NOTHING SUCCEEDS LIKE SUCCESS. GUARANTEEING SUCCESS IN LANGUAGE LEARNING

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Abstract

Teachers have a vested interest in their students being motivated and successful in their subject. But how can we motivate *all* our students? The best general motivator is success. How then can we make all our students succeed on a day-to-day basis? By making sure they start each class remembering what they learned in previous ones. But this usually only happens if they do their homework properly, and we cannot guarantee this. The proposed solution is to replace the memorisation and practice components of homework by flashcard-based drill in the classroom; this way we can make certain that everyone does it, and develops a permanently growing base of knowledge, allowing them to be successful and walk into the classroom each day 'with a smile on their face': i.e. motivated. This method, which could be described as *Programmed Mastery Learning*, has been used for decades at *Fluency*[®] Idiomas, Spain, to teach English to over 4000 pupils yearly, with a team of 100 teachers. The present paper monitors the application of this method to the teaching of basic Arabic, where reading skills also particularly benefit from flashcard drilling.

1 Introduction¹

1.1 The importance of motivation

In the past, studying for qualifications was just one of many different options open to young people. If they were not successful at school they could drop out and do something else. Nowadays, it has become more and more important to study and obtain qualifications in order to get *any* kind of job. This means that there are many students in our classes who have relatively little intrinsic interest in what they are studying; they just need the qualification.

For this and other reasons teachers are becoming more interested in finding ways of motivating their students. Educational administrators look for cost-effectiveness, and subjects which attract few pupils are terminated and new subjects created which draw more enrolments. The student is becoming a customer and 'the customer is always right'. Demotivated students fail to learn and change to other subjects, a process which could eventually endanger the teacher's job, as future students will tend to avoid subjects where they have heard that there is a serious danger of failing. A teacher can no longer think 'If they don't study and fail their exams its their problem'. It has now become the teacher's problem.

¹ I wish to express my deep gratitude to Dr. Fuensanta Hernández Pina of the University of Murcia, for all her help, suggestions and corrections, without which this paper would probably not have been published.

In compulsory education, on the other hand, there is less danger of being left without students but, due to the relaxation of discipline, keeping order in class has become dependent on the students being successfully motivated by their teachers and parents, who coincide in the opinion that students are becoming less and less interested in school (Alonso Tapia, 2005, p. 11). Unmotivated students fall behind, get bored and disrupt classes, leading to teacher stress and burnout. Marchesi (2004, p. 179) insists on the importance of teachers transmitting their subject to *all* their students, and there are, of course, also moral issues involved in leaving students behind (Barber, 1997, p. 260).

1.2 Motivation in second-language learning

As in all education, motivation is known to be one of the main factors leading to success in second-language learning. However, in spite of its fundamental importance, the design of language teaching methodologies tends to centre on questions like what content to teach or what approach to use, in order to achieve native-like acquisition of the language, and seldom focuses on the real problem: how can we make sure that the vast majority of the class actually learn what we are trying to teach them? Apart from attempts to make text books attractive and content inherently 'interesting', the problem of motivation is separated away from course design and left in the hands of individual teachers to do what they can (Fontana, 2000, p. 63; Stenhouse, 2003, p. 35). Barber (1997, p. 88) overoptimistically declares, "there is nothing more important to success than an intellectually challenging and varied curriculum taught by enthusiastic and talented teachers". However, as Marchesi (2000, p. 141) observes, "There are no recipes, shortcuts or magic solutions. The only feasible option is to organize teaching in such a way that it connects with pupils' interests" (trans. Sp.), while Ortega, Mínguez & Saura (2003, p. 44; trans. Sp.) sentence that, "the scanty interest which the curricular programme awakens in pupils becomes a clear cause of behaviour ranging from lack of attention and disruption to absenteeism and open conflict".

What have we achieved if our language-teaching programme is theoretically flawless, but relatively few students actually end up learning from it? This is particularly the case when teaching Arabic, where, apart from the difficulties caused by having to re-learn how to read and write, and mastering an almost completely new lexicon –very different from that of the Indo-European languages–, we have the added problems of which dialect or form of the language to teach, and whether to combine teaching a dialect with the Modern Standard Arabic *koine* in an integrated course (Younes, 1995), introducing two parallel forms of speech simultaneously, given the generalised *diglossia* in Arabic-speaking countries. Extra motivation is required to overcome such complexity; in comparison English speakers tackle French or Spanish with the relative ease. However, the discussion of curriculum and course design has centred on those other questions and done little to alleviate the problem of building up students' motivation.

1.3 Homework-based methodologies

Most language-teaching methodologies rely on students doing a significant amount of homework. New language content is presented and practised in the classroom, attaching particular importance to the deployment of authentic materials so that pupils can grasp how the item is used in real-life situations. Then students may or may not be given homework to do, but it is understood that they should at least come to class the next day remembering most of what has been taught previously. The work done in the classroom is not normally enough to guarantee long-term recall of all content, or sufficient skill in its use.

This means that students are generally expected to memorise new lexical items, and practise the formation of sentences, outside the classroom. Now, if the course is being imparted in a country where the target language is spoken, learners may be able to obtain sufficient reinforcement –and a considerable boost to their motivation– by conversing with native speakers. However, if this is not the case, they will probably have to study at home; and unless they are able to dedicate enough time to their homework, they will not be adequately prepared when they walk into the next class. Many authors have underlined how the multiple distractions of modern life can stand in the way of personal study (Neill, 1975, pp. 106-7; Manassero Mas, Vázquez Alonso, Ferrer Pérez, & al., 2003, p. 24; Tallo Niño, 2002, pp. 168-9).

1.4 The plight of less-successful learners with homework-based methodologies

The relationship between the learning part of instruction being left to be done at home and student failure is emphasised by Lieury (2002, pp. 198, 211). By nature, many people lack the discipline necessary to learn a second language, just as they find it difficult to slim or stop smoking. They need some strong intrinsic or extrinsic motivating factor, or to be put under considerable pressure. In the absence of any of these, homework-dependent teaching often fails for such students. Let's see what happens.



Fig. 1. Idealized progress chart of a *less-successful* student learning a difficult language like Arabic, with a homework-based methodology. The maroon line points up how their waning competence-level is linked to the decline in motivation.

In Fig. 1 we can follow the progress of a hypothetical insufficiently-motivated beginner student over the first five weeks of their course, showing at each stage an estimate of the percentage they will probably remember of all that they have learned up to that point.

In the first week all the content is new, but with a good teacher, at the end of the class, they might already remember 30% of everything introduced. However, as they are only

averagely studious, they may not do their homework very well, perhaps consolidating only 50% of the content taught in class. And the percentage remembered will perhaps fall to 40% before the next class, due to natural forgetting.

In the second week, not remembering 60% of what was taught in previous classes, they begin to find it hard to understand and learn the new material. Language learning is accumulative and the mastery of previous knowledge is vital in order to successfully assimilate new items. So instead of 30% they may only remember 25% of everything introduced by the end of the second week. They may react at this point, realizing that things are going badly, and do more homework. If they manage to get up to date, they may turn into 'successful' students and move out of this category. If not, the downward trend will continue, and they will remember, say, only 33% (instead of the previous week's 40%) for the third week's classes.

In Week 3, not remembering two thirds of what has been taught up to that point makes understanding the class even more difficult, so they learn less and remember still less. They are now perfectly aware that things are going badly and their motivation falls. As a consequence they do less homework and remember even less, so that by the end of the fifth week they have definitively got left behind, their motivation collapses and they will soon drop out.

The downward slope of the magenta line illustrates how a falling learning curve is linked to declining motivation. As we have seen, it is a two-way phenomenon, a 'vicious circle'. Insufficient motivation during the early weeks leads to insufficient study, causing insufficient learning; then, awareness of this lack of learning causes a fall in motivation, leading to a fall in study, producing a further fall in motivation, leading inexorably to the loss of all motivation, the disappearance of all study and the abandonment of the programme. More worryingly, the loss of self-esteem caused by this failure may mean that future learning programmes –undertaken with less self-assurance– will be equally unsuccessful, leading possibly to more serious psychological consequences and failure in their adult lives (PISA, 2003, p. 135).

1.5 Progress of successful learners with homework methodologies

The story is quite different when 'successful' students are taught using homework-based methodologies (see Fig. 2). This is natural because this form of teaching is specifically designed for them.

After the first week's classes they might retain 30%, the same as the less-successful students, as their intelligence may be similar (Dweck, 1986, 1041). But at the end of diligent homework sessions, they will remember 90%, and not just 50%, of the material taught. Just before the next class this figure may have fallen to 80%; but this 80% of knowledge of previous material will be a valuable asset in the second week, facilitating the classroom assimilation of new material, with their total accumulated knowledge going up to at least 40% by the end of the second week. They continue to be conscientious with their homework, and again remember 80% of everything as they enter the third week.

Remembering almost everything, the 'successful' students find the classes ever easier and more enjoyable, especially when the teacher has to do extra revision for other pupils; whilst this is happening they themselves may be *over-learning*, an important contributing

factor in building up fluency. They are conscious that things are going well for them, and this encourages them to keep doing their homework, so that they continue to remember almost everything as the course progresses. Their level of motivation is optimal, and they will no doubt go on to success in learning the language. It is just the opposite of what happens to less successful students. Oliva (1999, p. 516) observes, "the marks they get are the best predictor of pupils' motivation and feeling of efficacy" (*trans. Sp.*).





1.6 Homework: the deciding factor

The main factor predicting success or failure for students taught using homework-based methodologies is –not surprisingly– how well and how regularly they do their homework. Pupils who always make sure they go into class every day remembering the vast majority of what has been taught in previous classes have every chance of completing the course successfully. On the other hand, those who, for whatever reason, are unable to do their homework, due to lack of time, opportunity or enthusiasm, are more than likely to fail, in many cases dropping out well before the end of the course. Homework guarantees that you remember everything. It produces that 80% plus of accumulated knowledge which guarantees that you are fully motivated throughout the course. And it is precisely that motivation that drives you to do the homework which, in the long term, assures that you stay motivated. As C. Coll (2001, p. 182; *trans. Sp.*) puts it, "The educational self-concept and its value ingredient – self-esteem – are at the same time a determinant and a consequence of the pupil's learning history".

So, as teachers, how can we make sure that students do their homework? The short answer is that we can't. Naturally we try to transmit to students the usefulness and importance of learning the language, we endeavour to make the classes enjoyable, we use attractive materials, we try to link what we are doing to their areas of interest, and many other techniques. Often we also have the support of parents, who encourage, pressure and even blackmail their offspring into studying; indeed, probably one of the greatest challenges facing parents in modern times is finding ways of motivating their children to do their homework. In spite of all this effort, large-scale success is not usually forthcoming. On the contrary, in many school situations the lack of motivation leads children to fail, causing unrest and disruption (Fontana, 2000, pp. 40-1), resulting in teacher dissatisfaction, stress and burnout (Manassero Mas, Vázquez Alonso, Ferrer Pérez, Fornés Vives, & Fernández Bennassar, 2003). In such circumstances, a different approach might reasonably be considered.

