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Methodology in interpreter education and training

Amalia Amato and Gabriele Mack

Introduction

After World War II, the endeavour to teach conference interpreting was undertaken by a few higher education institutions in Europe and the USA, while the need to prepare community interpreters, following increased migration flows, was initially catered for by professional associations or institutions in destination countries, starting with Australia and the UK. Also in community and signed language interpreting (SLI), an initial helper-model was increasingly replaced by a professional one. Currently, several hundreds of programmes are offered all over the world for all forms of interpreting.¹ Different national, regional, economic, social and cultural backgrounds as well as specific requirements and professional statuses have led to differences in methods and approaches. Given the large number of factors at play, this chapter will only focus on those aspects of interpreting which affect: interpreter education; models, players and curriculum design; assessment; how technology is changing and will continue to shape interpreter education.

Main aspects of interpreter education

There is a longstanding distinction between interpreter training, which focuses on skill development and problem-solving, and interpreter education, which underpins practice-orientation with the acquisition of academic knowledge and an ability to theorise. In what follows, *teaching* will be used as a hyperonym, but the focus will be on education. We will discuss methodologies, contents and tools developed in academic settings which run parallel to the evolution towards fully established professional profiles in the various fields of interpreter activity. How the profession (and consequently education) will evolve in the future is difficult to predict due to technological developments, migration flows which modify the request for languages, and political and social changes, including growing constraints in public budgets and the increasing precariousness of both interpreting professionals and educators.

Interpreting between languages can be seen as a reaction to what Chesterman calls *communicative suffering* arising ‘from not understanding something that you want to understand, from misunderstanding or inadequate understanding, and from not being able to get your own message across’ (2001: 151).

In terms of interaction dynamics, the primary speakers’ turns can be either *monologic*, i.e. directed by one speaker to many listeners (e.g. a lecture) or *dialogic*, between two or more participants alternating extended or short turns (e.g. a business meeting). In the first case, which is typical of conference settings, turns tend to be long and exclusive, their allocation being often entrusted to a chairperson or moderator, while in dialogue interpreting turns are negotiated and co-constructed by all communication partners, including the interpreter.

In terms of timing and mode, interpreting can be performed *consecutively* or *simultaneously*. In the first case the interpreter's turn follows a turn by a primary speaker, in the second these two turns overlap, with only a short delay (*décalage*) in the interpreter's rendition. Consecutive interpreting (CI) thus uses 'normal' speech patterns but doubles speaking time; it can be performed with or without note-taking (which becomes essential with long turns). Simultaneous interpreting (SI), instead, produces a systematic overlap of two speakers which is managed with technical equipment – typically microphones, headsets and a booth for interpreters. When SI is performed without equipment, it is whispered to the listener (*chuchotage*). SLI is usually performed in the simultaneous mode. Sight translation as well is performed mainly by interpreters.

Possible *contexts, settings* and *types of interaction* where interpreting may be required include business meetings, conferences, educational settings, health and mental care services, humanitarian emergencies, inter-governmental negotiations, legal settings, live performances, media, military and conflict situations, parliamentary sessions, and (public) service encounters. In principle, both monologic and dialogic formats can occur in all these interactions, and both consecutive and simultaneous modes can be used or alternated, although SI is uncommon in some of these settings. The *communication partners* may be adults, adolescents or children, and there may be imbalances in the interlocutors' cultural and educational background and/or institutional power. The contact between them can be seen as a continuum from face-to-face, with participants and interpreters located in the same place and using all their sensory channels, to remote interactions with participants in two or more locations and contact sometimes limited to the acoustic channel only, as in telephone interpreting. *Paralinguistic* and *visual components* also play a crucial role in interpreter-mediated interaction. Style and register of the *discourse* to be interpreted can range from informal to formal and from oral/unplanned to written/planned language. In some contexts written texts (e.g. manuscripts) and visual components (e.g. pictures or slides) can play an important role.

Given this complexity, successful interpreting requires not only highly advanced language comprehension and production skills, but also cultural sensitivity, general and specialised knowledge, high concentration, reactivity and self-monitoring capabilities, stress- and fatigue-endurance, handling of complex communication situations, understanding of the primary communication partners' needs, and continuous, fast decision-making. Learning how to do this in the various settings mentioned above is a process which has been formalised in interpreter education programmes.

Models, players and curriculum design

Every pedagogical approach is defined by the underlying model of the activity taught. Angelelli (2017: 36) maintains that

[m]onologic (conference) interpreting and dialogue interpreting education have evolved differently: the first started as a response to a pragmatic need (prepare interpreters for international organisations, governments and international communicative events in general) and then became a field of investigation whereas the latter has been the object of investigation first and has then entered the academic curricula.

A first, rather intuitive teaching model for conference interpreter education, based on a prescriptive approach, was elaborated in Paris (Seleskovitch and Lederer 2002/1989). This was gradually replaced by an information processing model with pedagogical methodologies aimed at developing cognitive and meta-cognitive abilities, identifying relevant sub-skills and problem triggers, and encouraging metacognitive practices (e.g. Gile 2009/1995; Motta 2016). In community and signed language interpreting, interpreter education benefited from research which conceptualised interpreting as a complex cognitive activity performed as situated practice in a social context (e.g. Swabey and Malcolm 2012; Cirillo and Niemants 2017, Roy and Winston 2018).² There is consensus also on the conceptualisation of interpreting as a problem-solving activity in which competent interpreters display ‘strategic’ patterns of behaviour in order to reach their communicative goals and to cope with specific challenges.

