How far have we gone with Applied Sign Linguistics in deaf education?

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Abstract

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In 2009, Applied Sign Linguistics *was for the first time the topic of international scholarship. Academic discussion involved areas such as: sign language teaching (SL) and learning; IT in SL learning; SL assessment; discourse analysis etc. In this paper, the aim is to discuss current developments in the field and in relation to deaf education in three main areas within the European Union (EU): (a) on the specific methods used in SL teaching; (b) on the shared disciplinary nature of the specific field (taking into consideration the larger cultural context within which SLs operate); and (c) on the constructs needed in order to research and study those fundamental issues of* Applied Sign Linguistics. *The paper argues that the future development of pedagogically oriented* Applied Sign Linguistics *is bound up with the capacity of the research infrastructure to undertake process-product study on the macro (i.e. SL programme evaluations) and micro level (i.e. SL classroom).*

Keywords: sign language teaching, Applied Sign Linguistics, sign language in Europe, signing in schools

Introduction

In September 2009, academic scholarship discussed for the first time *Applied Sign Linguistics* in terms of: the skills and knowledge associated with sign language (SL) learning/teaching and assessment; SL pragmatics; intercultural communication; and cognition and teaching (Mertzani, 2010). Both international symposia (in 2009 and 2011) aimed at presenting *Applied Sign linguistics* next to "applied linguistics" of modern foreign languages (MFLs), due to the establishment of many SL learning programmes in Higher Education (HE), school education and Lifelong learning worldwide. Because of this reality, there was the need for an interdisciplinary exchange of expertise, practice and research, which could deal with practical problems of SL and communication, by analysing and/or applying available theories and methods from MFLs, results from sign linguistics, and/or by developing new frameworks.

Applied Sign Linguistics, as is "applied linguistics" for MFLs, is linked with research developments firstly, in sign linguistics and secondly, in deaf education. The aim of this paper is to discuss this specific relationship within deaf education, in primary and secondary schools. Concerning sign linguistics, "much progress has been achieved toward the aim of delineating the structures, distribution, and operations in sign language phonology, even though this work is by no means over and debates about the segment, feature hierarchies, contrast, and phonological operations continue" (Brentari, 2011, p. 21). Regarding this advancement, the purpose of sign linguistics, in relation to the teaching of SLs, is to investigate and describe in the best way those instances of teachers' and learners' linguistic ability in their learning settings (e.g. in traditional classrooms, online, and/or mobile). For the purposes of this paper, this latter is discussed within the European framework.

Firstly, an account is given on the way sign linguistics influenced SL teaching overall and secondly, the way and degree of applying sign linguistic knowledge in schools for deaf children. At the end, the paper discusses the current status of SL teaching and its future prospects in Applied Sign Linguistics.

Sign Language Teaching and Sign Linguistics

The relation and relevance of sign linguistics to the teaching of SLs is very important since the former is concerned with the components of the language, which the SL teacher is called to instruct in the classroom and, the SL learner to acquire. Such linguistic knowledge is necessary for constant use in the language classroom,

next to current teaching methodologies (Khansir, 2013, p. 1141). This rapport is evident in the history of SL teaching. Initially, when research of sign linguistics was at its beginning, SL programmes were based on the construction of word lists in students' native language with their equivalent signs. Thus, the focus was on word-sign correspondences and on the memorisation of simple grammatical and syntactic rules, practised in short sentences and in translation exercises (Mertzani, 2010, pp. 59-60). With the advancement of technology, video technology in particular, the focus was on the production of preset (usually grammatically-based) texts and self-recordings, which comprised the first lexicons.

