Dyslexia and foreign language learning

Abstract

This case study considers inclusive practice in learning and teaching in the context of session design and delivery in the foreign language classroom, focusing on a dyslexic student. It suggests that in a subject whose core intended learning outcomes are based on oral, aural and written language skills, achievement by dyslexic students will be facilitated by a well-planned session that is multi-sensory and incorporates adjustments to the benefit of every student, whilst taking into account issues of sensitivity and discretion.

Introduction

Learning a foreign language (FL) is a complex process, requiring the interaction and application of analytical skills in order to understand the formal linguistic structures of the FL, meta-cognitive skills to enable self-correction/error analysis, and memory. A fourth aspect, which is inextricably linked to these skills, is having the confidence to use the FL both productively (speaking and writing) and receptively (listening and reading). Successful learning can be hindered by difficulties arising in one or more of the areas highlighted above for any FL student. However, the potential for such problems arising in the FL learning context is greatly exacerbated for students with a specific learning difficulty (SpLD) compared to their non-SpLD peers (Barr, 1993). This case study focuses specifically on the SpLD of dyslexia and its implications for FL learning and teaching. It considers the challenges that both the learner and the teacher face in order to achieve effective learning outcomes, within the scope of session design, on the assumption that for dyslexics problems arise which are directly attributable to one or more deficiencies in the processing of native linguistic knowledge at the levels of syntax, semantics and especially phonology (Ganschow and Sparks, 1995).

Dyslexia

Dyslexia is a condition that is neurological in origin, which is categorically non-attributable to factors such as socio-economic background, a lack of motivation to learn or IQ level (Ellis 1993, The Dyslexia Handbook 2002: 67). Research using brain-imaging techniques indicates that physiological differences in the brains of dyslexics underlie the differences in cognitive functioning and development (Paulesu et al., 1996; Stein et al., 2001). At the cognitive level, deficits may occur in visual processing, linguistic processes (such as phonological representation) and memory (Everatt, McCorquodale et al., 1999). Focusing on problems with phonological awareness, difficulties often appear at the pre-reading stage of development (Frith & Frith, 1996), particularly in discerning discrete differences in phonemes, characterised by the inability to produce or recognise rhymes (Paulesu et al., 1996). Other manifestations include problems with sound blending and segmentation,

which is necessary for breaking words down into constituent phonemes (E.g. Everatt, McNamara et al., 1999; Snowling, 1995) and is crucial for the process of learning to read orthographically, i.e. by having the ability to associate phonemes with alphabetic letters. In terms of literacy, the symptoms of dyslexia given by The British Dyslexia Association (2004) include the reversal of single numbers or letters within a word, the omission or insertion of words, and losing track of the text when reading. However, the range of potential difficulties a dyslexic student faces goes beyond problems with literacy per se; they may also have difficulties with comprehension (listening, reading and note-taking), difficulties with organisation, classification and categorisation and show a lack of fluency, often resulting in a reluctance to talk in large groups (ibid).

Case Study: Informant's Details

DG, the informant in this case study, is a highly motivated mature student, who is a native speaker of Spanish, living and working in France and enrolled on an English course, testing at the upper-intermediate level at the point of entry. She completed a questionnaire that had been devised to explore the effects of dyslexia on her native language and her foreign language learning experience. In a question relating to specific native language skills, she indicated that in Spanish she has persistent difficulties with writing (grammar and spelling) and general listening. In English, she indicated the most difficulty with writing (grammar and spelling), speaking (pronunciation) and reading. From pre- and post-questionnaire discussions, as well as the questionnaire answers, it became obvious that she has developed some personal learning strategies to cope with her disability. For example, she finds learning vocabulary 'quite easy' as she connects novel items with objects, forms or situations even if there is no obvious semantic link, i.e. she creates a reference point or a context within which to place the new word for retention and subsequent retrieval from her memory. She also employs strategies for learning grammar, which she finds very difficult. For example, she devises schemas for the same class of grammatical items and applies them to rules, but this process is impeded because it takes a lot of time to memorize the schemas. She also tries to overcome some of her spelling difficulties by playing Scrabble, i.e. by looking for possible formations of letters from the random selection physically in front of her.