2 Review of Literature

2.1 Motivation in language learning

The literature on motivation identifies numerous factors which can help students along the often arduous path to learning, and afford clues to teachers as to how to motivate their students, bearing in mind that in the absence of any kind of motivation learning will inevitably cease.

Over the last half century, studies on motivation in language learning have focused particularly on the description and classification of the different sources of motivation that act on students when they set about learning or perfecting their knowledge of a language (see Chang & Liu, 2013, p. 196). In comparison, the amount of psychological research on how to motivate language learners to actually apply themselves to the task on a day-to-day basis has been less forthcoming: "Motivational theories typically focus on how and why people choose certain courses of action, rather than on the motivational sources of executing goal-directed behaviour, whereas... in educational contexts (and from the point of view of motivational classroom interventions in particular) the motivational influences on action implementation are more important than the directive function of motivation." (Dörnyei & Ottó, 1998, pp. 43-4). In other words, what really interests teachers is not what moved their students to study the language in the first place, but rather what will motivate them to keep on the job now that they are there.

In response to this need, Dörnyei & Ottó (1998, p. 57) published a very complete table of 'executive motivational influences' involved in goal implementation. "These energy sources can be enhancing or inhibiting, depending on whether they contribute to the successful implementation of the goal or dampen the actor's endeavour." (*Ibid*, p. 51). The authors hoped that "by listing the motivational influences in a comprehensive manner and by specifying which concrete phase of the motivational process they are related to, the framework can serve as a structures basis for designing motivational strategies to be used in the classroom" (*Ibid*, p. 65).

The considerable extension of this list –made up of a total of thirty categories and subcategories of motivational conditions able to have a positive or negative effect on the students' work– sets the bar high for teachers if they wish to take as many of them as possible into account when planning their classes, being aware that many students may only be motivated by very few of them.

2.1.1 Utility of some of the principal motivators

The teachers' job can be made easier if the student receives extrinsic motivation from *outside* the classroom. Pressure applied by parents, in the form of rewards for good marks, or punishments for bad behaviour, make it easier to run the class; equally, if the students

need to learn the subject to obtain a qualification they will be ready to pay attention and work hard. However, as neither parental nor any other motivation proceeding from outside the classroom can be guaranteed, teachers usually try to solve the motivation problem themselves, from *within* the classroom. Here, the rewards will need to be psychological rather than material, as the latter become expensive, whereas punishments can be practically ruled out as they are no longer socially acceptable.

Marks can be an effective motivator with students who are keen to progress. At the same time, the thought of failing is enough to make other students knuckle down; they seek security and wish to avoid the problems that low grades might cause them (Alonso Tapia, 2002, pp. 109-13). Explaining to the students the *usefulness* of what they are learning can also be motivating, while their not perceiving its utility can be dispiriting. Even so, awareness of the relevance of the subject does not persuade all students to work hard, nor does it predict long-term success, and can sometimes even be counter-productive (Alonso Tapia, 2002, pp. 109-13; 2005, pp. 35, 42).

Creating an engaging *classroom environment*, lining the walls with interesting images and objects, deploying visually attractive teaching materials and textbooks, or giving vivid presentations are strategies intended to make the learning experience more enjoyable and, it is hoped, more productive. However, the effect tends to be short-lived: the novelty wears off whilst the work to be done remains. Vygotsky (1997, p. 84) rejected this approach. He considered that making "volcanoes and geysers" was fun, but "not useful pedagogically... even profoundly harmful": the students did not become interested in geography but in the fireworks and special effects, which just distracted their attention from the subject. And he gave another example: "It is rather easy to arouse interest in history lessons by relating anecdotes, but it is difficult to tell whether the resulting interest has to do with history, and not the particular anecdote". Nevertheless, he recognised that "An emotionally tinged fact is remembered more strongly, more firmly, and longer than one that is neutral", and insisted that "The teacher must be concerned not only that the students think about and learn geography, but also feel deeply about it" (*Ibid.* pp. 106-7). It could be argued that the special effects and anecdotes would be well remembered, though perhaps more so than the lesson which they were supposed to reinforce.

A more subtle extrinsic motivational technique consists in bolstering up the *self-concept* and self-confidence of the pupils, so that, believing that they are highly competent, they are moved to study, and get good marks (Alonso Tapia, 2005, p. 32). The American educationalist Bruner (1998, 77) gives a good example of this effect: "Korean immigrants in America score fifteen points higher in IO than their fellow Korean immigrants in Japan, where they are scorned, segregated, and treated as inferior, whereas in America the presumption is that they are very bright". Merely being considered bright raised their IQ by 15 points! Equally, according to PISA (2003, p. 135; trans. Sp.), "Research on the learning process has shown that students need to believe in their own capacity before they are able to dedicate the necessary energy to learning strategies... Belief in their own efficacy is a good predictor of whether pupils will be able to control their learning". They must see how their efforts mean that they progress and learn (Alonso Tapia, 2002, p. 123). The strategy, then, is to 'push start' students, telling them that they are bright and are doing well, even if that is not strictly true, in the hope that it will encourage them to study and earn good marks, so that these high marks will in turn motivate them to continue studying. However, this kind of motivation can only be successful in the long term if the results are forthcoming, that is if they observe that they really are -or are becomingcompetent, and that others would agree with that judgement (Alonso Tapia, 2005, p. 45).

If all else fails –and it often does– teachers may appeal to the students' work ethic. This means that the pupils are meant to steel themselves and 'get on with the job', without thinking too much about whether they like it or not. However Dewey (quoted by Claparède, 2007, p. 57) declared that it is psychologically impossible to provoke activity without a certain level of interest, and Mace (1969, p. 36) points out that "even great ability will not compensate for the absence of motivation". Marchesi (2007, pp. 184-5; trans, Sp.) notes that motivation has traditionally been thought of as "a personal characteristic which is relatively stable over time and quite difficult to modify. From this point of view, the pupil is responsible for his or her lack of interest in learning... [Nowadays we consider] that the pupils' motives must be interpreted in terms of their previous experiences". If, in the light of earlier experience, the students' expectations are low due to ineffective teaching, we can fully understand why they are not keen to study. "We tend to blame students' demotivation and failure on their lack of willpower and effort. This may prevent our self-esteem from being hurt, but in practice it prevents us from learning from our mistakes and becoming better teachers" (Alonso Tapia, 2005, p. 240; trans. Sp.). And J. Torres sums up by saying: "We adults, who are responsible for education... are the ones from whom the work ethic should be demanded." (Torres Santomé, 2006, p. 53; trans. Sp.).

2.1.2 Difficulty of extrinsic and ad hoc motivation in education

The problem with all forms of extrinsic and 'bag-of-tricks' motivation is that they cannot be maintained over a long period. Circumstances, attitudes and teachers change constantly and something that works at one moment in time will cease to work later because the extrinsic agent which had previously been acting disappears, or because the student starts to take the motivating agent for granted and needs some new stimulus.

Given such complexity, teachers relying on extrinsic motivation are in no way able to guarantee that their students will be constantly motivated.

2.1.3 Intrinsic motivation

For a given group of students who are learning some given subject matter over several years, the only common factors shared over time by all the students are the subject matter itself and the act of teaching and learning. Then, as the whole subject matter cannot reasonably be expected to motivate everyone at all times, as some parts will be more interesting than others, we are left with the act of teaching and learning as the only option available if we are looking for a way to motivate all pupils. We are talking about *intrinsic motivation*, where the subject matter holds our attention in such a way that we are rewarded by the activity of learning itself: we enjoy it and do not need any external reward.

In this respect, Bruner asseverates: "It is doubtful [that reinforcement is] reliably to be found outside learning itself... External reinforcement... does not nourish, reliably, the long course of learning by which man slowly builds in his own way a serviceable model of what the world is and what it can be" (Bruner, 1966, pp. 127-8). Vygotsky (1997, p. 85) also underlines the importance of not counting on extrinsic motivation for this long endeavour: "It is easy to induce a reaction if its performance is associated in the child's mind with some pleasure, but if we wish to foster in the child just this reaction, then we

must take care that satisfaction and pleasure are associated with the reaction proper, and not with the anticipated reward". That is to say that in the case of education, the reactions which should be fostered are those which lead –through cognitive activity– to learning; these are the reactions which must produce the feeling of pleasure, so guaranteeing the unlimited prolongation of the activity. If we wish to be able to motivate *all* our students we will need to make use of the process of learning itself.

2.1.4 Intrinsic motivation through success

How can we motivate students through the process of learning itself? It is known that *success* in learning, and getting answers right, is highly motivating. This is not due to raised expectations of getting good marks or receiving material rewards; instead, success in solving problems and overcoming difficulties is rewarding in itself. Extrinsic compensation is less effective than the feeling of achievement produced by the accomplishment of a difficult task. M. Montessori (2000, p. 424; 2003, pp. 239-40) began offering her young pupils sweets and toys, until she saw that "after overcoming the efforts, the emotions and the joys of silence... they were happy for that reason, at having experienced something new, at having won a victory. This was their true compensation; they had forgotten the promise of sweets and were not interested in going to get the objects which I though attracted them" *(trans. It.)*. Bruner notes that "Cognitive or intellectual mastery is rewarding" and "intrinsic learning... provides its own reward" (Bruner, 1966, pp. 30, 134). And Holland (1960, pp. 218-9), referring to his behaviourist experimentation, amusingly comments: "With humans, simply being correct is sufficient reinforcement – pigeons will not work for such meagre gains".

Thus, numerous investigations have shown that what most motivates students is success (Antibi 2005, p. 96). Vygotsky (1997), quoting Münsterberg, notes that "Exercise turns out to be successful only when it is accompanied by internal satisfaction. Otherwise, it turns into tiresome repetition the organism will rail against. A successful effort is the most essential condition for progress. Every complete satisfaction with the result evidently brings about a new setting and settling in the nerve adjustment. This is full of pedagogical significance. It suggests that the mere repetition alone does not secure progress, inasmuch as only the successful practice helps toward the desired setting of the central nervous system" (p. 280). The evident conclusion is that "We get interested in what we get good at... Several teachers have suggested that the eagerness comes from increased confidence in one's ability to understand the material... Surely our schools have not begun to tap this enormous reservoir of zest" (Bruner, 1966, pp. 118-20).

Criticism and failure, on the other hand, impair the positive motivation of students (Russell, 1998, p. 242). Quintilian, the first century Roman author, noted (1997, I, p. 217) that it was important to avoid correcting students wherever possible, and advocated making sure the lesson was well taught so that few pupils made mistakes and had to be corrected, which some found upsetting. Barber (1997, pp. 270-1) found that people whose success/fail or praise/blame ratio fell below 3:1 (75%) tended to drop out of courses: "In study-support centres, as it's voluntary, they must get this right or no-one will attend". Raising the level of difficulty demotivates many students. Ferster & Sapon (1960, pp. 183-4) observe "Whenever the level of difficulty increased too rapidly from unit to unit, so that large numbers of errors were made, the reaction was uniform in nearly all students, who reported being emotionally upset and who reported a strong tendency to stop even though they may not have completed all the work. [...] Those students who failed to finish

the course stopped at the more difficult lessons. [...] The disposition to return to the study material probably decreased as the larger number of errors produced a situation in which the student emitted too much study behaviour per reinforcement to sustain further study." For this reason Freinet (1996, p. 240; *trans. Sp.*) insists: "Always make sure that your pupils are successful. The tempo of teaching will improve for that reason alone... Failure is an inhibitor, a destroyer of vigour and enthusiasm". Alonso Tapia (1999, pp. 109-13; *trans. Sp.*) sums it up neatly with the observation, "It's not that students sometimes don't learn because they are not motivated, but rather they are not motivated because they don't learn".

Piaget (1992) describes the psychological mechanism involved in motivation and demotivation, observing that interest is a regulator of our internal energy levels; if we are 'interested' in a task we automatically find it easy and it ceases to tire us (pp. 49-50). As Claparède (2007) puts it, it is as if the objects which matter to us had the effect of liberating energy, whilst those which do not interest us drain our reserves of energy (p. 93). Piaget (1992, p. 50) illustrates the phenomenon graphically by saying that all our successes and failures are registered internally on a kind of permanent *scale of values:* successes make us feel more optimistic and failures make us feel more pessimistic with respect to future actions. In this sense Vygotsky (1997, p. 144) refers to "the biological striving of the organism to retain and reproduce experiences associated with pleasure"; when confronted by some circumstance, the body refers to its scale of values to decide whether the phenomenon is of interest, in which case it liberates energy in order to be able to act appropriately and obtain the expected pleasure.

2.2 Two previous proposals for guaranteeing learning

Probably the first coherent proposal for teaching in such a way that nearly all pupils could learn together was put forward by Comenius (1657) in the *Didactica Magna*. He maintained that almost everyone can learn; it was only necessary to advance slowly through the material and not leave anyone behind. He used oral repetition in class, which he considered superior to private study because it made sure that everyone paid attention, participated and learned, and it allowed student-teacher feedback in both directions. The subject matter should be explained little by little, staying on the same point until it was understood by all the students, and then learned and memorised via repetition and exercise. Rules should be short, clear, and grounded on previous knowledge; nothing should be based on authority and nothing should be taught that was not useful for life.

Comenius also had clear ideas about language teaching. He insisted that the mother tongue should be used instrumentally to teach the second language, and was totally against working directly in the target language. His motto was 'Never teach something unknown by means of something else that is also unknown'. He criticised the use of the same grammar rules to teach a language to students of distinct linguistic backgrounds: each mother tongue differed from the target language in a different way, and it was only necessary to teach the differences.

Comenius's method, allowing him to teach everybody without depending on private study, was largely forgotten, and did not resurface until halfway through the twentieth century with the appearance of the *Programmed Learning* movement. However, this time students were taught individually, and the task of instruction was entrusted to machines or specially-structured books, instead of a teacher in a classroom. Students who took the

programmed courses learned quickly and well, and gave highly positive feedback, and it was possible to teach all students, although some were able to complete the courses much more quickly than others. The success of the methodology fed the optimism of the sixties: "Instead of eliminating scholastic failure by automatic promotion, we may be able to eliminate it by nearly automatic achievement" (Blyth, 1960, p. 413)

The efficacy of Programmed Learning can be attributed to three key highly motivating components:

- 1) *Small manageable steps*, maximising success and minimising failure: "By making each successive step as small as possible, the frequency of reinforcement can be raised to a maximum, while the possibly aversive consequences of being wrong are reduced to a minimum" (Skinner, 1960, p. 109).
- 2) *Constant activity:* "Behaviour is learned only when it is *emitted* and reinforced. But in the classroom, the student performs very little verbally. However, while working with a machine, the student necessarily emits appropriate behavior, and this behavior is usually reinforced since the material is designed so that the student is usually correct." (Holland, 1960, p. 219).
- 3) *Immediate feedback:* "It can easily be demonstrated that... the lapse of only a few seconds between response and reinforcement destroys most of the effect" (Skinner, 1960, p. 105).

2.3 A new proposal to guarantee learning in the classroom: the Fluency Method[®]

The *Fluency Method*[®] (*Fluency*[®] and *Fluency Method*[®] are registered trademarks, but the methodology described is not protected, as teaching methods cannot be patented) was designed to minimise failure in the teaching and learning of English in Spain, and has been used for more than two decades by hundreds of teachers with over 4000 students yearly in the Spanish provinces of Murcia and Valencia. It is based on the use of flashcards for the memorization of all new lexicon and for practising the construction of grammatically correct sentences; it deals with these two essential components of language learning in the classroom instead of leaving them for students to do at home.

The method is based on the combination of the two teaching approaches known as *Mastery Learning* and *Programmed Learning*:

- 1) *Mastery Learning* is a methodology which seeks to give each student sufficient instruction for them to grasp what they are being taught, and continues working with them until they do (Stenhouse, 2003, p. 101-3; Kubina & Morrison, 2000).
- 2) Programmed Learning prescribes the division of the object of instruction into small easy steps –in such a way that all students are able to understand and learn each one– and then teaches them in a logical order, culminating in full knowledge of the subject matter (Lumsdaine & Glaser, 1961; Comenio, 1657, pp. 114, 118; Contreras Domingo, 1994, p. 194). It is based, as Stenhouse put it, on the principle that 'Nothing succeeds like success' (2003, p. 64).

The fusion of the two approaches might reasonably be denominated *Programmed Mastery Learning*, as it divides the learning object into small, easy, logically-ordered steps and then makes sure that each pupil learns each of the steps, all of which comes together to give mastery of the content being studied.

2.3.1 Replacing homework by equivalent classroom activities

As teachers, we cannot guarantee that pupils will do anything once they walk out through the door. At best we have a measure of control over what goes on inside the classroom. Therefore, if we want to be sure that our students learn, we have little choice but to minimise our dependence on private study and try to replace the most indispensable tasks normally left as homework by activities carried out in the classroom, where we have a greater possibility of making sure they are done properly.

What particular aspects of learning would this involve? In language courses the two most essential components of homework are normally the memorisation of lexical items and the practice of grammatical structures. In a context of private study, this is normally done via the rote learning of words and expressions, and written exercises to practise the application of grammar rules to sentence construction. We would need to transfer both of these activities into the classroom.

An important factor to be borne in mind here is that whilst the time available for doing homework is, in theory, abundant, class time is strictly limited and expensive, so it must be employed profitably: not a minute must be wasted. Simply asking the pupils to do their homework in the classroom would not be a solution. Language students are typically expected to spend a similar number of hours working at home to the number of class hours. In these circumstances, if the homework were simply transferred into the classroom it would reduce the rate of progress by half, as 50% of the class would have to be dedicated to private study. Any method used for consolidating vocabulary and practising structures in the classroom must be much more time-efficient. Indeed, the only way to avoid slowing down progress would be for the new activities to displace the old ones, or make it possible to do the old ones more quickly.

Homework is not time-efficient. Rote memorisation is inefficient and written grammar practice is slowed down by having to write it, whilst the lack of immediate feedback is disheartening and can lead to inaccurate learning (Blyth, 1960, p. 402; Pressey, 1960, p. 504; Porter, 1960, p. 125). Someone studying on their own also tends to get bored and is easily distracted. In contrast, an oral, interactive methodology, implemented by the teacher, gives much better results, making it possible to teach the whole class together, to hold their attention all the time and to continue until it is clear that they have learned. And the instant feedback which it allows is a key factor in motivation (Skinner, 1960, p. 105, 123; Little, 1960, pp. 59-60; Alonso Tapia, 2005, p. 154; Bruner, 1966, p. 50).

2.3.2 Choral drilling

The principal activity proposed here is flashcard drilling, that is oral practice and reinforcement using flashcards or similar systems. Illich (1976, p. 21-3) was a strong advocate of drill instruction for language learning. However, individual work with students would not be viable as it would take too long to give everyone sufficient turns to achieve fluency in all the content. Choral drilling, using the techniques described in Section 6, is time-efficient as everyone practises together. Drilling continues until the whole group are visibly and audibly answering comfortably and correctly, together. At the end of the drill, two rounds of individual turns are used to check that everybody is able to respond correctly. Knowing that they will have to respond individually encourages students to work hard during the choral drill, as they very much want to be able to answer

correctly when they are asked. Medium- to long-term recall is achieved if all activities are repeated, to this level of perfection, on three different occasions. The memorisation has a lasting effect: at least several months –and often years– for the majority of words learned; it should be refreshed by using the lexicon in exercises or conversation, or by redrilling the set at extended intervals (Skinner, 1960a, p. 151).

Fig. 3 shows an estimate –based on classroom experience– of the levels of learning typically obtained by hypothetical 'successful' and 'less-successful' students over the three drilling sessions. The chart represents as a percentage the extent to which they are likely to remember the set of words, or be able to use the new grammar rule, over the three sessions.



Fig. 3. The learning progress of *successful* and *less-successful* students over the three sessions of flashcard drilling. Even the *less-successful* students show a solid 80% of mastery after the third session.

At the end of the first session, practically everyone has mastered the content at least 90%. We do not stop the choral drill until we know from experience that they are ready, at which point the individual rounds show an average of 10% of mistakes (*i.e.* in a group of ten students, one mistake per round). Natural forgetting means that by the next class, one or two days later, the most diligent students will still remember over 80% and the least hardworking perhaps 65%. After the second session these figures will improve to say 90% and 75% respectively, and at the end of the 3rd session, knowledge nears 100%. Even a 'weak' student will remember 80% when they walk into the following class, a few days later.

The important point here is that the estimated 80% of recall achieved by *weaker* students through drilling is the same as the estimated 80% obtained by *successful* students who do their homework diligently. In this way, students who were unsuccessful with homework methodologies are now able to walk into the classroom each day confident that things are going to go well: they are able to participate actively in classes and enjoy the same success-driven motivation as the diligent students.

2.3.3 Choral drilling of vocabulary and expressions

Vocabulary, expressions and all lexical content must be interiorised as reflex knowledge and rooted in the memory. Only in this way will they be available for immediate, spontaneous use in language exercises or free conversation. The absence of this preliminary step is what often makes language-practice sessions so tedious, where only the most studious pupils are able to take advantage of the learning opportunity they offer, though even *they* can find it heavy going, due to the difficulty in remembering and comfortably pronouncing the words they need.