After 1970s, apart from the social and political movements that took place in relation to deaf education (e.g. legal recognition of SLs, civil and linguistics rights of deaf people, and socio-cultural perspective of deafness) (Leeson, 2006), especially after the publication of William C. Stokoe on the linguistic validation of American Sign Language (ASL) and all SLs, research focused on the interaction of deaf and/or hard-of-hearing children within their families (deaf and hearing), and the acquisition of SLs as their first languages (L1). This research emphasis came from university departments in educational psychology, or from deaf organisations, and as soon as sign linguistic knowledge transmitted among academic scholars, more researchers with a linguistic background became active and urged for an in depth description of SL grammar. Thus, research about deaf education and learning processes in deaf children, gradually became interdisciplinary, involving sociolinguistics, psycholinguistics and neurolinguistics (e.g. sign language processing) (Quer, Mazzoni, & Sapountzaki, 2010).

The study and recording of the developmental stages of children's SL (especially of those coming from deaf families who learn the language as mother tongue) (Cormier, Smith, & Sevcikova, 2013) allowed some taxonomy of "easy" and/or "difficult" structures, and thus, of levels that could be attained in the course of SL learning. For example, in adult learning programmes, where SLs are taught as second languages (L2), the beginners' level with regards to users' linguistic competence, usually involves the learning of short sentences (with six or more signs) with at least two clauses; comprehending and producing proforms and locatives in simple signed narratives; and basic vocabulary (e.g. origins, family, personal interests) (Centre for Deaf Studies, 2008/2009). However, such content was varied and still is, as there is very limited joined work among the accredited bodies (e.g. universities, deaf associations, schools), on

a common basis, on the description of the levels of the language (as a L1 and/or L2).

In line with the above, and in terms of methodology, SL teaching focused more on interaction and the development of users' communicative competence in SL (i.e. linguistic, sociolinguistic, discourse), adopting communicative language teaching (CLT) approaches, as the latter were employed and applied in MFLs. This development was supported with more research from sociolinguistics that informed about cultural norms within deaf communities and families of deaf children. Thus, the focus of SL teaching was the creation of communicative scenarios, in which the learner uses the language in the way deaf people do. For instance, in the SL programme (for the learning of British Sign Language – BSL) of the Centre for Deaf Studies (CDS), of Bristol University, one of the learning objectives was to immerse students into the deaf community, having frequent extra-mural contacts and not just the hourly sessions that SL courses were offering (CDS, 2001). Currently, following tested paradigms from MFL and, inventing new ones, CLT is the method that dominates most adult learning classes (Mertzani, 2010).

The involvement of deaf researchers in sign linguistics influenced and changed both content and methodology in SL learning, promoting a deaf-led perspective (e.g. of a range of courses delivered by deaf associations), which demanded better quality of materials, and inclusive with new data entries from sign linguistics research. For example, deaf practice within HE SL programmes demonstrated large production of video-based learning resources, whereas the opposite was observed outside academia[1]. According to Fenton-Ree (2010), based on informal discussion at the BSL-TSN workshop at Deaf Skills 2006, it was found that "57% of the deaf teachers had never created their own video (signing) materials and 60% had only shared materials with another deaf teacher on 1 or 2 occasions" (p. 12). Thus, the provision of teaching materials, particularly SL video resources, adequate in content, format and technical quality became a constant and immediate concern. Therefore, hands-on approaches were applied and many programmes "have amassed heterogeneous collections of videos", access to which involved "picking the brains of those colleagues who may have worked with some video clip or exercise suitable for one's own didactic or research

[1]. A reason for this can be the availability of technology resources, with which university departments were well equipped. An example was the laboratory of CDS in Bristol University, equipped with professional video and computer technology, of which, on a daily basis, deaf researchers made use (among other uses) for the production of learning materials. In addition, students and scholars, during BSL classes, were using the centre's online learning environments which permitted instant video recordings and submissions. Reading such practices, one realises the size of video data collection for SL learning/teaching purposes.

purposes" (Hebmann & Vaupel, 2008, p. 74). This growing number of different SL texts represented "a very dynamic, fast-growing and changing language in use" (p. 75).

The provision of SL teaching materials is supported by recent work on corpus sign linguistics (since 2009). The making of electronic corpora (e.g. the BSL Corpus Project, at the Deafness Cognition and Language Research Centre - DCAL, in University College London; and the Corpus NGT, Radboud University Nijmegen, in Netherlands), comprise a centralised source of data for research and study of, for instance, regional variation and change in aspects of SLs (and other linguistic information), such as in vocabulary and grammar. For such purposes, data is usually collected by deaf native signers, comprising computerised databases of digitised video recordings, available online and/or offline, through limited access permission to scholars. However, limited research is documented on the use of such corpora in SL classroom (e.g. in the SL interpreter training programme at the universities of applied sciences in Magdeburg and Zwickau since 1997), although there is great potentiality. They can complement existing SL materials and create accessible libraries of video resources for research and training purposes (Leeson, 2011). In the SL interpreting programmes, corpora are used to provide students with a great variety of different texts in signed and spoken languages, since their access to SL is limited in daily life (Hebmann & Vaupel, 2008, pp. 74-75).

In contrast to MFLs, SL learner corpora do not exist. In the year 2010 - 2011, Mertzani (2010) conducted a preliminary study of BSL learner corpus, funded by the British Academy, in the U.K. The study examined the interlanguage of BSL of beginner learners, using a small scale database of videos generated at CDS of Bristol University. Students' videos were then analysed, with the aim to exploit and identify error categories for the development of an error tagging system in BSL learner corpora. The study exploited eight grammar and syntax error categories, and results revealed that overall, students produced more correct than incorrect BSL across the categories; they produced very often more syntax rather than grammatical mistakes; and in the grammar category of inflected verbs, they produced more grammar errors than syntax. However, more research is needed to show learner corpora uses in the description of learners' SL proficiency levels in the course of their learning.

Additionally, with regards to curricula and syllabuses, content development has begun to rest within collective rather than individual SL teachers. Towards this

scope, deaf academics participate actively in initiatives, particularly in European and/or international partnerships that discuss the content, objectives, structure and materials of SL learning, such as in the production of course materials in which deaf, native users of SLs are allowed to be recorded only (when it comes to SL teaching). Such recent initiative was, for example, the D-Signs project (2009-2011), a joined project among five European member-states (from the U.K., Ireland, Greece, Cyprus and Czech Republic) that produced materials for the learning of SLs as L2, mapped on the standards of the Common European Framework of Reference for Languages (CEFR), from the field of MFLs (Kyle, John, Mertzani, & Day, 2010; Leeson & Deirdre, 2009; Leeson & Grehan, 2010).

Based, partly, on D-Signs[2], and acknowledging the lack of a common SL learning framework, deaf academics (and not only) joined in the PRO-Signs project (an on-going project since 2012), with the aim to establish European standards for SL proficiency for professional purposes, focusing specifically on SL teaching in Deaf Studies (e.g. in universities) and interpreting programmes. The major output of the project is to define (in English and International Sign) the proficiency levels for SLs and development of curricula for hearing learners; to develop a sample assessment kit for SL competency at the C1/C2 level indicating the qualification of professional interpreters; and overall, to provide teaching and learning guidelines. The project, funded by the European Centre for Modern Languages (ECML), is the first step toward the establishment of European standards for specifying proficiency level in SL learning. It is expected that deaf communities and employers have standard levels to guide them; teachers and lecturers can benchmark curricula across Europe and, benefit from networks of shared practice[3].

In terms of L1 acquisition, research in sign linguistics allowed the development of various tests (however not all standardised), for many European SLs, which can assess SL development as L1 in deaf children (their receptive skills mainly) and subsequently, plan intervention in their schools (for a review[4] of SL assessment tests see Haug, 2008). In particular they can be applied for: (1) diagnosis of children's language development; (2) monitoring SL development in school; and (3) linguistic assessment of deaf adults, hearing parents with deaf children, professionals working with deaf people. In terms of children's linguistic

2. Referring to the description of A1/A2 levels of CEFR in the D-Signs project.
3. Information of the project can be found on its main website: http://www.ecml.at/F5/tabid/867/Default.aspx
4. The website Sign Language Assessment (link: http://www.signlang-assessment.info/) provides a brief summary, with examples, of the European assessment tests currently in use.

competence, the tests focus on selected aspects of SL morphology and syntax (e.g. negation, number and distribution, verb morphology, noun-verb distinction, size and shape specifiers, and handling classifiers), evaluating their understanding in receptive skills (usually video-based; and/or picture-naming tasks). In these, children are required to name pictures and/or choose from multiple-choice videos so that the assessors can check whether their version of the sign correspond to the one used in the test. In some cases, regional SL variation is also included. In other contexts, children are asked to comprehend grammatical relations within various video-based narratives.

Summing up, this section presented the way research in sign linguistics informed, overall, teaching methodology; learning materials; and assessment in the teaching of SLs as L1 and L2. The following section discusses such ventures in the European context, so as to inform the state-of-the-art of Applied Sign Linguistics in relation todeaf education.

Teaching Sign Languages in European Schools

SL teaching in schools is somehow susceptible of the social and political similarities among the European Union (EU) member-states (Leeson, 2006; Quer, Mazzoni, & Sapountzaki, 2010).

[T]he reality of signers and the vicissitudes of deaf education and sign language recognition are roughly comparable", thus, in some aspects, there are shared features that differentiated some states from the others (e.g. the southern Mediterranean countries from northern EU countries), but at the same time there are parallels observed, albeit at a different pace at times (Quer, Mazzoni, & Sapountzaki, 2010, p. 95).

In the 1990s, there was a movement away from oralism and an increase in SL awareness across Europe had emerged. In 1988 and 1989, the European Parliament passed two resolutions and recognised European sign languages as used by Deaf people in each Member State; in 1989, the Third European Congress on Sign Language Research held in Hamburg passed "The Statement on the Recognition of the National Sign Languages of the Deaf"; and in 1991, the World Federation of the Deaf called for the recognition of SLs. In 2001, in the Parliamentary Assembly Recommendation 1492 (2001) on the rights of national minorities, The Committee on the Rehabilitation

and Integration of People with disabilities (Partial Agreement) (CD-P-RR) regarded SLs as non-territorial languages, since they meet the definition criteria of non-territorial languages as set out in the European Charter for Minority or Regional Languages, as well as cultural and linguistic minorities with specific cultural identities (Timmermans, 2005, p.20, 22). In 2003, the Parliamentary Assembly Recommendation 1598 (2003) was passed on the protection of sign languages in the member states of the Council of Europe.

Following from such acts, many European member-states recognised SL as the language for the communication between deaf persons and others, but very few as the language for instruction in schools. As a result, until today, SL – even in those states that its educational status is recognised – is not used as: (a) the school subject that deaf children must study throughout their school years (in the way hearing children do for their mother tongues), although sign bilingualism pedagogies are claimed to be followed in school curricula; and (b) as the communication tool for delivering the learning and teaching of school subjects. On the contrary, it seems that total communication approaches dominate school practices, mainly due to the fact that SLs have not yet become obligatory of school study (in primary and secondary education) (Leeson, 2006).

In this context, SL teaching has some challenges in common with other situations involving minority languages such as: (i) the use of a standard language in education; (ii) legal status and funding; (iii) development of teaching material; (iv) availability of qualified teachers; and (v) new challenges in modern society (Cenoz & Gorter, 2009).

With regards to point (i), language learning in deaf schools still equals to the teaching of the states' official language (e.g. English, Spanish, French), regardless of the large number of sign linguistic and psycholinguistic research, indicating otherwise. This situation has led to the adoption of compromising, complementary approaches to the linguistic and social needs of deaf people (Quer, Mazzoni, & Sapountzaki, 2010), such as total communication approaches. In other cases, such as in Greece, SL teaching was affected for many years (from the 1990s to early 2000) by the 'Greek language question' dispute[5], which restrained and delayed the development of teaching methodology for any language (L1/L2). Thus, language learning was based on traditional methods that had an archaic orientation, according to which learning of mother

5. This dispute concerned the use or not, as an official language of the nation, of: (a) the language of the Greek people (Demotic Greek); or (b) an archaic, artificial version that was imitating ancient Greek (called: katharevousa), but it was not spoken by the majority of Greeks. In 1976, demotic was made the official language.

tongue meant the learning of modern, demotic Greek, on the basis of ancient Greek (even in deaf schools with some modifications). Hence, in this context, all languages, including GSL, were taught based on such methods that emphasised learning of detailed grammar rules and writing activities/compositions (Mertzani, 2004).

Concerning (ii), since the 1990s and until the early years of EU economic crisis (2008), SLs had both legal and funding support from EU. During this period, HE institutions received major support for the development of benchmark research, mainly in documenting SLs (e.g. in multimedia lexicons, and corpora). Much of this work was administered for free[6] in schools for SL teaching practices (mainly lexicons, pilot curricula etc.), and for teacher/staff training in deaf education matters (e.g. family provision, cultural identity, and social attitudes). Teaching vocabulary, using video multimedia materials, from children's early school years, is a common target and practice within EU. This is also evident in the development of numerous SL assessment tests as it is already mentioned.

The primary objective of deaf education programmes is, where sign bilingualism is applied, "to facilitate the normal acquisition of language, cognition, and social structures through an accessible first language and then build the skills of academic learning and literacy upon this foundation" (Enns & Herman, 2011, p. 362). It is the policy among EU schools, due to the heterogeneity of deaf children population, to establish a language base for deaf children (and their parents), by focusing on the development of SL skills (receptive and productive), before proceeding with other study subjects according to school curricula. For this reason, the aforementioned SL assessment tests are used for reliable evaluations of children's SL proficiency. However, school practice informs that such tests are not available throughout EU membership, and test adaptations are preferred, without though making proper standardisations.

Deaf children who have difficulty developing SL skills are often identified by teachers using the above assessments, or else in a descriptive mode, based on reports taken through their interaction with the children, interviews with their parents, and professional discussions among staff in schools. SL Levels are also determined, as they begin formal schooling, and their progressed is monitored during their school years. "Unfortunately, in the area of signed

6. A representative example is the project Signing Books (1998-2000; website: http://www.sign-lang.uni-hamburg.de/signingbooks/), which aimed to research current provision in Europe, identify and evaluate best practice - and make this knowledge widely available as a resource to producers, publishers, presenters and viewers. These objectives were in close relation to the production of SL teaching materials.

language acquisition very few commercially available assessment measures exist [and] [a]s a result, teachers often rely on informal descriptive measures to develop teaching goals and monitor progress" (Enns & Herman, 2011, p. 363).

In terms of SL teaching materials, the situation in EU school is much differentiated. Very few countries, based on their passed laws on SL recognition in deaf education, have developed materials for primary and secondary school use. The majority of these are bilingual; SL is the school subject (as a L1) and the tool to communicate the video content; and spoken language (mainly in its written form) is taught as a L2 through SL. An example is the SL and bilingual national curricula[7] established in 2004 by the Pedagogical Institute, in Greece, for deaf children in primary education (Kourbetis & Mertzani, 2009). In these, video multimedia materials were created by native signers, focusing mainly on analysis of stories, narratives, and general educational context (e.g. maths, physics, geography, history) (Kourbetis, 2011). Unfortunately, to the best of the author's knowledge, there is no research to document the impact of such materials into children's SL learning, and their use in the SL classroom (by both teachers and learners). There is no mention either of using SL corpora for SL learning purposes, although research presents schools and/or inclusion classes as the hubs for deaf children's SL acquisition.

In line with the aforementioned law acts, the majority of member-states trained (and are still training) professionals in tertiary and/or vocational education, about SL research and deaf education matters. Thus, today, there are available qualified teachers with high command in SL, since their placement in deaf schools requires (and obliges) the attainment of SL proficiency certificate. Yet limited research exists to report on their teaching and its impact (if any) on children's SL learning. Research is needed to explore their method(s) in the SL classes, in schools, since these new generation teachers now hold the knowledge and awareness of the linguistic (and not only) aspects of SLs. In addition, there is increase of deaf qualified teachers, whom international scholarship considers to play important role models in children's school achievement.

With regards to point (v), as it is already mentioned, due to the economic crisis, deaf education is under great pressure across EU. The financial crisis has led to an increase in budget deficits in many countries, and this has resulted in the need for fiscal consolidation. Thus, there

7. The National Curriculum of GSL is based on the following foreign school curricula: the Comprehensive ASL Curriculum for Deaf Students by Hoffmeister, Greenwald, Czubek, & Di Perri (2002); the Kindergarten Language Arts Curriculum Guide by Di Perri & Hoffmeister (2002); and the Deaf Studies Curriculum Guide by Miller-Nomeland & Gillepsie (1993) as cited in Kourbetis & Mertzani, (2009).

are financial challenges (e.g. funding cuts, staff reductions, salary cuts and freezes) that threaten SL teaching in schools (e.g. due to closing and/or merging deaf schools). In terms of the impact of the crisis on human resources in education, in most countries (from 2007 to 2010), the number of school teachers has generally followed the fluctuations in the pupil/student population (European Commission/ EACEA/Eurydice, 2013). As a result of this crisis, was the closure of CDS of Bristol University, with milestone research in Deaf Studies over 30 years. The funding of ICT resources and of specific programmes for educational support is also affected by cuts in education expenditure (ibid.), a situation that currently threatens the production of SL material. At the moment, the availability of free online platforms (e.g. YouTube, Facebook, blogging, Skype) for continuing, collective and/or individual SL production and sharing, are valuable tools to teachers, parents and students during classroom practice.

Discussion and conclusion[8]

Applied linguistics started in the decade of '60s, when audiolingualism and later, cognitivism, were believed to be the methods drawn directly from a theory of language description (Weideman, 2007). At that time, there was a link between linguistic theory and language teaching. In terms of Applied Sign Linguistics, it is easily claimed that there was not a theoretical continuity between sign linguistics and SL teaching. The teaching methods, especially their principles that have been tried out throughout the 1970s, cannot be related to the results of the sign linguistic analysis of that time. They are, instead, beliefs that underlie and support some techniques of analysis, but they are not the results or conclusions of sign linguistics analysis. They simply preceded sign linguistics. This is the reason why, in one single decade, different programmes attempted to employ four methods, with different principles and techniques. However, from 1980s to present the application of CLT is based upon the results of sign linguistics, thus, there is a theoretical continuity between Applied Sign Linguistics and sign linguistics.

From 1980s and onwards, investigation of the syntactical features of SL demonstrated the need for a linguistically-based SL instruction, which differed significantly from the SL teaching in the 1970s. Sign linguistic analysis was then utilised in the selection and creation of SL teaching/learning

8. This section is first published in Mertzani (2010). It is included here with few adjustments for the purposes of this paper.

materials (e.g. SL curricula such as the VISTA curriculum for ASL; SL textbooks for the teachers and the learner such as the publications by Cokely and Baker-Shenk in 1980; SL dictionaries; multimedia DVD/CD titles; and recently, online SL material/ websites), and evaluation, assessment materials to be used in SL classrooms. Thus, in order to make such a selection, it was realised that in order to apply any theoretical insight of sign linguistics, there was the need for a contrastive analysis of learners' L1 (spoken language and/or another SL as a L1) and SL (the target language for teaching/learning). There was enough scepticism about theory and practice, since sign linguistics has the same subject-matter as SL teaching. In designing solutions to SL problems, sign linguistics theory led the way.

Moreover, it can be claimed that in Applied Sign Linguistics there is continuity with Applied Linguistics. The latter constitutes the "tradition/model" for SL teaching and learning in their broad sense. As Weideman (2007) puts it very well, even though an historical analysis may present applied linguistics as a progression of successive generations or traditions, many of these traditions still exist, and/or co-exist. In the case of applied sign linguistics, there was not any succession of theoretical traditions but there was a progressive selection (from 1970s to 1980s and onwards) of certain – well-known in applied linguistics – methods and principles, which were adjusted to SL teaching/learning. Furthermore, this progression informs "tradition" about an already established work. In doing Applied Sign Linguistics work, theoretical "traditions" were and still are a point of reference.

However, what is missing from Applied Sign Linguistics is what Bygate (2005) addresses; "what is needed is not simply to develop and cross-examine the theories, but to explore their applicability within real-world contexts" (p. 571). In other words, this statement calls for research-based prescriptions about "what works" in SL teaching/learning in general. This is an important challenge for many SL teachers and scholars. For instance, it is not sufficient to identify the context of CEFR levels according to SL learners' needs; it is necessary to know what can then be done to help SL learners to achieve the levels. This also raises the issue of communicating with the broader society, for example, with the deaf community, with special interest groups and/or the public, who – the majority at least – are non-specialists in SL (e.g. employers and employees around SL uses in the workplace). In order to explore the applicability of the above theories, the applied sign linguist needs to engage in a constructive collaboration with various "authorities" and understand their diverse

relations to real-world SL problems. At present, there is not enough research about the theoretical "traditions", which will inform the field about "what works". Currently, Applied Sign Linguistic research is being conducted in contexts remotely, and its results remain – in most cases – unknown.

According to Mitchell (2000), language learning theories and research findings on effective teaching

> can influence and widen the repertoire of possible actions and choices which lie open to the teacher. In this sense, an expanded programme of research ... could certainly support the development of more effective and consistent practice in the area ... But any such programme needs to be founded on a clear set of principles, if it is to generate robust new knowledge about effective teaching and learning (p. 298).

In line with this, Applied Sign Linguistics needs to strengthen its research by evaluating the overall effectiveness of the existing SL programmes through evidence-based practice (e.g. classroom experiments and quasi-experiment). So far, for example, there is still not enough evidence on what to teach in each SL level; there is still lack of "standard" pedagogic grammar; of what is actually "teachable" and measurable. Applied linguistics research has shown the effectiveness of certain instruction techniques; input, output and feedback for the acquisition of the target language (Ellis, Basturkem, & Loewen, 2001). Again, such evidence is missing from SL teaching and learning.

Applied Sign Linguistics is a challenging discipline. Richard Kiely, as the keynote speaker at the *Applied Sign Linguistics Symposium 2009* pointed:

> What it occurred to me today is that, in terms of Applied Sign Linguistics, there is a very big challenge. In my feeling, in teaching English as a foreign language or teaching foreign languages, when the work started forty or fifty years ago, the task of language description had been done; dictionaries were there; grammars were there; that had been going on for 100 years. It seems to me that you have the challenge at the same time of describing sign languages, and trying to negotiate issues of standards, variation etc. at the same time as working out how to teach sign language and what are the involved processes. It is a very complex issue with less activity.[9]

9. The extract is a transcribed part of the keynote presentation. The recordings of the conference belong to private archives by the author.

Moreover, this statementmeans that evidence-based practice needs to be grounded in a network of close and long-term partnerships between researchers, teachers and other participants in SL teaching and learning. In addition, it means the need to increase agreement among scholars on what kind of data will count as providing evidence of SL teaching and learning.

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