DG knows that she has problems with phonological awareness and she is in the process of learning the International Phonetic Alphabet (IPA) symbols for English. She finds the system clear (one phoneme maps onto one symbol) and she can associate it with the point of articulation in the mouth. She is able to memorise these physical points, but has difficulty memorising sounds per se, made manifest in a difficulty to perceive voiced/unvoiced distinctions. To compensate, she systematically replaces voiced and unvoiced consonants in her mind, attempting to decipher the correct phoneme. Furthermore, if she does not perceive a phoneme within a spoken word, she uses the context to try and understand the word. Finally, she finds that her listening is aided by observing an interlocutor's facial expressions and mouth movements. Bearing DG's preferred learning strategies and styles in

mind, the following section considers how DG's particular problems and strengths can be accommodated in the FL classroom. But first, we begin with some generic applications of good practice in session design for the inclusive language classroom.

Session design

In the design of any session there should be clearly defined aims and intended learning outcomes, upon which the activities to be exploited in achieving these outcomes and how achievement is to be assessed are based (e.g. D'Andrea, 1999). The intended learning outcomes of a FL session will typically relate to one or more of the following in terms of knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom, 1956, cited in Beard & Hartley, 1984): a particular grammar point (consolidation or newly introduced), expansion of vocabulary, improving productive skills (speaking and writing) for fluency and/or accuracy and improving receptive skills (listening and reading) for gist and/or detail. A further consideration is that the outcomes and their associated learning activities should also be built around students' current knowledge, particularly of the FL. Having defined the outcomes, the planning of each learning activity should be directly linked to an intended outcome or outcomes (Biggs 2003). A multi-sensory approach should be employed to accommodate the various preferred leaning styles within a group, whether the activity is tutor-led or student-led. This point is particularly pertinent for dyslexic students. For example, in a tutor-led activity, a handout outlining the main points with bullet points (rather than continuous, dense text) or a diagram, and an exposition on the board (using different coloured board markers) coupled with a clear verbal delivery that has pauses for clarification should aid comprehension and note-taking. For student-led activities explicit written and verbal instructions should be given along with a range of stimuli for the activity, such as realia, pictures, and written examples or models of the target structure/vocabulary etc. to be used.

Sensitivity is also a crucial issue when designing and delivering a session that accommodates a dyslexic student. First, any accommodations should not draw attention to the student; for example, where possible give any handouts to the dyslexic in advance of the class. Second, an emphasis on well-planned small group/pair work is a beneficial and sensitive approach particularly for the following reasons:

* All participants bring their strengths and innovations to the task and collaborate for its completion,

* Participants are in close proximity (allowing the student to monitor mouth movements, facial expressions and body language),

* Problems with comprehension are discussed as a group, engendering meta-cognitive analysis, and if unsolved, the query is presented to the tutor by the group (rather than by an individual in front of the

whole class),

* It allows for individual monitoring by the tutor to identify any specific problems, which can be followed up privately after the session,

* It allows for individual praise and acknowledgement from the tutor

* For class feedback at the end of the activity, it allows the tutor to ask for a volunteer from each group to speak, as a tutor should 'not expect dyslexics to answer questions or talk in big groups' (The British Dyslexia Association 2004).

The main drawback is if the group or pair contains a dominant student/s, potentially leading to exclusion or withdrawal of the dyslexic student. This can be easily dealt with by tutor intervention at the group/pair forming stage prior to the activity, by either putting people into groups/pairs or suggesting a change of partner or groups from the previous activity.

DG also benefits from specific learning and teaching strategies, depending on the target outcomes. Starting with a grammar-based learning outcome, students are given a specific reference to the grammar point in question at the end of the previous lesson, allowing for independent study or at least some familiarity with what to expect. This provides the opportunity for DG to think about the rules and prepare any initial questions she may have. In the session the grammar point is presented within a context and theme (such as in a listening or reading text), where the structure can be recognised in a meaningful way. Activities are planned to check comprehension and application, either in the pair work format or individually, before feedback from the class.

Moving on to outcomes related to receptive skills, as ascertained above, both reading and listening comprehension tasks present particular challenges to DG. To facilitate these exercises, pre-reading/listening tasks are prepared, which the students complete in pairs or small groups. Typically, they are given the title and topic of the main task, with questions that ask them to anticipate the content. The aim is to elicit potential vocabulary, which is then written on the board during class feedback at this stage and remains on the board for the remainder of the task, providing visual, written cues. The main activity is delivered in four stages: (i) gist/general comprehension, (ii) more detailed comprehension (iii) comparison and discussion of answers with a partner (iv) end-of-task class feedback. Furthermore, for listening comprehension activities, using the TV has proved to be very effective for DG, benefiting from simultaneous visual and aural input.

Activities relating to outcomes based on the productive skill of speaking also require strategic planning, particularly as dyslexics often feel inhibited to engage in such activities. A speaking activity that is based on outcomes to improve accuracy is typically highly structured, involving pair work, with explicit models of the target. Tutor monitoring and error correction focuses only on the intended

learning outcome and students are invited to try to correct the error themselves, with a view to engendering self-analysis and independent error correction outside the classroom, which is particularly important for dyslexics. Fluency-based speaking activities are prompted by appropriate stimuli and involve small group discussions. In order to promote self-expression and confidence (especially for a dyslexic student) tutor monitoring is discrete and non-interventional, unless the student has been excluded from their group or withdrawn from the activity.

To develop writing skills, a formative essay-type assignment is set each week, with explicit guidelines to the planning, content and expectations of the piece of work. Takeaway writing assignments are particularly effective for DG, as it gives her the space to reflect on her planning at her own pace and she can also use a word processor. Feedback for all students takes the same form: errors are numbered and annotated at the end of the assignment for students to self-correct and the work is resubmitted with corrections, which is a very effective meta-cognitive exercise. In-session activities are also designed to help with planning and structure, for example, to help with paragraph linking techniques and logical ordering.

In terms of building vocabulary and spelling, as DG indicated that one of her strategies is playing Scrabble, (non-competitive) word games and matching exercises are designed to be kinaesthetic where possible, such as in the form of matching cut up pieces of paper and using letter tiles. Furthermore, all students are encouraged to experiment with various ways of learning new vocabulary, for example, using mind maps/spider diagrams and word associations, to establish their own preferred method and a variety of these methods are used on handouts and in class.

Finally, and of paramount importance for DG, every (new) item of vocabulary is presented in orthographic and phonetic script, with the syllabic structure of the word indicated. Furthermore, sessions regularly include activities based on an outcome that focuses on phonetics or phonetics and orthography (to the benefit of everyone, not just DG). To facilitate the development of phonemic awareness, every student has a copy of the IPA for English and a diagrammatic cross-section of the face, showing the organs of speech (Wells & Colson, 1990 9th ed). The diagram, which is also presented on a slide, is used to specifically indicate points of articulation and exercises are given to physically locate and practise particular phonemes. The group has also been instructed in methods to detect voiced/unvoiced contrasts.

Conclusion

Session design incorporating adjustments for a dyslexic requires careful, strategic planning, so that intended learning outcomes are achievable by everyone, whilst maintaining academic standards. Activities also have to be sensitively designed to avoid embarrassment and flexible enough to accommodate possible lateral and imaginative approaches to problem-solving and information

processing, which is a typical characteristic of many dyslexics. The intended learning outcomes and the stages of a session have to be as explicit as possible, ideally presented both verbally and in written form at the beginning of a session, as dyslexics particularly benefit from an overview (Green, 2003). Further small adjustments that aid the dyslexic student include presenting any written text in a sans serif font, such as Arial or Century Gothic, and on non-white paper.

A multi-sensory, student-centred pedagogy allows for scope and creativity, which enables a tutor/facilitator to make inclusive adjustments, which if well-planned, should enhance the learning experience for disabled and non-disabled students alike in achieving the intended learning outcomes of any session. Finally, it is worth asking a dyslexic about their own learning strategies and incorporating them into session design where possible.

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