Research on dialogic interpreting has led to a more interactionist model with a stronger focus on developmental stages of skill acquisition and the measurement of learning progress. This model applies the principles of dialogic pedagogy, collaborative and reflexive teaching, guided practice and problem-based learning, and takes into account values and beliefs of learners. Interdisciplinary research on teaching methods is gaining ground and some evidence of a coherent and comprehensive application of its results is emerging. Interesting contributions to unresolved questions – concerning the practice of shadowing, for example – come from disciplines like second language acquisition (e.g. Kadota 2019). This shows that interpreting studies have indeed ‘done a lot to establish a firm basis for training’, and their ‘insights have been accepted and implemented in practice’ (Kalina 2015: 33).

Learners and teachers

Two crucial aspects in teaching interpreting are the stage in their life at which prospective interpreters undertake their education, and their prior qualifications. Learners can range from young people without any working experience, to highly proficient bilingual adults who may have already worked as ‘informal’ or self-trained interpreters.

Given the complexities of interpreting, the qualifications of educators are crucial for the development and outcome of the teaching process. Conference interpreting was originally taught mainly by experienced professionals and learned ‘by doing’ – a form of *ante litteram* situated learning. Increasing professionalisation was accompanied by academisation of teaching, and the initial master-apprentice approach was integrated by more research-based pedagogy as a growing number of trainers also engaged in interpreting studies. A thorough knowledge of the research on interpreting, but also on cross-cultural communication, cognitive psychology, sociolinguistics and pedagogy, is indeed necessary to guide the development of adaptive expertise in a specific group of learners, to set achievable objectives for the different stages, to pace progression, to select the most suitable activities and training materials, and to assess intermediate and final outcomes of the learning process. Motta (2013), adopting a constructivist approach to learning, distinguishes four main teacher’s activities which can also foster meta-cognitive apprenticeship: *modelling* and *coaching*, i.e. performing a task while being observed by the learner or supervising and giving feedback to the learner while he/she is performing the task; *scaffolding*, i.e. preparing and organizing activities suited for the task at hand;

and encouraging learners' own *reflection* on their learning processes in order to develop self-monitoring skills.

Important international groupings of higher education institutes (such as CIUTI or EMCI), professional associations (such as AIIC or ENPSIT), interpreter educators' associations (such as CIT or ASLIA) and accreditation and certification authorities (like NAATI) still consider practical expertise and professional experience as fundamental pre-requisites for teaching interpreting, while educational qualifications are often not explicitly requested; but professional associations were also among the first to recognise the need to train trainers: from 1991 AIIC has organised dedicated workshops, while in the US and Australia the introduction of certification and accreditation processes boosted this trend. A few years later, the University of Geneva launched a certificate programme followed by a Master of Advanced Studies in Interpreter Training based on a *blended learning* approach. Another interesting example is a course for interpreter trainers developed at the University of Stockholm, which was designed as a joint initiative for educators of conference, public service and signed language interpreters and interpreters for the deaf-blind (Englund and Wadensjö 2013). Gallaudet University, which is dedicated to educating the deaf and hard of hearing, offers a Ph.D. programme for experienced signed-spoken language interpreters designed to prepare future interpreter educators and researchers (Gallaudet 2020).

Curriculum design

Curriculum design is a very sensitive area that reflects the underlying conceptualisation of interpreting and the overarching values, norms and rules of a society expressed in decisions about education and in language policy (Pöchhacker 2019).

Generally speaking, the goal of education institutions is to prepare interpreters who are able to meet the manifold challenges of multilingual communication which often require a considerable level of specialisation in highly technical, legal or scientific subjects. Market-orientation, though, should not overrule the need to teach students general abilities that allow them to cope with varied and rapidly changing professional situations rather than responding to specific market demands (Bernardini 2004). The great methodological challenge in the debate about training vs. education is to offer research-based teaching grounded in real-life practice, enhancing experiential learning in a participatory process which involves all players – interpreting educators, students, users and providers – and is flexible enough to meet new requirements as they emerge.

The need for a scientific and interdisciplinary approach in interpreting curriculum design was highlighted already three decades ago by Arjona-Tseng:

If training and formal education are our goals, then basic principles of pedagogy, educational psychology, learning theory and educational measurement must be the cornerstones of our instructional thinking. (Arjona-Tseng 1991: 506)

In his seminal work on this subject, Sawyer (2004) illustrates a three-tier organisation of interpreter educational programmes based on different levels of expertise (Figure 29.1).

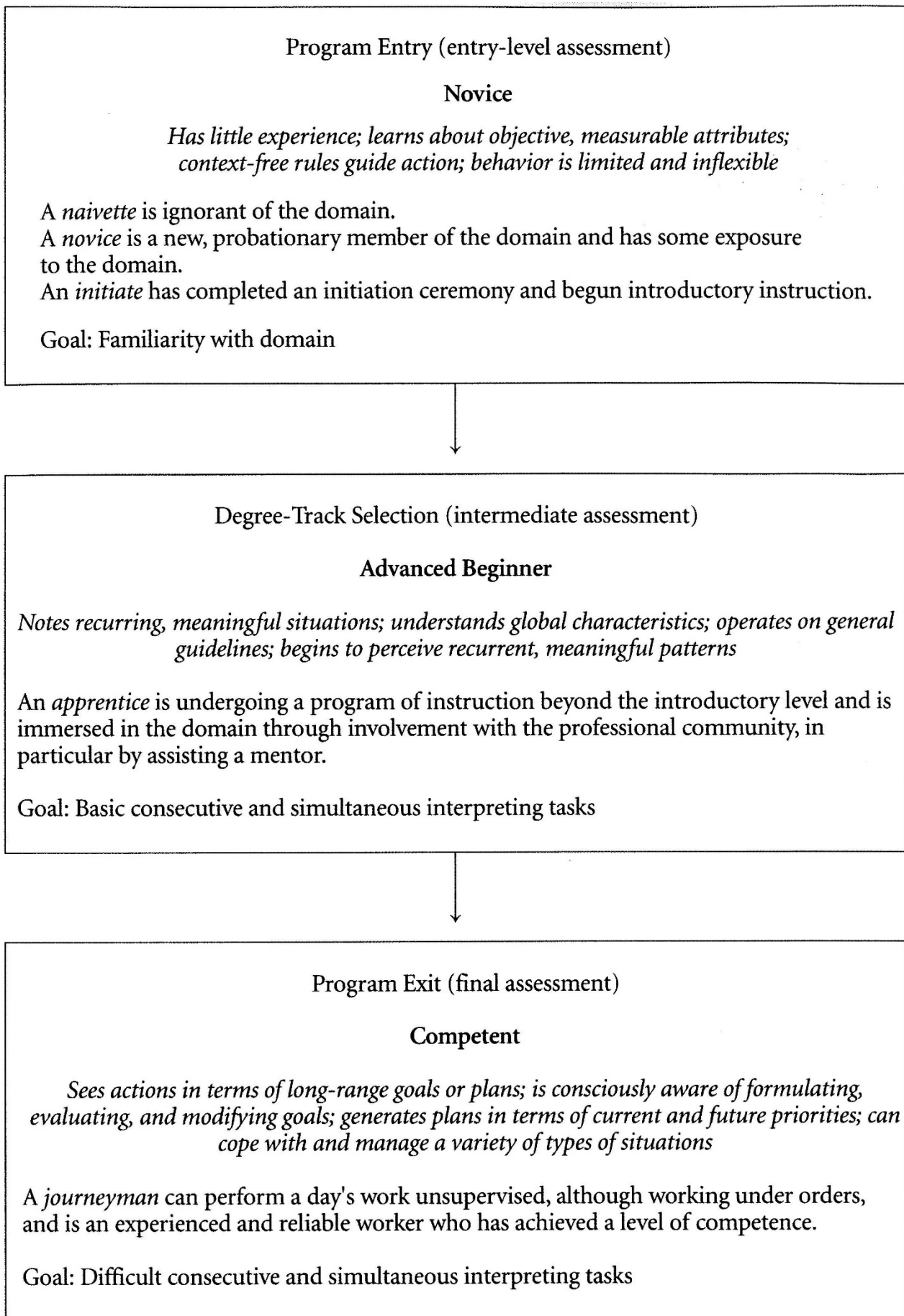


Figure 29.1. Levels of expertise in interpreter education (from Sawyer 2004: 72, courtesy of John

Benjamins)

This approach provides a structured set of subsequent stages in the learning process seen as a gradual progression from *noviceship* to competence, and laying the ground for full *expertise* (and possibly mastership) which can be attained only after years of deliberate practice. Indeed, expertise studies in the area of cognitive psychology influenced interpreting curriculum design considerably (Hoffman 1997; Moser-Mercer 2000). The addition of an affective dimension to this model generated a more ‘holistic’ approach encompassing also personal and interpersonal aspects and placing emphasis on cooperative and independent learning and self-reflection (Sawyer 2004). Advocating a collaborative approach in interpreter’s teaching methodology, Angelelli (2017: 35) proposes dialogic pedagogy in interpreter education ‘in which teacher and students engage in a critical examination of a topic, express and listen to multiple points of view, and develop respectful and equitable classroom relations’.

A further evolution aims to educate *adaptive experts* ‘who are capable of developing a deeper conceptual understanding of a target domain, adapt prior knowledge to the specific situation at hand and gain a higher level of competence’ (Motta 2016: 137). Traditional face-to-face lessons are increasingly being replaced by blended learning methodologies, fostered by information and communication technology (ICT) and *flipped* lessons methodology, devoting more time to individualised learning experience and students’ interaction (Atabekova et al. 2018).

Boéri and de Manuel Jerez go one step further sketching a curriculum which aims to educate skilled interpreters who are also reflective citizens. Scholars, professionals, trainers and students alike are invited to ask themselves how to put their knowledge ‘not only at the service of the market but of society as a whole [...], and importantly how we might contribute to building a more inclusive and mutually supportive community of translators and interpreters’ (2011: 43).

This short overview shows how different pedagogical theories may influence curriculum design. Similarly to assessment, curricula can also be product-oriented or process-oriented, and the very different views about curriculum design are like a pendulum

that swings over time with concern focusing relatively on orderly presentation of knowledge and skills in a highly structured sequence that are easily assessable, to highly student experience-driven curricula in which students are given carefully selected experiences for which the instructor acts as a facilitator rather than in the traditional role of teacher. (Metzger et al. 2019: 125)

Course objectives and contents

Precise and specific course objectives and learning outcomes which indicate the skills they intend to develop are crucial, and are at the basis of study programmes that can vary a great deal in duration, structure, contents and skills taught. Many curricula state only general objectives such as acquiring interpreting techniques, exposing students to practical working experience and improving students’ proficiency in foreign languages. CIUTI, the oldest association of universities and higher education institutions offering interpreting programmes, has not set well-defined *professional standards*, unlike, for example, the Australian National Accreditation Authority for Translators and Interpreters

(NAATI 2021), the US Commission on Collegiate Interpreter Education (CCIE 2019) and the California Healthcare Interpreters Association (CHIA 2017).³ The core curriculum of the European Master in Conference Interpreting (EMCI 2017) is an example of harmonisation responding to the requirements of EU institutions. Concerning curriculum contents, Gile (2001) distinguishes three components in interpreter know-how and consequently education: *methodological*, *linguistic* and *cognitive aspects*. Acquiring methodological know-how means internalising norms and strategies which can differ according to the interpreting mode and setting. It also means being able to take decisions and to motivate them. Since interpreting is a complex task, teaching should also focus on cognitive abilities: listening and analysis, memory, production, and coordination (Gile 2020). Language skills need to be constantly improved and extended to include also specialised language and terminology.

Progression and sequencing of learning tasks and choice of learning materials are some other key factors in curriculum development. Setton and Dawrant have sketched a five-stage model, conceived for conference interpreting but applicable to other fields, where each step focuses separately on specific sub-skills and then proceeds to put them together in more complex tasks: initiation, coordination, experimentation, consolidation and finally ‘reality’, defined as ‘a final stage of intensive preparation for real-world conditions’ (2016b: 78).

Classroom activities reflect the evolution in teaching methodology, with practical exercises increasingly based on the situated learning approach and either simulated or taken from real-life situations. Similarly, professional and ethical conduct and emotional aspects of interpreting are coming to the fore. Another specific teaching focus is related to interactive and communicative aspects, e.g. turn management, contextual resources, awareness of different roles and role boundaries. Here the use of role-plays (Wadensjö 2014), the analysis of recorded or transcribed real-life interactions (Niemants and Stokoe 2017) and the discussion of problematic situations during ‘guided data sessions’ (Davitti and Pasquandrea 2014) are examples of research-based teaching methods.

Controversial issues

A good number of issues with methodological implications are still open and not sufficiently grounded in research, pertaining partly to curriculum design, and partly to teaching practice. What is the minimum level of language proficiency, and what other basic skills are required for beginners? Should CI be always taught before SI? Which (preparatory) exercises are (more) effective in the early stages of SI learning (e.g. dual task exercises, shadowing, clozing, attention-sharing, paraphrasing)? Is sight translation an effective preliminary exercise for SI? Which sub-skills are a prerequisite for others? How much theoretical knowledge do prospective interpreters need? How much importance should be attached to public speaking, stress management, intercultural sensitivity, or the ability to prepare for specialised subjects and to acquire language for special purposes? Specific teaching methods for whispering, sight translation and relay interpreting are hardly ever discussed in the literature, and yet these are frequent activities in an interpreter’s professional life. There are plenty of studies about note-taking but methodological suggestions on teaching are still mainly based on practical experience and some questions remain open, for instance the pros and cons of graphic vs linguistic orientation of notes.

Assessment

A preliminary distinction is necessary between assessment and evaluation: *assessment* focuses on an individual's achievement whereas *evaluation* focuses on the results of a curricular programme. Assessing whether educational goals are achieved during the learning process and *testing* its outcome are central aspects before, during and at the end of any type of interpreter education. Assessment is a multi-factorial activity involving multiple agents, languages, tasks and candidates with different profiles and performing in different modes and settings. Research has shown that this activity is not always sufficiently well-grounded in theory and empirical research (Campbell and Hale 2003; Han 2018).

Purposes and objects of assessment

Assessment activities may serve different purposes (Sawyer 2004; Galán-Mañas and Hurtado Albir 2015: 64-65). *Diagnostic assessment* may take place to grant access to interpreting courses (diagnostic test). *Formative* (or *in-training*) and *intermediate assessment* usually takes place during a course in the form of feedback to foster the learning process, or to give access to the next term or year. *Summative assessment* provides information about learning achievements and usually takes place at the end of a programme, while *ipsative assessment* is a form of reflective practice which assesses a performance against the prior performance of the same person and can help identifying problems and finding solutions also by self-assessment.

Most of the literature on assessment in interpreter education focuses on quality and professional certification (Liu 2015) while 'the design and administration of the in-training exams are still mainly relied on the experiences of individual trainers, and the exam procedures differ from one institution to another' (Wu 2010: 301). Assessment can focus on the product (quality) or on performance (process). Gile (2001) suggests a process-oriented approach during the course to monitor and guide skill acquisition; in final exams, on the other hand, he considers product-oriented assessment to be more fitting. Sawyer (2004: 94) proposes a *portfolio assessment* during the course as 'a means to gather a greater range and depth of sample performances and facilitate both process- and product-oriented assessment as complementary approaches'. Using final exams as a form of professional certification was suggested by Setton and Dawrant (2016b) but certification and accreditation go beyond the scope of this section which will focus on *intermediate* assessment since it is more relevant for educational purposes.

Main issues in intermediate assessment

Relevant questions concerning interpreting assessment practice pertain to a) its objects (i.e. which competences and skills are tested – for instance language knowledge, transfer competence, accuracy, working memory, terminology, cultural knowledge, communication skills, professional behaviour, etc.); b) the tools used (e.g. marking systems); c) the basic approach of the assessment instrument and its form (e.g. norm- or criterion-referenced); and d) the kind of results generated by the assessment (a grade based on objective items, a qualitative judgement based on rubrics, etc.) (Campbell and Hale 2003).

Two crucial issues still open to debate are test *reliability* and *validity* (Sawyer 2004; Han 2018). According to Campbell and Hale (2003: 205),

[t]est designers need to ensure that test results are reliable, for example, yielding the same results with different groups of candidates and at different points in time; and [...] valid in that they, for instance, reflect the model of learning that underpins the curriculum and are relevant to the professional behaviours taught in the curriculum.

Another important aspect is the *authenticity* of tests, which should reflect a real-world situation (ibid. 2003: 205). For conference interpreting, (mock) conferences or video recorded speeches satisfy this requirement, whereas for dialogic interpreting test construction is more demanding. NAATI (2012) recommends that interpreting examinations be delivered live and be based on scripts that mirror the features of spoken communication, and candidates be assessed also on how they manage and coordinate the interpreted interaction.

Wu (2010; 2013) has dealt with the problem of intra- and inter-examiner *consistency* in SI assessment using a group of interpreters and language teachers as assessors, who were not given any assessment criteria but asked to compare performance pairs. Qualitative comments on the experiment showed that all assessors used the same assessment criteria, though with different weightings, but the language teachers' results were more consistent – presumably because they were accustomed to language testing based on reliable and valid assessment systems, while interpreters based their judgement on more intuitive or practice-derived criteria.

Iglesias Fernández (2013) has also challenged the assumption that practising interpreters are in the best position to establish assessment criteria. These criteria are generally related to two different dimensions of interpreting, namely linguistic-semantic aspects, such as cohesion, coherence, accuracy, completeness, and terminology, and para/extra-linguistic and pragmatic components such as clear pronunciation, pleasant voice, and fluent and convincing delivery. A main issue with all these categories is their exact definition. The relationship between the source discourse and the interpreted version, for instance, is variously referred to as fidelity, accuracy, equivalence or consistency with the original. Moreover, criteria can imply a general common-sense meaning or a more specialized one: fluency for example can be understood as general language proficiency but has also a more technical meaning related to speech rate, number and duration of pauses. Collados Ais (2016) has studied the perception and assessment of interpreting by lay users and found overlappings and inter-relations between categories: in her experiments, SI with a lively intonation was associated by raters with higher accuracy than a monotonous but more consistent delivery. In dialogue interpreting the importance of assessing discursive and interactional skills has been stressed by Jacobson, who has highlighted, on the basis of socio-linguistics and conversation analysis, that miscommunication can occur 'when socio-cultural knowledge and language-bound discourse strategies and signalling devices are used to ill effect in another language' (Jacobson 2009: 55).

Two more overarching issues are crucial for tests: 'their internal quality, which we call the *fairness* of the test and [...] the defensibility of the policies and values implicit in their use, which we call the *justice* of the test' (McNamara et al. 2019: 8). Both concepts should be taken seriously into account

when developing assessment tools for interpreting, in particular when they are used to give access to the profession.

Marking systems

Traditionally, interpreting performances have been scored using an *error deduction* system based on pre-determined error types assessing the accuracy of the interpreter's rendition compared to the source speech or dialogue, rather than the interpreter's competence and performance in relation to a specific purpose and situation of interpreting or the overall proficiency of a candidate (Angelelli and Jacobson 2009). The two main approaches to test marking are criterion-based and rubric-based. The first reduces subjectivity since it attaches descriptors and scores to specific criteria, but still entails a certain degree of subjective interpretation by examiners when rating complex constructs which are difficult to define unambiguously, or which can be understood in various ways (Liu 2015). Angelelli (2009) has developed research-based rubrics with descriptors reflecting various sub-components of the skills to be assessed. The level awarded in each rubric is determined by selecting the descriptor that most closely matches the candidate's performance. This system is definitely more comprehensive than an error-score system and far better than an impressionistic assessment based on individual raters' personal values, routines and concept of what is an error. Han (2018: 83) suggests that '[p]erhaps it is time to design and develop rating scales (holistic and analytic) based on actual interpretation samples and compare their effectiveness with that of traditional scales'.

Regardless of the approach adopted in marking, the question arises whether the scoring process should take into account also the level of test difficulty. The following paragraph is an attempt to suggest a mixed approach based on candidate's performance and input variables.

Input variables in assessment

Since the concept of variables affecting the level of *difficulty* of an interpreting exercise, test or exam is recognised and a number of possible problem triggers have been identified in the literature⁴, this knowledge should also be applied to assessment. Indeed, in some testing systems the candidates' performances are compared with pre-assigned scoring units in the source language input. An example of this kind of good practice is the US Federal Court Interpreter Certification Examination (e.g. FCICE 2013/2019). In order to reflect the skills and knowledge that are actually required, this test was developed on the basis of needs and observations of various stakeholders and experts: federal judges, court and conference interpreters, linguists and psychometricians. Although it tends to focus on errors or negative aspects of a rendition, subjectivity and variability are reduced and the features of the material to interpret are taken into account.

A possible improvement in marking systems is to combine criterion- or rubric-based assessment with an appreciation of positive aspects of a performance and a test difficulty scale. Hönig (2002) has developed a taxonomy of speech difficulties based on text linguistics and speech act theory. The first part of his model describes how students' knowledge relates to the topic and structure, while the second part focusses on test features including cohesion, coherence, anaphoric and cataphoric references and presentation; Andres (2015) has expanded this model further adding more features. The difficulty grading system can be even more fine-grained and be based on sections of the input

attaching a ‘bonus’ to good solutions of parts of the test that are rated as particularly challenging. This makes it possible to also assess sub-skills such as the management of specific difficulties or handling of problematic communicative situations.

In order to reduce variables, the same test input should be administered to all candidates of a group in the same conditions, for example by using pre-recorded tests and the same lab and equipment. But most importantly, examiners should be trained in using the assessment system correctly before they embark in this delicate task.

New trends and new tools in interpreter education

Progress in information and communication technology (ICT) is advancing at an impressive pace and has brought with it forms and ways of communication which were unimaginable only a few years ago. Together with knowledge generated by educational science it has also paved the way for computer assisted interpreter training (CAIT) which can make teaching more efficient and effective.

ICT contribution to interpreting educational material⁵

The first, and one of the main ways in which ICT entered into the area of interpreter education was facilitation of access to authentic speeches and live-streaming of conferences as material for teaching and self-study (Hansen and Shlesinger 2007). Already in the late 1990s, dedicated speech banks were developed to support both in-class and after-class practice,⁶ and there are now plenty of on-line resources of this kind⁷ including the Speech Repository created by the interpreting service of the European Commission. Its content is organised by level of difficulty and interpreting mode, and registered users can simultaneously play speeches and record their delivery for (self) evaluation. For dialogue interpreting and languages of lesser diffusion, monolingual audio-visual spoken language corpora built for language learning purposes have been used as ‘templates’ to create bilingual dialogues in different language combinations as in the case of the IVY project (Braun and Slater 2014). Also corpora of interpreters’ renditions can provide a valuable contribution to interpreter education (e.g. Bologna University’s EPIC).⁸ Aston (2018) has suggested using such corpora to facilitate the acquisition of formulaic language which reduces cognitive effort in both production and reception. A tool for improving the teaching of note-taking is the smart-pen, a device which allows note-taking matched to the audio recording of a speech (Orlando 2015). Terminology management software designed for the booth (Fantinuoli 2017) also requires dedicated educational practice, since it produces additional cognitive load for the interpreter.

Technology for interpreter education in the lab and for blended learning

A more active and student-centred learning approach has gained ground in interpreter education through Computer Assisted Interpreter Training (CAIT). The first software developed specifically for interpreting students, Black Box (Sandrelli and de Manuel Jerez 2007), allowed students to perform various preparatory activities as well as interpreting practice with the possibility of recording their delivery and bookmarking source text passages.

Technology has also been combined with more traditional pedagogy in blended approaches using the web for educational activities to complement in-class learning and autonomous practice, e.g. in the

online platform TR@IN at the University of Geneva. In SLI, Napier (2006) has extended the blended approach to three different levels: theoretical frameworks used in teaching, the delivery of the programme, and curriculum. Since in Australia signed language interpreters are tested and accredited through the same national system as translators and interpreters of spoken languages, the different curricula were combined in a joint programme in which students can gain an insight into each other's theoretical frameworks and professional practice. Hui (2019) tested an e-learning platform for self-directed learning to complement classroom activities which proved to be effective in helping students address their weaknesses and helped them to better understand assessing criteria and to improve their self-assessing capabilities.

CAIT tools are particularly appropriate for *situated learning*, since they can simulate real-life settings. A good example is the Interpreting in Virtual Reality (IVY) project developed for self-study in business and public service interpreter education within Second Life (Braun and Slater 2014). IVY offered a virtual learning environment in line with a more participatory and collaborative approach. Before starting to practice in an interpreting setting, students received a briefing which made activities more similar to real-life assignments; they could communicate on-line with peers, organise virtual meetings and involve potential users (Braun et al. 2013). Digital reality thus substitutes real-life interpreting by simulating features which are difficult to reproduce in a class. Evaluation by students (Braun, Slater and Botfield 2015) shows that specific guidance is needed to fully exploit the potential of this learning environment.

ICT also fostered virtual classes (VC) in which teachers and professionals from two or more institutes or institutions take part via videoconference. This is particularly useful for training in language combinations that an academic institution cannot offer because of financial or other constraints. VCs are a valuable add-on educational practice also because they allow students to receive feedback from external experts like members of the interpreting services of international institutions and to practice with peers attending similar courses in another country or education institution.

Technology for distance interpreter education

In the past, the most difficult aspect to reproduce in distance education was interactivity. Ko (2006; 2008), who experimented teaching liaison interpreting and SI using video- and teleconferencing, highlighted as a main drawback the fact that in teleconferencing teacher and students cannot see each other, while interpreting in real situations involves both verbal and non-verbal interaction between interpreter and primary participants. A few years later Ko and Chen (2011) tested on-line interactive interpreting teaching in virtual classrooms using the Internet and a Collaborative Cyber Community (3C) learning platform. Their system allowed students to connect from anywhere and to practise interpreting in four different types of virtual spaces where they could interact both with their teacher and among themselves in a synchronous mode for in-class activities and in an asynchronous mode for after-class group practice. Within the InZone project in humanitarian interpreting education, a blended approach using the learning platform of the Geneva University Interpreting Department Virtual Institute along with open educational resources was used to prepare interpreters to work in the field.

In 2008 the Universidade Federal de Santa Catarina, together with other Brazilian universities, developed a SLI e-learning programme both for deaf and hearing students which was supplemented with a face-to-face option supporting teaching based on visual learning (Müller De Quadros and Rossi Stumpf 2015). The Middlebury Institute of International Studies at Monterey has re-designed and adapted a module of traditional face-to-face instruction for an online context to bridge the gap between the need for professional development in community interpreting and various constraints experienced by working professionals (Mikkelsen et al. 2019).

The potential of ICT in interpreter education, though heavily boosted by the Covid-19 pandemic, is far from being fully exploited, but experience shows that it can be an enabling resource for teachers using a blended learning approach and an empowering instrument for students in both monologic and dialogic interpreting, both for spoken and signed languages, on-line and off-line, in-class, remotely or for self-study. In the broader context of society, the use of ICT can give access to education to candidates who may have financial or other constraints, and it can help increase the number of language combinations offered by a single education institution. This in turn means fostering equal rights for language and cultural minorities and vulnerable groups. Overall, technology opens up new horizons and makes the outlook on interpreter education look very promising.

Remote interpreting: to train or not to train?

Considering the massive migration of interpreting services on-line (especially remote simultaneous interpreting performed on Internet-based platforms – RSI) due to the pandemics, the obvious answer to the question whether to train or not is yes. But this shift started years ago, since technological advances and cheap telephone and videoconference connections have fostered a growing demand for remote interpreting (RI), an expression we use here as a hyperonym for RSI, telephone, teleconference, videoconference and video relay interpreting.

For signed language interpreting, RI is a well-established service in Australia and the US, where it is offered by institutions and private companies; in Europe it is relatively new but increasingly used also for spoken languages. A call or video link can connect two or more points, with participants and interpreter(s) being located in different places. Until recently RI settings were typically legal, medical, business, and educational, but the use of the Internet as a means to provide interpreting started entering the area of conference interpreting even before the Covid-19 pandemic (Spinolo 2017), with companies offering web-based platforms to connect interpreters and participants of an event from remote locations and giving participants the choice to listen to their preferred language using an application on their mobile phone. Besides the possibility offered by RI to overcome the limitations imposed by lock downs and social distancing due to the pandemic, the increasing demand for this interpreting mode is due to the advantages it offers institutions, service providers and users, which include increased availability of interpreters, flexible working hours, less travel costs, and more privacy for patients.

Education has a fundamental role to play in this context (Fantinuoli and Prandi 2018) to help interpreters and users understand and manage the peculiar challenges of RI which include the lack of contextual cues, difficulties with turn-taking, overlapping talk, deixis and acoustic strain, to mention only a few (Amato et al. 2018). Until the pandemic broke out, short courses in RI were mainly been

offered by service providers but the health emergency and consequent containment measures have forced all interpreting education institutions to migrate on-line at least for some parts of the academic year 2020-2021. This has not necessarily entailed a course re-design for a virtual environment, but it has definitely opened the doors to a “hybrid class” with some students attending lessons in person in the classroom and some others following them from home on a e-learning or remote simultaneous interpreting platform. It is still too early to assess the results of this new and at times “forced” teaching practice, but it is probably going to remain in place also after the health emergency because it gives access to interpreting education to students who live in remote areas and/or have financial constraints preventing them from attending graduate courses in person.

Several years before the pandemic, AVIDICUS, a series of EU-financed research projects on videoconferencing in bilingual legal proceedings, had already developed guidelines and training schemes for interpreters and legal practitioners, and the project SHIFT in Orality has recently piloted a summer school in telephone and videoconference interpreting for service calls in business, legal and medical settings. The Department of Interpreting and Translation of Bologna University at Forlì Campus has just introduced a new teaching module in its interpreting MA programme. The module is called “Multimodal Interpreting” and it offers both a theoretical introduction and some practical activities in RSI, telephone and videoconference interpreting, interpreting for TV and films, voice-over and “interpretation overlay”.

An example of the negative effects of existing technologies is the growing demand for SI performed using tour guide systems – mainly for logistic and financial reasons – also in conference settings, where it puts an additional strain on interpreters and is likely to lower the quality of their performance considerably. However, there is a glaring lack of research on this crucial aspect.

Another, vital responsibility for interpreter education is teaching future interpreters to cope with interpreting performed by artificial intelligence and to make them aware that it is necessary to “deliver more than words” in order to “keep humans at the forefront of interpreting (Downie 2020: xii).

Conclusions

Although far from exhaustive, this overview shows that interpreter education has made remarkable progress over the last 30 years. It has evolved from a ‘craft’ that was passed down by professionals to young apprentices to a well-established, increasingly research-based and formalised subject taught in higher education institutions where a growing number of educators are contributing to the development of curricula and teaching methods grounded on research. Moreover, the use of technology is extending access to interpreter education and providing an invaluable opportunity for signed languages and languages of lesser diffusion as well as for exceptional situations like the coronavirus pandemic. Further effort is needed, however, in particular in curriculum design and assessment. Ideally assessment criteria, curricula and professional standards should be developed in parallel in order to develop a system that has construct, content and criteria validity. In Australia, Flanders, the Netherlands, the UK and the US, professional standards for certification in public service interpreting were developed with a multi-stakeholder approach including interpreting providers, universities, users and interpreters, and courses for certification purposes were developed or modified accordingly. A similar practice could be adopted by educational institutions to design

their curriculum also for other types of interpreting and in order to put in place an assessment system which reflects the underlying curriculum developed in a multi-stakeholder process.

A word of warning is necessary concerning the use of remote teaching and cutting-edge technology. Virtual classes and blended learning can enrich and streamline more traditional classroom activities, but they require even more skilled and engaged teachers. As for new technology, it is here to stay and will evolve more and more rapidly, and responsible educators cannot ignore it. A caveat, though, is that teachers should not bend to whatever technology allows them to do, but rather they should look for and actively develop ad hoc solutions that best support effective learning and interpreting in various contexts. Considering the communicative disadvantages of remote vs. face-to-face interpreting, the decision to resort to RI should not be based on financial reasons and its convenience for service providers and institutions only, to the detriment of successful interpreting. On the other hand, RI is a welcome solution whenever it is not possible to find a qualified and experienced interpreter on-site. For interpreter education the question is how (and how far) to integrate ICT into existing programmes and decide, for example, whether the necessary knowledge and skills to perform RI should be taught in parallel with face-to-face interpreting skills or in a subsequent stage, comparing and contrasting the two.

Note

Main aspects in interpreter education; Learners and teachers; Models and players and curriculum design; Course objectives and contents; Controversial issues are by Gabriele Mack. Curriculum design; Assessment; New trends and new tools in interpreter education are by Amalia Amato.

Further Reading

Cirillo, Letizia, and Natacha Niemants (eds) (2017) *Teaching dialogue interpreting. Research-based proposals for higher education*. Amsterdam & Philadelphia, John Benjamins.

One of the few books about dialogue interpreting which explores the contribution of research and professional practice to interpreter education. The contributions provided by experts in the three fields offer reflections on fundamental aspects of interpreter education and present training modules on specialised professional settings.

Ehrlich, Suzanne, and Jemina Napier (eds) (2015) *Interpreter education in the digital age. Innovation, access, and change*. Washington D.C., Gallaudet University Press.

An overview of research on digital technology applied to interpreter education which investigates the impact of new technology on the work of language professionals, addressing both signed and spoken languages.

Sawyer, David (2004) *Fundamental aspects of interpreter education. Curriculum and assessment*. Amsterdam & Philadelphia, John Benjamins.

A seminal study on curriculum design for interpreter education. It is based on a doctoral dissertation on the translator and interpreter curriculum at Monterey Institute of International Studies, but gives also a thorough overview on the underlying principles drawn from educational philosophy and pedagogy.

Winston, Elizabeth, and Christine Monikowski (eds) (2013) *Evolving paradigms in interpreter education. Impact of interpreting research on teaching interpreting*. Washington D.C., Gallaudet University Press.

A collection of articles by interpreter educators about the impact of research on teaching signed language interpreting. Each contribution focuses on a specific aspect of signed language interpreter education which is discussed and commented by two experts coming from a different background.

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¹ Currently CIUTI (<http://www.ciuti.org/members/>) counts 54 full and 6 associated members in 22 countries, with no African institutions; AIIC (<https://aiic.org/site/dir/schools>) lists 68 training programmes in 35 countries including in Africa (last updates: 15 July 2021).

² There have been very few attempts to lay down a comprehensive pedagogical framework for conference interpreting: the first was Seleskovitch and Lederer (2002/1989), followed by Gile (2009/1995) and Sawyer (2004); the most recent is Setton and Dawrant (2016a; 2016b); Gillies’ works (e.g. 2013) are designed for self-study.

³ It remains to be seen if curriculum designs will reflect the recent initiatives to set international standards on interpreting, e.g.: ISO 20539:2019, ISO 20228:2019; ISO 18841:2018; ISO/IEC 13611:2014; UNI 11591/2015; DIN 2347:2017-03.

⁴ For an overview, see Liu and Chiu (2009) and Mankauskienė (2016).

⁵ For an overview of ICTs in interpreter education, see Kajzer-Wietrzny and Tymczyńska (2014).

⁶ IRIS, Trieste 1996; MARIUS, Granada 2003.

⁷ E.g. ORCIT, Speechpool and the websites of many training institutions.

⁸ URL: <https://docs.sslmit.unibo.it/doku.php?id=corpora:epic> (accessed 15 July 2021).