Effective memorisation cannot be achieved by the mere repetition of the same word over and over again, typical of private study (casa: *house, house, house, house...*). As you can hear yourself saying *house* you don't need to use your memory to be able to repeat it as many times as you like. When you stop, the trace left in the memory soon vanishes, meaning that you have to start again. True long-term memorisation is best obtained when you use some interactive technique to oblige the brain to constantly retrieve words from the memory. This is best done using the stimulus of flashcards.

2.3.4 Choral drilling of vocabulary

There are different systems for drilling vocabulary with flashcards; this is one of the best. First the teacher shows the class a flashcard, for example with the Spanish word **casa** on the front, pronounces /haus/ in English, clearly, several times and asks them to repeat it chorally 3-4 times. This repetition leaves a *temporary* register in their memory, sufficient for the teacher to be able to introduce **escuela** in the same way, get the class to repeat /sku:l/ 3-4 times and then show them the *casa* card again and they can still remember to say /haus/.

casa house, house, house, house **escuela** school, school, school, school, house **4**, school, house, school, **calle** street, street, street, street, school, street, school, street, house **9**, school, street, house, school, street, **estación** station, station, station, street, station, street, station, house **10**, school, street, station, house, school, street, station, **piso** flat, flat, flat, flat, station, flat, station, flat, house **11**...

Fig. 4. Order of presentation and frequency of appearance of flashcards in the described drilling schedule. As memorisation progresses it becomes possible to insert more and more other words (number in red) between instances of the same word (*house*).

Now you alternate between the two cards to consolidate these words. When the class is answering smoothly you introduce the 3rd word, **calle**, in the same way, make them repeat /stri:t/ 3-4 times, perhaps correcting them until they say it well, and return to the other two words. Their incipient long-term memory assures that the students still remember both. Now alternate between all three cards until everyone is saying them comfortably, and introduce the 4th word, **estación**, getting them to repeat /'steiʃən/ 3-4 times; alternate with the previous word; then alternate between all four words until students are doing them all comfortably. Now you introduce the 5th word **piso**, and so on. The order and the frequency of apparition of the different words practised during drilling is shown in Fig. 4. The numbers in red indicate how many other words are recalled and uttered between

successive instances of *house*. Bearing in mind that thinking of a different word wipes the previous one from our working memory, the growing distance between apparitions of the same word is made possible thanks to the gradual consolidation of the long-term memory.

In order to shorten the drill, we can begin to omit cards which cause no difficulty, leaving them on the table. When all ten cards have been taught, we put back those which have been temporarily left out and continue to go through the pack until we can hear that everyone is saying each one comfortably. Finally, we ask each student two cards and expect 90% of correct answers. If there are more mistakes than this, it means we have stopped the choral drill too soon.

2.3.5 Some observations on vocabulary drilling technique

With experience, it is not difficult to tell when the class is ready to move on to a new word, or to be tested; the principal clues are the uniform level of sound in the choral answers, and the pupils' ability to keep up a steady rhythm in their responses. It is important to try to maintain a rate of about one word per second all through the drill, alternating between the same words until you achieve this rhythm and then keeping it going with the new ones. It is when you observe this rhythm being kept to comfortably that you can introduce the next word or begin the individual rounds.

When a challenging word is introduced it is sometimes useful to give the students a mnemonic aid to get started; however, by the end of the drill they should have cast off this temporary 'crutch' and be saying the word freely. At the end of a vocabulary drill they should not need to think in order to answer, and the fact that they are able to answer rhythmically is a good indication that they are ready, because the rhythm makes it difficult to think.

Some students take longer to pick up words than others, so initially the level of sound is lower; but it is not necessary to take any specific action other than keep going with the same words. The slower students hear the other students' answers and soon join in. Skinner & Holland (1960, pp. 160-1) found that in similar circumstances students were quite happy to fail to answer the first time if they could be informed of the answer and answer correctly from then on. The teacher has the option of saying the words together with the class, to help out temporarily, but this should not be normal practice. Always wait until everyone is answering comfortably before you introduce a new card. Acting in this way, an efficient teacher will tend to bring a group of students of varying ability together over the course (Dubet, 2005, pp. 43-4; Blyth, 1960, p. 405), whereas less effective teachers, who are typically impatient and do not finish drills properly, will tend to end up with some strong students and other who have fallen significantly behind.

As the rhythm and sound levels of the choral responses tell you when the group is ready to move on to a new word, teachers have at their disposal at all times a tool which allows them to constantly adjust the level of difficulty to what students can handle. This type of drilling can activate a phenomenon known as *flow*, which occurs when an activity is neither so difficult as to be stressful nor so easy as to be boring (Csikszentmihalyi, 2005; Dörnyei & Ottó, 1998, pp. 57-8). This makes the activity enjoyable, and people are less conscious of the passage of time. The rhythm of the drill also has a slightly hypnotic effect, reducing the students' awareness of the 'outside world' and helping them to

concentrate on their work. Stopping the drill breaks the 'spell' and brings students 'back to reality'; this should be avoided whenever possible as it endangers the learning process and can cause a feeling of frustration.

It is particularly dangerous for students if their teacher feels that the flashcards must be boring, She or he will try to shorten the drilling sessions, seeing it as an 'act of kindness' and wanting to move on to something which will be more 'fun'. However, doing this has the opposite effect: the weaker students don't get to learn the words properly and are unable to reach that 'comfort' level of knowledge, causing them great stress and leading them once again to fail and drop out. The drill cannot be shortened: the length of a session depends only on how quickly the students become totally comfortable with the words. A new word can only be introduced when all the other words are going smoothly. When you hear a fall in the intensity in the choral drill, it means that not all the class are yet comfortable, and you must keep practising the words already introduced and not bring in any new ones yet.

2.3.6 Choral drilling of expressions

The system for teaching expressions is the same as that used for words, but it takes a little longer. The class must first learn to pronounce the expression naturally, with the correct intonation and accent, which needs practice. In the first session it will be more difficult to achieve rhythm and a natural pronunciation, but by the third session these problems should have been overcome. With longer expressions, it can be useful to direct the class as if you were the conductor of an orchestra, with a big smile on your face and making it into something of a game.

2.3.7 Choral drilling of grammar structures

Noam Chomsky (1957) famously stated that languages are systems that allow you to create an infinite number of sentences out of a finite number of words and rules. Obviously it is not quite as simple as that, but it *is* clear that if we want to learn a new language we should not try to memorise the infinite list of sentences –which is by definition impossible–, but rather we must memorise the finite number of lexical items and become experts in using use the finite number of rules.

Phrase building and sentence construction are *skills* in which we must be *trained* until we become proficient. The rote memorisation of full phrases and sentences is boring and ineffective. The efficient way to produce sentences is to use grammar rules, and the use of these grammar rules must be *practised* until it is perfect. The brain must refer consciously to the rule each time it produces a sentence until this action is interiorised and becomes automatic.

Assimilating a grammar rule requires each student to make a large number of phrases using the rule. In order not to hold back progress it is essential that the *only* problem is the correct use of the rule being taught. There should be **no** other difficulties: only *fully learned* vocabulary should be used, and any other grammar rules involved should have been fully automated beforehand. Many authors have insisted on this point (Comenio, 1657, p. 66; Skinner & Holland, 1960, p. 164). "Whenever a new principle, vocabulary item, or usage is being learned, it is the only thing being learned at the time. All other parts of the material have been mastered previously" (Ferster & Sapon 1960, p. 178).

Any kind of complication will slow down practice and make it impossible to do enough sentences to develop fluency. For example, to produce prepositional phrases like "in the park", "near the hospital", students should previously have memorised a set of basic prepositions and a series of nouns of 'places in the city', and automated the use of the definite article.

Phrase sets normally contain around 13 translation flashcards with a phrase in the students' native language (L1) on the front and the equivalent target language (L2) phrase on the back. Once the rule has been explained –perhaps by putting examples on the board– the class chorally translates the phrases, moving from card to card, just as one moves from sentence to sentence in a written exercise. The advantage of orality over written exercises is that work proceeds much more quickly (you can speak much faster than you can write) and feedback is instantaneous (if the teacher says nothing, the answer is correct). Another advantage of oral work is that people are happy to do the same phrases more than once; in contrast, the request 'Now do the exercise again' with reference to a written task is likely to produce long faces.

At first, some pupils may make mistakes or not answer; but hearing the others they soon catch on and begin to respond correctly. You must continue until the production of phrases flows smoothly. When you hear and see that everyone is ready, you do two individual rounds, expecting 90% success, as before. If the students find the exercise hard –this happens when they have difficulty remembering the vocabulary or other rules involved (which they ought to know better)–, you can go backwards and forwards over the same sentences; this helps 'get things moving', as the solutions to the problems are still fresh in their minds.

2.3.8 Some practical considerations concerning flashcard drilling

The typical size of a group might be from 5 to 16 pupils. When there are only two or three pupils the choral drill does not work very well because some students answer slightly more quickly than others; the slower ones hear the faster ones and get distracted, or repeat what they hear instead of thinking of the answer for themselves. On the other hand, a private 1-to-1 class works very well. With a larger number of students, the choral drill becomes uniform and no longer distracts the slower pupils; if they don't know the answer they listen to the others and are better prepared next time the card comes up. When there are more than about 16 pupils, it is more difficult to be sure that everyone is participating successfully, and the individual rounds can get very long. However, with a disciplined group there is no real upper limit; the individual rounds might perhaps have to be more selective but should not be eliminated: the possibility of being tested keeps you 'on your toes'.

One big advantage of flashcard teaching is that there is no accumulation of partly-learned new knowledge –habitual in language classes– that the students will have to later consolidate at home. The material is designed so that no new item is used in further exercises until it has been properly consolidated in its basic form through classroom drilling. As it does not depend on private study, the course becomes a self-contained continuum, where you can stop at any point or continue until the students are worn out.

If a student joins the group late, is weak or is ill for a time, private drilling sessions can be organised to help them catch up on the most important items. However, as sets are done several times it is not always necessary; on the other hand it is not always possible, to take students out, and a student who falls seriously behind may not be able to catch up. This system allows people to learn as long as they attend classes; if they don't, and are not prepared to study to catch up, they will have to change to a lower group.

The design and production of the flashcards used for drilling is a mammoth task and it is not advisable, or practical, for each teacher to prepare his own materials. These should be designed by one or more teachers who are expert in the use of the system, and properly tested before they are used by other teachers. A checklist should be kept, indicating the date of each session, to make sure that sets are used the correct number of times, and in the correct order. The checklist should also contain all other activities included in the course, so that each one is done at the right moment.

2.4 Research questions

Although the *Fluency Method*[®] as described above had been in use for many years for the teaching of English in Spain, it had never been formally tested.

At the 2012 annual symposium of the *Sociedad Española de Estudios Árabes*, held in Seville, during a session dedicated to the teaching of Arabic, I proposed carrying out an experimental oral Arabic course for Spanish speakers using the *Fluency*[®] methodology. Given the numerous impediments that Europeans face when they try to learn this language, it seemed worthwhile investigating the possibilities that flashcard drilling offers, especially for the learning of vocabulary and the development reading skills, two significant areas of difficulty. As one of the principal aims was to make Arabic teachers aware of the method, anyone interested was invited to observe the course.

The principal research questions were:

- 1) What would the time requirements be for the different activities?
- 2) How well would they learn?
- 3) Would flashcards be effective for teaching the reading of Arabic?
- 4) Would the students enjoy the classes?
- 5) Would students have to study at home in order to keep up?
- 6) Would the students have preferred to study rather than being drilled?
- 7) Would the students show interest in continuing to learn in that way afterwards?
- 8) Would they expect to be able to get by in spoken Arabic if they continued?
- 9) How would the teacher observers react?

3. Method

A free experimental 20-hour adult beginners' Modern Standard Arabic course for a maximum of 10 students using the *Fluency*[®] methodology was advertised in Madrid in the spring of 2013. The classes were held on the premises of the Egyptian Embassy's *Instituto Egipcio de Estudios Islámicos* in 16 sessions over the four weekends: sessions 1-4: 15th-16th February; sessions 5-8: 5th-6th April; sessions 9-12: 19th-20th April; and sessions 13-16: 24th-25th May. The timetable was: Fridays 16.30h–18.00h and 18-30h–19-30h, and Saturdays 10.00h–11.30h and 12.00h–13.00h. The author travelled to Madrid from Murcia each weekend, 350 km each way, to impart the course.

No pretest was given to the students but information was collected on their previous

studies of Arabic and their initial declared level. At the end of the course, the students were given some short posttests on the material taught, and also asked to complete a questionnaire. An average of 5 teacher-observers also attended each session, and all were sent a questionnaire so that we could obtain their opinion of the course. A detailed description and analysis of the course was later published in the *Proceedings* of the *Sociedad Española de Estudios Árabes* (Pocklington, 2015).

3.1 Participants

3.1.1 Pupils

The first weekend 10 students began the course, but two did not continue because they found the level too low (one of them also said she didn't agree with the methodology); these were replaced from the second weekend by two others, one of whom already knew a little Arabic. After the second weekend, one further student left to continue studying in Lebanon and one was taken seriously ill, leaving eight students for the remainder of the course. Of these, five attended from beginning to end, six took the final tests and five filled in the final questionnaire.

The six participants who took the final tests were as follows:

- 1) A female total beginner.
- 2) A male who knew a few words and expressions in Egyptian Arabic.
- 3) A male 'false beginner' who had done an introductory course 6 years earlier and remembered very little apart from some familiarity with the writing.
- 4) A male who had taken an Arabic degree 26 years ago, but only remembered how to read the letters, and a few odd words.
- 5) A female student who began studying Arabic simultaneously at the *UNED* (Spanish Open University).
- 6) A female self-taught student of almost low-intermediate level (who missed the first weekend).

3.1.2 Observers

The observers were all university lecturers of Arabic, four of whom attended most of the classes, whilst several others were only present in odd sessions. As the questionnaires were anonymous, it was not possible to know exactly which observers filled them in. They included:

- 1) A semi-retired female Professor of Arabic Literature.
- 2) A semi-retired female Lecturer of Arabic and Psychology.
- 3) Two male and two female Lecturers of Arabic.
- 4) One native-speaking male Arabic Lecturer.
- 5) One post-graduate female Lecturer.
- 6) The Director of the Instituto Egipcio de Estudios Islámicos (male).

3.2 Materials and instruments

The course was designed in a similar way to the *Fluency*[®] English courses, with a uniform admixture of new vocabulary, expressions, structures and phrase sets, plus conversation and the initiation of reading. No written activities were included as neither writing nor homework was contemplated in this totally oral course, aimed at demonstrating and

testing the efficacy of the *Fluency*[®] techniques in the teaching of Arabic. Materials prepared for the course consisted of flashcards, class notes, a checklist, posttests and questionnaires.



Fig. 5. Front and back of a Spanish-to-Arabic A5-size vocabulary flashcard

3.2.1 Lexical and syntactical flashcards

A flashcard was prepared for each word (Fig. 5), expression (Fig. 6) and translation phrase (Fig. 7). The fronts of the lexical cards always showed the Spanish translation of the word or expression being learned, and sometimes also an image. For many words and most expressions it is not practical to include an image, as it is often difficult to find something sufficiently clear. Furthermore, there is *always* a danger of pictures causing confusion, even in the most obvious cases. For example, if someone arrives late and doesn't hear the teacher's initial presentation, they might memorise Fig. 5 (station) as 'train', 'to come', or even 'grey'.



Fig. 6. Front and back of a Spanish-to-Arabic A5-size expressions flashcard

For the 20-hour course, the following numbers of flashcards were required: vocabulary (130), expressions (51), verb-tense development (73), noun-phrase development (80), normally grouped in blocks of approximately 10 cards and kept in plastic envelopes.



Fig. 7. Front and back of a Spanish-to-Arabic A5-size phrase flashcard

3.2.2 Verb-conjugation flashcards

At *Fluency*[®], to teach the English verb tenses we use a set of 10 cards with 10 different verbs, adding a different personal pronoun or proper name to the front of each card. Once the students know the lexical forms of the verbs perfectly, they are then asked to say the pronoun/name followed by the verb with the appropriate ending. I did the same for the Arabic verb (Fig. 8), but it is more complex than the English verb and some students found this exercise difficult; it will need to be broken down into smaller steps.



Fig. 8. Front and back of a Spanish-to-Arabic A5-size verb-conjugation flashcard

3.2.3 Flashcards for the automation of reading

These cards were developed specifically for Arabic, as they are not needed for teaching English in Spain. Five sets of 28 cards were produced: the Arabic alphabet contains 28 letters, all of which represent consonants or semi-consonants, though three letters double up as the long vowels \bar{a} , \bar{i} , \bar{u} . Arabic is a cursive script, where 22 of the letters are joined to the following letter within the same word. This means that the initial, medial and final forms differ, though once you know the initial forms it is generally possible to identify the medial and final ones quite easily. The isolated, unlinked forms were not specifically included in the course, but they are very similar to the final forms. The five flashcard sets used were all syllabic (Fig. 9) or disyllabic:

- 1) Each consonant + $\bar{\mathbf{a}}$.
- 2) Each consonant $+ \bar{\mathbf{u}}$.
- 3) Each consonant + \overline{i} .
- 4) \mathbf{a} + each consonant.
- 5) **ba** + each consonant + $\mathbf{\bar{u}}$ or $t\bar{a}$ ' marbūța.



Fig. 9. Front and back of an Arabic syllabic reading flashcard

Once recognition of the letters in syllables has been automated, you move on to reading individual words and later short phrases or expressions using the backs of the vocabulary and phrase flashcards previously learned. As they already know how to pronounce the words and can recognise all the letters, they soon begin to identify and read the words and phrases aloud. This should be done, from this point onwards, chorally and individually with each set of words and phrases, once they have been taught via the three habitual sessions of drilling. This activity will prepare students to read normal Arabic texts without the help of the short vowels, which are not normally marked.

3.2.4 Drilling without flashcards, or for words which come in a natural order

An alternative to flashcards if you don't have them, and particularly useful with series of words like the numbers, pronouns, days of the week or months, is to simply write the words on the board in L1, in order, in a vertical column, and use your finger to indicate which word you want them to say in L2 at each moment. Start at the top and gradually work your way down, using the same method as with the flashcards, not introducing the next item until you can alternate randomly between the known words without any difficulty on the students' part. Do the words in order just before adding a new one. When you have taught all the words, ask each student, one by one, to recite them in order without looking, starting with volunteers.

3.2.5 Conversation development

This can be done in the same way as in standard EFL courses, but with the advantage that the students will be relatively fluent in the vocabulary and grammar they need. In levels below B1, the use of static ('non-flash') flashcards, which we call 'prompt cards', is highly recommendable, in order to give pupils ideas of what to say. This avoids wasting time while students try to think of an answer that they know how to say.

3.2.6 Class notes

At the beginning of each weekend, full information on the material to be taught was handed out in photocopied form, so that pupils would not need to take notes, thus saving time. The sheets included simple, clear explanations in Spanish of the lexemes, grammar and pronunciation, together with details of all the sets of flashcards, including, for each word or expression, the Spanish translation, the standard Spanish transcription of the Arabic pronunciation –indicating the accentuated vowel in bold type– and the normal Arabic written form (Fig. 10).

Motivation, Identi	ty and Autonom	v in Foreign I	Language	Education
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بيت
محطة
جامعة
مدرسة
دكان
شارع
شقة
مكتب
مسجد
مستشفى

Fig. 10. Details of the Vocab 1 'Places in the City' flashcards as presented in the class notes

3.2.7 Checklist

An ordered checklist was kept of all the activities carried out in the classroom, indicating the name of the activity and the numbers of each of the sessions in which it was introduced or repeated (see Fig. 11).

3.2.8 Posttest

Three strictly invigilated written tests were prepared and given to students during session 16 (see Appendix A):

- 1) *Oral comprehension*: 10 words or expressions, and 10 short phrases were read aloud twice in Arabic. Students had to write the meaning in Spanish. (10 mins.)
- 2) *Language production*: 10 Spanish words or expressions, and 10 short phrases had to be translated into Arabic. As we had not studied writing, students were not penalised for writing their answers using Spanish characters. (10 mins.)
- 3) *Reading*: Students had to write the Spanish transcription of 20 syllables written in Arabic characters, and then translate into Spanish, 16 words, expressions or short phrases written in Arabic. (10 mins.)

3.2.9 Questionnaires

During the final session, students and observers were asked to fill in questionnaires in order to give their impressions of the course and possible implications for the future (see Appendices B & C).

3.3 Procedure

The material was taught in the way –and according to the order– in which it was presented in the *Class notes*. The time required for each activity to be completed was recorded, and the checklist (Fig. 11) kept up to date so as always to know how many times, and when, each activity had been completed. Note was taken of aspects that the students found more difficult, in order to be able to adjust the methodology where necessary, and bear it in mind for future courses. On the last day the students were given the posttest and both students and observers were asked to fill in the questionnaires.

ACTIVITY: REPET	TITIONS:	1 st	2 nd	3 rd	4 th	5 th	6 th
Vocab 1: Places in the City		1	1	2	2	3	8
Expressions 1		1	1	2	3	4	5
Reading 1: 11 letters + ā		1	2	3	4	6	8
Gram 1: 8 Basic personal pronouns		1	2	3	5	7	9
Vocab 2: People		2	3	3	5	8	11
Reading 2: 7 letters + ā		2	3	4	6	8	11
Gram 2: Article al- with and without solar assimilation	l l	2	3	5	8	11	14
Vocab 3: Verbs in the present		3	4	5	6	7	13
Expressions 2		3	4	5	7	10	12
Reading 3: 10 letters + ā		3	4	6	8	11	13
Vocab 4: Mixed nouns		3	7	8	11	15	
Vocab 5: Particles		4	6	8	14	15	
Reading 4: 28 letters + ū		4	6	8	9	13	15
Expressions 3		5	7	10	12	15	
Gram 3: Verb adhabu in the present		5	6	7	9	11	
Vocab 6: Classroom objects, etc.		5	7	11	13	15	
Gram 4: Prepositional phrases		6	8	14	14		
Gram 5: Verbs in the present tense		6	7	9	13		
Vocab 7: Personal objects		7	8	10	14	15	
(Gram 3:) Verb <i>adhabu</i> in the present negative $(+ l\bar{a})$		7	9	13			
Gram 6: Present negative of verbs $(+ l\bar{a})$		7	9	13			
Expressions 4: Presentations and greetings		7	10	12	15		
Vocab 8: Mixed nouns		8	9	13			
Gram 7: Present interrogative of verbs (hal)		9	10	13			
Vocab 9: Prepositions		9	12	14			
Gram 8: ' <i>indī</i> "I have" all persons in the affirmative		9	10	14			
Reading 5: 28 letters $+\bar{1}$		9	13	15			
Expressions 5		10	12	15			
Gram 9: ' <i>indī</i> "I have" all persons, affneginterrog.		10	14				
Vocab 10: Days of the week		11	12				
Gram 10: Verb <i>adhabu</i> in the future aff. + interrog.		11	12				
Gram 11: Verb <i>adhabu</i> in the future neg.		11	12				
Reading 6: $\bar{a} + 2\bar{8}$ letters		11	13	15			
Vocab 11: Regular adjectives		12	13	15			
Gram 12: Verb <i>adhabu</i> in the future aff. + neg. + inter	rog.	12					
Expressions 6: Presentations dialogue	-0	12	15				
Vocab 12: Particles 2		13					
Gram 13: Personal possessive ending		13	15				
Reading 7: ba + 28 letters + $\mathbf{\bar{u}}/t\bar{a}$ ' marbūta		13	15				
Gram 14: Demonstratives pronouns			15				
Gram 15: Negative with <i>laysa</i> (8 forms)			15				
Gram 16: The noun phrase			15				
Gram 17: $T\bar{a}$ ' marb \bar{u}_{ta} + possessive suffix							
Reading 8: Reading words from backs of cards							
Gram 18a/b: Complement of <i>lavsa</i> with <i>-an</i>		15					
Gram 19: Aff. & neg. adjective phrases + laysa with -a	ın	15					

Proceedings of CLaSIC 2018

Fig. 11. Checklist showing the activities done in class and the sessions in which they were done (Pocklington, 2015, p. 59).

3.4 Data treatment

3.4.1 Marking of posttest

The tests were marked according to the 'proportional correctness' of each answer, i.e.

how much the answer was worth in proportion to a totally correct answer. The resulting totals were then converted into percentages for each of the different parts of the exam. The results are shown in Table 2, below.

3.4.2 Conversion of questionnaire scores into percentages

Most questions required answers on a scale of 1-5, where 1 indicated "I totally disagree" and 5 "I totally agree". In order to convert these answers into percentages, 1 was counted as 0% in agreement, 2 as 25% in agreement, 3 as 50% in agreement, 4 as 75% in agreement, and 5 as 100% in agreement. The average percentage was then calculated for the whole sample.

4 Results

4.1 Time requirements for the different activities

The time requirements for teaching oral *Arabic* to Spaniards did not turn out to be significantly different from those normally found when teaching oral *English* to Spanish speakers, taking as a basis our experience at *Fluency*[®]. The average time needed for the different types of sessions (Table 1), on the first, second and third occasion that the activity was carried out, was as follows:

- First session: 15-17 mins.
- Second session: 3-6 mins.
- Third session: 2-4 mins.

	SESSION 1	SESSION 2	SESSION 3	TOTAL
Memorisation of 10 words	16	4	2	22
Memorization of 10 expressions	17	3	3	23
Grammar exercises with flashcards	16	6	4	26
Automation of Reading	15	4	3	22

 Table 1. Average time requirements in minutes for different types of drilling sessions

The total time employed in the teaching the 12 sets of vocabulary, over all the sessions, was 274 mins. (4h 34 mins); for the 5 sets of expressions, 115 mins (1h 55 mins.); for grammar and structures (basically noun-phrase development and verb conjugation), 453 mins. (7h 33 mins.); and for reading 192 mins. (3h 12 mins.). To this must be added 60 mins. (1h) dedicated to incipient conversation practice.

All of this made a grand total of 18h 14 mins. of actual teaching time in the officially 20 hours of classes. In that time students learned 130 words, 51 expressions, the formation of the present and future tenses, how to build different types of noun phrases, and began to read. Full details of the exact content of the course can be found in Pocklington 2015. Not all the content had been solidly memorised or automated, because many items had yet to be done three times; if the sessions had continued for two more weekends it would have guaranteed, in most cases, the proper learning of all that material, but leaving new material only partially learned.

4.2 How well did the students learn?

According to the results of the tests (Table 2), all students except one reached a very good level: in 50% of the cases the mark obtained was over 90%, and in 83% of cases over 70%. Only *Pupil 1* struggled to learn: she did quite well with words and expressions but faltered when it came to grammar and reading. This may be due to the fact that several members of the group were false beginners and the class may have moved too quickly for her; it is difficult for a pupil to learn with this kind of teaching if they fall behind (for information on the students' initial levels and previous learning experience, see section 3.1.1).

DUDH	ORAL COMPREHENSION		LANGUAGE PRODUCTION		READING		AVERAGE
TOTIL	Words & Expressions	Phrases	Words & Expressions	Phrases	Syllables	Words & Phrases	MARK
Pupil 1	50	18	46	19	23	5	27
Pupil 2	65	92	61	60	90	64	72
Pupil 3	100	84	65	81	95	44	78
Pupil 4	100	97	90	75	100	91	92
Pupil 5	93	98	90	80	90	96	91
Pupil 6	100	99	85	77	95	91	91

Table 2. Marks obtained by the trial group, registered as percentages for each
skill (Pocklington, 2015, p. 79)

The use of flashcards for automating *reading* must be considered a success, especially the part referred to syllable recognition, where five of the six students got over 90%. Although we had only just begun to read complete words, *Pupils 2 & 3* (despite starting more or less from scratch) also obtained satisfactory marks in the reading of words and phrases. It is probable that *Pupils 4-6* were at a distinct advantage in this part of the work, due to their previous experience with Arabic, where reading and writing tend to be the first (often the only) thing learned.

4.3 What were the opinions of the students?

One important objective of this Experimental Course was to elicit the students' opinions about what it was like to be taught in this way, especially as the methodology is very different from other usual modern-day language-teaching methods. We were particularly interested in knowing whether they had enjoyed the classes, if they had needed to study, if they would rather have studied than be drilled, if they would like to continue learning in this way, and if they though they would be able to get by in Arabic if they carried on learning with the methodology. Their highy favourable responses were as follows (the points scores are also given, between square brackets; the full answers to all the questions can be found in Appendix B):

- 1) Students agreed 95% [45555] that the classes had been engaging and enjoyable.
- 2) They agreed only 5% [11122] that they had needed to study in order to keep up.
- 3) They showed only 15% [11123] inclination for studying on their own rather than

coming to the group and being drilled.

- 4) They agreed 95% [45555] that they would like to continue learning in this way.
- 5) They agreed 75% [34445] that they would be able to get by in Arabic in 120 hours (= 5 courses like this one).

4.4 What were the opinions of the teacher-observers?

The teacher-observers agreed with the pupils, though somewhat less effusively. Amongst other points, they considered the classes 66% [134455] enjoyable for the students, and they agreed that it was a good system for teaching *words and expressions* (88%) [345555], *structures and grammar* (63%) [134445], initiation to *reading* (63%) [134455], and developing *conversation* (71%) [334445]. They coincided (67%) [134455] in that the pupils would be able to get by in Arabic after 120 hours; one of the 'fives' wrote 'A1' in the margin. And they agreed (67%) [134455] that more people would enrol for Arabic if it were taught in this way.

Asked about their own attitudes, the teacher-observers disagreed -8% [111113]– with the statement that pupils "are the only ones responsible; if they do not study, and fail, it is their problem". On the other hand, they agreed 100% [555555] that they would like to be able to guarantee that their pupils learned; that teachers should adapt their methods so that pupils learn as much as possible; that they would change their way of teaching if it improved their pupils' results; that it was important to increase the number of Arabic students; and that it was important that those who began reached a good level.

Asked whether they would use the methodology, they agreed (67%) [134455] that they would consider it, and agreed (71%) [234455] that with a little practice they could teach in that way, if they were given the materials. The full answers to all the questions on the teachers-observers' questionnaire can be found in Appendix C.

5 Discussion

5.1 Advantages of oral flashcard training over private study

Comenius (1657, p. 92) was a strong advocate of oral repetition in class over private study because it allowed students feedback and made sure they all participated and learned. At the same time, Lieury (2002, pp. 40-3) insists on the importance of oral rather than silent repetition during memorisation, as it increases learning by more than 50% and helps "build the articulatory programme" of new words. He also insists that memorisation must be "multi-episodic" (p. 210), that is to say occurring on many separate occasions, rather than successively.

A person may begin to become fluent in the utilisation of a word or expression after using it on at least 20-30 non-successive occasions. All language students get fluent in the use of a few basic words and expressions because they come up so often in the classroom. Private study generally fails to develop fluency because repeating words successively at home (casa: *bayt, bayt, bayt, bayt, bayt...*), perhaps as many as 30-50 times but divided up into say 4-8 separate blocks of 4-8 successive repetitions, is insufficient to develop long-term memory or fluency, as it is equivalent to only 4-8 distinct repetitions, falling short of the estimated minimum of 20 or 30 required. With flashcard drilling, each card gets (depending on the difficulty of the word) 12-25 *non-successive* repetitions in the first session alone. Each time the word comes up, the student has to retrieve it once more from their memory, as they have been pronouncing other words in the interim.

With phrase-building the situation is similar. When grammar-based exercises are done as homework, the student probably writes 10-15 sentences, generally without correction. In contrast, using a set of 13 flashcards, in the three sessions of oral practice you will probably do over 50 constantly-changing phrases, where the immediate correction available prevents the possible consolidation of mistakes.

Drilling only ceases when the group's mastery is uniform and easy, so fluent access to words and agile handling of grammar norms is always assured. With private study, in the absence of interactivity, there is no such guarantee, and even the most diligent students can come into class with a defective command of vocabulary and grammar rules.

5.2 Is there time for drilling in class?

When I defend the need to transfer these essential components of homework into the classroom, teachers often argue that it wouldn't leave them time to complete the programme. Fortunately, this is not the case. In a normal L2 class, teachers dedicate a significant amount of time to structure practice, grammar exercises and question-and-answer routines aimed at interiorising new vocabulary. They generally also need to include sessions of revision to help floundering students catch up (usually without success). With the introduction of drilling, all these activities cease to be necessary.

On the other hand, without the preliminary drilling of lexical items and grammar structures, the practice of language in situations and all other conversational activities become arduous and stressful for both teachers and pupils, as many students neither find it easy to remember the new words and structures, nor can they pronounce them well. The consequent sluggishness means that most students get few turns and have little chance of reaching any level of fluency in the classroom. The same is true of phrase-building and sentence-formation: any student who has not first become fluent in the vocabulary to be used will find it hard to develop any level of skill in these operations. In this sense, the general need to break down complex learning problems into simple steps in education is well-established, as it is known to both speed up learning and reduce stress in learners by minimising the number of mistakes made (Holland, 1960, pp. 221, 226-7; Meyer, 1960, p. 236; Montessori, 2003, pp. 256, 301-2; Russell, 1998, pp. 52-3, 59, 222-3).

5.3 Possible composition of a CEFRL level A1.1 course

In accordance with the time requirements indicated in Table 1, a 60-hour beginners' Arabic level A1.1 course (Table 3), using the *Fluency*[®] method, might take 15 hours to memorise 410 words, 2 hours to memorise 52 expressions, and 25 hours to automate 57 structural rules using phrase sets and other oral exercises. It would then dedicate approximately 10 hours to conversational activities –through the practice of standard dialogues, language for specific situations and free conversation–, 5 hours to basic reading skills and 3 hours to an introduction to writing (leaving further writing practice to be done at home).

410 words @ 22 min./set of 10	15 hours
52 expressions @ 23 min./set of 10	2 hours
57 grammar/phrase sets @ 26 min./set	25 hours
Conversational exercises	10 hours
Letter, syllable and word-reading practice	5 hours
Initiation to writing	3 hours
	60 hours

Table 3. Breakdown of a typical CEFRL level A1.1 Arabic course

Two courses of this type would bring students approximately up to CEFRL level A1 in 120 hours with little or no personal commitment outside the classroom, though obviously if they didn't practise writing at home they would be unlikely to reach level A1 for that skill.

5.4 Some pros and cons

The fact that class time is precious and expensive means that it should be employed on making sure that all the students learn the *spoken* language, an objective which we consider can only be achieved effectively, if we want to teach *most* students, through oral drilling and conversation in the classroom. This barely leaves any time for writing and extra reading. However, these can safely be set as homework as they do not require the presence of the teacher and, if they are not done, students will continue to learn to speak the language, as long as they keep coming to class. Failing to do homework will not prevent pupils from succeeding in class.

Spending an important part of the class on the drilling vocabulary and phrase-building means that students become especially competent at speaking, but they get less listening practice than in a typical modern-day language class, because during the drilling the teacher speaks very little. In comparison, the question-and-answer routines used in standard language courses to interiorise vocabulary and structures result in the teacher using L2 a lot more; replacing these exercises with drilling has the disadvantage of reducing listening opportunities. It is therefore important for the teacher to take every opportunity to speak in English, apart from the part of the class dedicated to conversation and situational language.

In practice, not unexpectedly, a lot of students do relatively little reading and writing at home. From our experience in the teaching of English in Spain, when students take external exams, their writing marks tend to be very good and their reading much weaker. This is no doubt because they are experts at producing correct oral language, so that as long as they can spell (a skill usually also developed at school), they do well in writing and composition. On the other hand they can run into difficulties in the reading part. This is not only due to their not doing enough reading at home but also because they are competing with a majority of possibly keener and more studious pupils, whose classes are normally larger unless they can afford private tuition, meaning that they have less opportunity to develop their speaking skills, whilst they read a lot both in class and at home, 'setting the bar high' for everybody in this part of the exam.

5.5 Isn't the drilling boring?

People who have not been taught in this way, and hear about this method, tend to think that the drilling must be boring. I would give them the example of a Martian who visits the Earth and sees people playing tennis. Back and forth, back and forth... From the outside it seems meaningless and trivial. But for most players it is anything but tedious, as they are *struggling* for victory, or survival. The same is true when you are on the 'receiving end' of flashcard drilling. You are aware that within a few minutes you are going to be tested in the individual rounds. Anyone who has gone through this experience knows how tense you can feel until you are comfortable in the choral drill. In this sense we don't need to worry about the faster students getting bored while they wait for the teacher to move on to a new word: instead they are happy that they can relax for a few seconds because they know all the answers. If any doubts linger, I would remind the reader of the results of the survey quoted in section 4.3, in which students found classes 95% 'engaging and enjoyable', and were 95% interested in continuing to learn in this way.

One extra advantage of working orally with the whole class in choral drills and similar group activities is that students' attention is retained over long periods of time, not allowing them to disconnect, get bored and begin to distract other students. Fontana (2000, p. 63) emphasises that being able to capture and hold the interest of the pupils is the best strategy that a teacher has in order to maintain satisfactory levels of control in the classroom.

5.6 Are the faster students prepared to wait for the slower ones?

Holding the whole group uniformly at the same level begs the question of whether the faster students might get bored at having to wait for the slower ones. Successful students mainly get frustrated in traditional classes when the less-successful ones have fallen so far behind that the teacher has to spend long periods of time on revision; or when weak students do not remember the vocabulary, or understand the grammar, and take a long time to answer the teacher's questions.

Replacing homework by drilling alleviates this situation by not allowing students to fall far behind. Intelligence is a recognised differentiating factor between students (Coll & Onrubia, 2001, p. 194; Coll & Miras, 2001, p. 343). However, Eysenck (1966, pp. 15-16) points out that although brighter students think faster, less intelligent students get there if they are given time. The quicker students do not get bored during the drill because the time that they have to wait for the slower ones is divided up into very brief periods. If, for example, the brightest pupils learn 50% faster than some of the others, this means that the fastest ones will pick up a new word in 10 seconds and the slowest ones in 15; therefore the initial memorisation has to go on for 15 seconds, 5 seconds longer than the fastest ones need. This short wait does not become frustrating because they are busy repeating; and the 'over-learning' which this might cause is quite likely to be beneficial.

5.7 Couldn't the students just drill themselves?

Yes. You can drill yourself with mini-flashcards, using them in the same way as the teacher in a $Fluency^{\text{®}}$ class. I have known cases of people who, after explaining this system to them, have taught themselves in this way literally thousands of new words in a

language that they were learning. The main problem is how to get hold of, or make, all the mini-flashcards, particularly those needed for grammar automation.

However, most people are not prepared to do this. Good teach-yourself courses have always existed and flashcards are available on the internet. What is lacking is the constant motivation needed to keep using these materials day after day, week after week, month after month and year after year until you learn the language. In comparison, most people who want to learn a language have sufficient will-power to drag themselves to classes regularly, provided they see that they are learning. This suggests that replacing classes by individual learning will never be easy, and indeed could end up never happening.

5.8 Theoretical quandaries

5.8.1 Isn't translation harmful when learning a second language?

The *Fluency*[®] methodology assumes that until we become highly proficient and can 'think' in the second language, the idea we wish to express appears first in our mind in our mother tongue. At this stage, production of the L2 sentence can only happen if we apply all the transformation ('translation') rules that we have learned. We implement the trivial but fundamental premise that "L2 is the same as L1 except where it is different" (Comenio, 1657, pp. 124-5), and translate word-for-word, changing only the order of the words or adding or removing particles if we have learned to do so. With extended practice, whole chains become automated and we begin to transform frequently-used L1 strings directly into their L2 equivalents without needing the smaller steps. Finally the idea itself begins to emerge in our minds directly in L2, when the step of going through L1 is also automated or somehow bypassed, at which point we can say that we are thinking in L2. This model explains why mere *immersion* in a second language normally fails to produce perfect grammatical speech even after decades, unless the learner studies the language at the same time. And it would predict that those language studies would need to constantly refer back to L1 in order to *understand* the meaning of the L2 expressions being learned, and would need to automate the same steps linking the L1 structure to the L2 structure –in order to be able to produce the L2 structure correctly- before automating that chain and eventually bypassing L1 altogether.

The assertion made by Krashen and others (Richards & Rodgers, 2001, p. 162) that language skills acquired through instruction in this way *cannot* lead to true natural conversational ability is inexact, provided the instruction received enables the student to reach an adequate level of lexical and grammatical fluency. Our conscious linguistic knowledge of L2 *must* permanently monitor our production as we move towards authentic conversational fluency; without this monitoring, we will be doomed to speak L1-influenced ('Tarzan-style') language for ever, even in circumstances of long-term immersion in L2. Immersion teaches all children to speak their mother-tongue perfectly, but it does not have this effect on immigrants, who normally never learn to speak their adoptive language perfectly. There is a saying that 'Practice makes perfect', but it is not true in this case; in second-language learning the competing saying '*perfect* practice makes perfect' is applicable, and this can only be achieved by combining practice with study.

5.8.2 Wouldn't this method produce fragmentary knowledge?

It could be argued that teaching in this way would produce fragmentary knowledge, and

that students would not be able to put the pieces together when they wished to speak. In the sixties, Holt (1984, pp. 145-6) argued, "Many people claim that any field of knowledge or experience can be turned into a series of questions and answers – *programmed learning*", and he added, "If I am given the questions I can remember most of the answers, but I can never remember the questions", criticising "the apparently endless gravy train of programmed instruction and machine teaching, onto which everyone and his brother seem to be happily clambering" (p. 178).

In language learning with flashcard drilling, the stimulus is an idea in L1 represented on a flashcard, and the reaction is the uttering of a word, or several words in L2. When there is one word or a compound *lexeme* on the card, the drill automates its retrieval and pronunciation in L2. When there is an L1 *phrase* on the card, the retrieval and pronunciation of each word or lexeme has previously been automated and the problem is to utter these in the correct L2 order, inserting or removing grammatical particles according to the L1 > L2 transformation rules automated in the phrase-building drills. Vygotsky (1997, pp. 63, 139) emphasises the "extraordinarily great psychological importance" of automatism and explains, "the process whereby the reaction is recalled is subordinated to an internal stimulus as its basic impetus. All the various parts of the recollected reactions are then linked up so that the response to one reaction serves as the stimulus of a succeeding reaction".

The production of *phrases* in L2 is an example of this complex linking of stimuli and reactions in an automated chain. The words and lexemes are retrieved, but instead of being uttered, they are mentally put at the disposal of the grammar rule which then orders them, inserting or removing the necessary particles, and utters them.

5.8.3 The hypothetical impossibility of a universal method

Over the history of education there has been much discussion as to whether it is possible to teach all students in the same way, with a 'universal' method, as is proposed here. Comenius (1657, p. 81) was a firm advocate of this, and the idea that you can design a method for everybody from the experience of teaching just a few students is found in many authors (Montessori, 2003, p. 113, 119; Russell, 1998, 41; Gilbert, 1960, pp. 478-80; Blanco, 2007, p. 424).

On the other hand, in the twentieth century, voices have been raised against such a possibility, pointing out that all students are different and will inevitably need to learn in different ways (Richards & Rodgers, 2001, pp. 21, 247-9; Dörnyei & Ottó, 1998, p. 44, 65; Heredia Manrique, 2004, pp. 30-2; Coll, 1999, p. 12; Segura Ramos, 2004, p. 91). The idea of teaching everyone with one common method –which, logically, has to work with the weaker students– is criticised by Freinet (1996, pp. 176-7), arguing that there are students who can learn many times faster, who would find it terribly frustrating. The latter opinion fits in with our experience at Fluency, though the difference does not seem to be so extreme if it is not allowed to grow by leaving the weaker students behind.

5.8.4 Isn't this 'mere' instruction?

Instruction went out of fashion in the 1970s. Onrubia, Rochera & Colomina (2001, pp. 443-7; *trans. Sp.*) summarise the criticisms as follows:

1) It does not take into account the intra-psychological, cognitive, affective, emotional

and motivational processes.

- 2) It converts the teacher into a technician following a script, which is not compatible with their role as an organiser and a guide in construction.
- 3) It is not sustainable from the constructivist standpoint, which centres around the pupil's activity and not the teacher's.
- 4) It attempts to establish teaching methods not linked to content, purported to work *urbi et orbe*, which cannot be.

However, it *is* possible to prove that instruction works and it is *not* possible to prove that it doesn't. The fact that the drilling methodology described here works proves that the above criticisms of instruction are incorrect or not relevant. 1) The drilling methodology clearly *does* 'take into account the intra-psychological, cognitive, affective, emotional and motivational processes'. 2) All teachers must follow scripts, otherwise their teaching will be chaotic; organisers follow carefully prepared plans. 3) If instruction is not compatible with the constructivist standpoint, the constructivist standpoint will need to re-examine its tenets. And point 4 is not a reason.

Instruction means limiting language teaching to concrete goals, which are best achieved by training, in all its forms; and training has to be carefully planned. Vygotsky (1997, 55) states that "only specific goals may be assigned to the educational process... from the scientific point of view, it is meaningless to speak of abstract ideals for education, for example, the development of an indivisible and harmonious personality, or of an educated and civilised person, since this says absolutely nothing about all those relationships we have to make use of in the educational process".

5.8.5 Isn't this spoon-feeding?

No, because with this kind of teaching, to be successfully 'spoon-fed', the pupil has to permanently stretch her or his capacities to the limit, and constantly develop new capacities; quite different from just sitting there and opening your mouth. In this respect, Dweck (1986, p. 1041) observes, "Appropriately challenging tasks are often the ones that are best for utilizing and increasing one's abilities". The *Fluency Method*[®] just provides an endless chain of appropriately challenging tasks.

6 Conclusions

Most literature on teaching second languages is focused on attempting to develop a theoretically sound course, and does not pay sufficient attention to ways of assuring that the majority of students actually learn. It is simply assumed that they will have sufficient opportunities to practise with native speakers, or will be prepared to put in the necessary hours of homework. However, a large percentage of pupils lack the long-term commitment, motivation and resilience required to learn a foreign language through language courses based on classes combined with private study.

In this paper it is proposed that the motivating factor used to assure learning be *success*, based on the classroom drilling of all lexical content and phrase-building skills. Apart from guaranteeing learning, flashcard drilling is more effective than private study in the development of *fluency*, due to the interactivity and immediate feedback that it allows. Drilling makes it possible for *all* students to walk into class with the same level of recall of previous material that diligent students achieve by doing their homework.

The principal components of a *Fluency*[®]-style course are oral drilling and conversation. Class time is expensive and is best employed making sure that all the students develop global mastery of the language. There is little reading or writing; these activities can be done at home and do not require the presence of the teacher. If they are not done, students will continue to learn to speak the language as long as they keep coming to class; not doing their homework will not prevent pupils from succeeding in class.

In order to save time, drilling is choral. It displaces other, less effective classroom activities like traditional grammar exercises, question-and-answer routines aimed at consolidating new vocabulary, and revision. At the same time it facilitates and speeds up situational language activities and conversation practice by making sure that students have all the words and structures 'at their fingertips' when they speak.

The interactivity of drilling is like tennis: you respond to each flashcard as soon as you are shown it, and depending on the quality of your answers the teacher continues repeating previous items or begins to teach a new one. Vocabulary drilling should produce reflex knowledge, while phrase drilling requires students to refer mentally to the grammar rule each time until they can form phrases automatically. Reading Arabic is a skill which is much more effectively developed with flashcards than in any other way.

Rhythm in flashcard drilling helps students to concentrate and enjoy the activity, and is used by the teacher to make sure that the session is neither too difficult nor too easy, producing an effect known as 'flow'. Good students do not get bored waiting for slower students because the latter are never allowed to fall significantly behind. A new word or rule is not introduced until everyone has mastered the previous ones, which means that the gulf which often separates successful students from less-successful ones never develops.

Flashcard drilling in the classroom is the best way to equip all students with a solid linguistic base on which to found their developing competence in the new language. Teachers who adopt this form of teaching will need to find ways to get students to read on their own, to perfect their spelling, and make sure they get extra listening practice. In exchange, they will have a happy group who progress together at a good pace, rarely drop out, and go on to speak the language well.

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[The abbreviation *(trans. Sp./It.)* indicates that the quote has been translated from Spanish or Italian.]

Appendices

Appendix A: Posttest

Section 1: Oral comprehension

10 words or expressions, and 10 short phrases were read aloud twice in Arabic. Students had to write the meaning in Spanish. (10 mins.)

Proceedings of CLaSIC 2018

 مسجد ٢. رجل ٣. قهوة ٤. المدينة
 الشّارع ٢. أكتُب ٧. هم يشربون ٨. بالسّلامة
 مساء الخير ١٠. من فضلكِ ٨. هل هو يتكلم العربية؟
 ٢. الكتاب ليس على الطّاولة.
 ٣. الولد يسكن في الشّقّة.
 ٤. سيّارتي ليست هنا. هي في البيت.
 ٥. هل عندك كلب؟
 ٢. هو يذهب الى المستشفى.
 ٧. الأستاذة امام الحاسوب.
 ٨. نحن لا ندرس في المدرسة. ٩. هم يعملون في شركة كبيرة. ١٠. امّنا لا تأكل اللّحم.

Section 2: Language production

10 Spanish words or expressions, and 10 short phrases had to be translated into Arabic. As we had not studied writing, students were not penalised for writing their answers using Spanish characters. (10 mins.)

1.	Hospital	6.	Antes de la clase
2.	Hombre	7.	En árabe
3.	El periódico	8.	¿Quién es ella?
4.	La empresa	9.	Nuestra ciudad
5.	Tú (f) hablas	10.	Hasta luego
11.	Mi madre bebe té	12.	No estudiamos español
13.	ζ Te gusta el pescado? - Sí.	14.	¿Dónde está vuestra casa
15.	¡Por favor pasa! (f)	16.	¿Tienes tiempo? - No.
17.	El piso es grande	18.	No estoy cansado
19.	Escribiré una carta	20.	No irán con ella

Section 3: Reading

Students were asked to write the Spanish transcription of these 20 syllables (below) written in Arabic characters, and then translate into Spanish, the 16 words, expressions or short phrases (further below) written in Arabic. (10 mins.)

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Appendix B: Pupils' questionnaire

In questions 1-10, indicate, for each statement, a score between 1 and 5, where:

- 1 = I totally disagree -5 = I totally agree
- 1) The classes were ENGAGING AND ENJOYABLE. [45555]
- 2) I PREFER TO STUDY AT HOME rather than learn in a group as we have done here. [11123]
- 3) In spite of coming to class I had to study AT HOME in order to keep up. [11122]
- 4) I learned all the WORDS AND EXPRESSIONS that we did very well. [24444]
- 5) I learned all the STRUCTURES/GRAMMAR that we did very well. [24445]
- 6) I learned all the READING that we did very well. [24455]
- 7) I would like to do exercises at home to learn to write. [44555]
- 8) I would like to continue with the Experimental Course next year. [45555]
- 9) At this rate I think I would learn to get by in Arabic in 120 hours (= 5 courses like this one). [34445] (the first student added "I couldn't say")
- 10) I think more people would enrol for Arabic if it were taught using this method. [34455]
- 11) What aspects of Arabic do you think should have received more attention? Was something missing? What?
- 12) Make a critical evaluation of the course.
- 13) Other observations, comments or suggestions.

The point scores which were given to questions 1-10 are indicated in square brackets. The textual answers to questions 11-13 (in Spanish) can be found in Pocklington, 2015, pp. 81-2.

Appendix C: Observers' questionnaire

In questions 1-14, indicate, for each statement, a score between 1 and 5, where:

1 = I totally disagree -5 = I totally agree

- 1) The classes seemed to me very ENGAGING AND ENJOYABLE for the pupils. [134455]
- 2) I think it is a good idea to use this method to teach WORDS AND EXPRESSIONS. [345555]
- 3) I think it is a good idea to use this method to teach STRUCTURES/GRAMMAR. [134445]
- 4) I think it is a good idea to use this method for INITIATION TO READING. [133455]
- 5) I think it is a good idea to use this method to DEVELOP CONVERSATION. [334445]
- 6) I would like to be able to GUARANTEE that my pupils learned. [55555-]
- 7) The pupils are the only ones responsible. If they do not study, and fail, it is their problem. [111113]
- 8) Teachers should adapt their methods so that pupils learn as much as possible. [555555]
- 9) I would change my way of teaching to improve my pupils' results. [555555]
- 10) I would like to start using these techniques in my classes. [134455]
- 11) At this rate I think the pupils would learn to get by in Arabic in 120 hours (= 5 courses like this one). [134455] (One of the fives wrote 'A1' in the margin.)
- 12) It is important to increase the number of Arabic learners, and that those who begin reach a good level. [555555]
- 13) I think more people would enrol for Arabic if it were taught using this method.

[134455]

- 14) With a little practice I could teach in this way, if I were given the materials. [234455]
- 15) What aspects of Arabic do you think should have received more attention? Was something missing? What?
- 16) Do you think it would be convenient/feasible to begin to use this method of teaching in the Spanish Official Schools of Languages and/or Universities? Why?
- 17) