological component on both sides: from the student on one hand, and from the rest of the class and the instructor on the other.

I believe it is crucial for the instructor to have a natural and confident approach with the entire class regardless of the presence of a student with a disability. It is important to address the disability with ease and effi-

ciency. This implies that the instructor be a role model who shows how to act around the disabled student and how to facilitate his/her difficulties so that every student can take this behavior as a model and act accordingly. A mutual understanding between the instructor and the class needs to be established, an understanding that will indeed benefit the entire learning experience.

In my course, this mutual understanding translated to the way in which each student became proactive in the classroom. Initially, Teddy's classmates didn't really know how to move around the class when he entered or left the room, nor did they always know how to interact in a group discussion. In time, they were helping Teddy by clearing the way when he approached or by feeling relaxed around him, acting with a familiarity they didn't have or feel before. This collaborative approach to the disabled student was at first modeled by me. However, as Teddy's interaction with the rest of the class progressively increased, each student felt compelled to facilitate the logistics of the space around him. I didn't expect students to be intuitively proactive, as I believe that, although adults, they needed a role model whom they could trust and follow. The instructor should always, regardless of the students' age and grade level, be a model, a motivator, and a leading force who shows a collaborative approach to any potentially uncommon situation that may modify the learning environment. Every student should learn how to organically feel part of a classroom perceived as a cooperative community of human beings who can each learn from each other regardless of their different abilities.

Teddy increased the human awareness and dynamics of each student. It brought the students closer to one another, lowered the affective filter, and benefitted the overall learning process. It was a tacit dynamic or agreement, a conversation of the senses that made each of us read the environment and act upon any specific situation. It was created organically, that is human nature, the good part of our human nature that adapts in the best possible way to a different learning setting.

LEARNING STRATEGIES

I noticed that Teddy would always come to class without material: no computer, no Braille material. I was absolutely certain that he felt uncomfortable about anything that made him feel aware of his condition, but I discovered that this was an incorrect assumption. When I interviewed Teddy, he told me why bringing the material to class would have been of no benefit for him: firstly, because usually a passage that is highlighted for comments or discussion is generally read aloud, and secondly, because it is

much easier for a seeing student to skim a text. When one reads Braille, fingers can only perceive dots of a very small portion of the page rather than a visual of the entire page which offers more meaning and information at a glance.

When I asked Teddy how he uses context clues to understand meaning, he replied that just like any student he goes back and re-reads the passage to see if something can be extrapolated—only he does so in Braille. In terms of listening, there is a simultaneous clinging to each word as it is spoken and an attempt to integrate it into the broader context of what has been said in the previous 45 seconds. I inferred that Teddy's reading and listening strategies weren't very different from those used by other sighted students. The main challenge, he explained, is to retain all the received information in a much smaller visual or mental space. Furthermore, not having visual cues has a substantial impact on the whole learning experience.

Through my interview with him, I understood that his way of organizing, acquiring, and absorbing knowledge is extremely engineered, extremely rational. It is like a web of wires that are beautifully connected in a very sophisticated manner. Even the way he expressed himself was extremely refined. He used high register language as it was much easier to draw connections between high register language in the target language and his own background knowledge — because so much academic English lexicon derives from Latin. During a class discussion, or more often in a written assignement, he would use Italian verbs such as "considerare, implicare, riflettere, preferire, emanciparsi, interagire, utilizzare, etc." or nouns such as "profondità, intangibilità, integrità, necessità, marginalizzazione, condizione, fenomeno, rappresentazione etc." His appropriate vocabolary use was informed by a deep and refined understanding of the English language. Furthermore, Teddy's knowledge of additional languages — he had previously studied Latin and French — certainly guided and facilitated his approach to Italian and my teaching. He had a profound knowledge of his own disability and a clear awareness of his strengths and limits. In addition, his learning strategies didn't only apply to the acquisition of a second language, but informed his overall approach to learning. What I have previously defined as an "engineered" mind, is in reality the product of years of reflection, study, and interaction with a disability that gave Teddy the opportunity of creating a sophisticated inner world that supported his interaction with a reality he could not see. The best way for me to reinforce his learning experience was to provide him and the entire class with learning material that would expose them to a higher language register, to a lexicon it would be easier to

relate to, Latin being the primary source of both Italian and academic English. The advanced level of the course also allowed me to propose a wide variety of authentic material about socio-cultural issues that asked for a more abstract and sophisticated knowledge and use of the lexicon. I recognize, however, that not every blind student has the same sophisticated skills and knowledge as Teddy. In light of the diversity among students my advice is to get to know the cultural and personal background of the student in question as much as possible in order to be able to understand which direction to take at a pedagogical level, and adapt any material to his/her needs and background experience.

Another question for Teddy concerned vocabulary learning that did not rely on cognates. He explained that memorization had never been an issue for him. But how does a blind student contextualize vocabulary, how does he make sense of something that is totally abstract? How does he own the language? Memorization plays a crucial initial role, and then comes into play a sort of "making a personal categorization and manipulation" — how to manipulate a noun into a verb and vice versa — how to associate words in their sounds, in their meanings. It is an intellectual process whereby vocabulary finds its place in the internal geography of the student's mind. I understood that whereas we are able to integrate our knowledge into our experience — whether it be tactile, intellectual, or visual — Teddy built an internal experience in which language becomes a web where everything is connected. It's a fascinating intellectual process. However, not every learner acquires and retains information in the same way. While with sighted students, I base vocabulary acquisition on real, tactile experience and ask them to import and recycle any new vocabulary into their own life, with a blind student, it will require more time and patience from the instructor to 1) guide and support the student's understanding of the second or third language — in case they have a previous knowledge of other languages besides their native one —, 2) help them learn experientially as well as linguistically as much as they can, and 3) help them understand the relationship between new concepts and words that are being taught and their familiar experiences.

The Role of Assistive Technology

Assistive technology has a major role in FL education of visually impaired students especially in instantaneous access to information, individualized instruction, and success. Assistive technologies developed for blind students allow them to access printed information, audio transcriptions and, at a more advanced level, tactile methods. The most wide-

spread techniques for showing textual information to blind students are speech synthesizers and Braille cell displays or Braille embossing printers. As mentioned earlier, visually impaired students mainly use screen-reading software (text-to-speech technology) in order to access information on computer screens. When we talked about technology, I asked Teddy whether it would be easier to use speech synthesizers to read texts rather than to have them translated into Braille. The answer was that, with a foreign language, the monotone synthesizer would not reproduce the accent or the exact pronunciation. I wondered if he could potentially adopt a software for Italian users that would read Italian text with an authentic pronunciation. The answer was quite surprising to me. Teddy said that for second language acquisition, listening to an unfamiliar voice would be very unsettling. Listening to the instructor within and outside the classroom represents much more of an authentic experience than listening to an unfamiliar voice. There is a strong psychological component that interacts and interferes with the learning process. When I proposed recording the material for him, he still preferred to read Braille since it would map onto the experience of his classmates when reading a printed text. Therefore, I understood that, although Teddy took full advantage of the assistive technology, he was trying to have a learning experience as comparable as possible to that of his sighted peers. He needed to feel the sound of the instructor's voice as much as he needed to feel the tactile sensation of the reading experience. An "authentic" interaction with the main source of information — the instructor and the Braille text — would facilitate the interpersonal and oral presentational tasks that followed. It is very common, for blind students, to build their Interpersonal[2] proficiency through a lengthier Interpretive reading and listening practice. Unlike their sighted counterparts, they tend to take fewer risks and need more time to build their confidence. As I have previously suggested, I believe it is crucial to meet the blind student at the beginning of the semester to better understand his/her background and experience as a visually impaired learner, and to better appreciate and facilitate his/her learning style. When the pedagogical and human aspect of the learning experience can organically interact, I believe every mode of communication— Inter-

[2] The Interpersonal, Interpretive and Presentational are the three modes of communication used by ACTFL to describe the language proficiency of language learners in Standards-based language programs. Each mode of communication looks at the ways a message is conveyed through speaking, writing or reading. For more details look at The *World-Readiness Standards for Learning Languages*, ACTFL, 2011.

personal, Interpretive, and Presentational — will be maximized. Teddy suggested that smaller classes and individual interactions are key elements for the success of blind students. I would add that this concept applies to every student regardless of their different abilities. In light of the often large size of language classes, it is important to know that extra time is crucial for the overall success of any disabled student in the classroom.

TIPS AND REMINDERS

1. Prepare the material in an electronic format which allows the VI student to more easily adapt the knowledge in a suitable format whether he/she may choose braille, audio or electronic.
2. Make all the material available in advance so that the VI student has enough time to prepare the most suitable format to his/her learning style.

1. Like in all sound language pedagogy, avoid mechanical exercises and maximize meaningful and open-ended ones.
2. Since during the assessments the writing process is entrusted to the digital device, it is very hard for a blind student to revise as he/she can't catch the mistakes. A great help is to have somebody who can re-read/revise the text for potential mistakes before submitting it to the instructor. This was the preferred method of editing for Teddy.
3. Don't give handwritten comments but chose to either record your corrections or give your feedback during office-hours.
4. Before class, reflect on how to verbalize everything you planned to cover in class. A verbal style of communication is the best learning strategy for VI students.
5. In class, verbalize everything that is written on the board, ask the reader assistant to describe all the potential pictures or visual content shown.
6. The reader assistant is a crucial component since he/she is a real help inside and especially outside the classroom.
7. The choice of films is also important. I chose a film — *The Great Beauty* — that was too abstract and hard to make associations with. My advice is to choose a film with a more coherent plot which can constitute a better opportunity for practicing narration skills. Make sure to inform the VI student prior to assigning the film so that he/she has enough time to a. chose the desired format b. ask for assistance.
8. There are certain limitations in the learning of a language in the domains of reading and writing that can be supplemented by going to personal meetings with the instructor. This approach implies a greater

availability during office hours, which instils a greater level of confidence both in the instructor and the blind student. The conversational mode — the interpersonal mode — between student and instructor represents the most intimate, but also the most representative way to self-correct. This model is much more conducive to active learning than any other more presentational approaches, and with blind students it significantly changes their confidence inside and outside the classroom.

9. Familiarize yourself with the technological aspect. Learn about the synthesizer used by the student.
10. Interview the student at the beginning, halfway through, and at the end of the semester to learn more about their learning style and what can be modified to maximize their learning experience.
11. Don't overcompensate by exceeding in the preparation of adapted material. It is important to maintain balance in the classroom so that every student feels cared for, safe and confident.

CONCLUSIONS

To conclude, we need to be displaced from our beliefs and methodological approaches if and when we work with a disabled student. It is important to envision strategies with a very flexible and collaborative pedagogical approach. Needless to say, there are certain parameters — like the logistics — that need to be meticulously pre-structured and defined much in advance. However, since the presence of a disabled student implies constant adjustments to his/her needs and learning style, it is equally important to be open to any potentially unforeseen revision of the syllabus. The success of a syllabus tailored to a blind student can only be proven once applied. Its outcome will be much less predictable than a typical approach.

Educators are constantly challenged by the abundance of new teaching methodologies to be potentially implemented in their teaching practice. It is not always easy to displace ourselves from our own pedagogical convictions and explore new possible teaching trajectories. Teddy taught me a great lesson as an educator and communicator, and I will use his own words to convey his thoughts:

> A lot of the changes that you contemplated that would be relevant to me specifically, would actually be helpful on a general level of education. If, for example, you are instructing on a mathematical concept on the board and you have to explain it verbally and break down the steps assuming that your classroom can't see the board, that is going to cause you to be

much more explanatory than you would be otherwise and people would stress much less.

After having known Teddy and after having further researched the topic of teaching a foreign language to disabled students, I understood that, when it comes to teaching a visually impaired learner, sometimes all it takes is to close our eyes and envision a flipped classroom where the differently-abled student
becomes the norm.

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RESOURCES

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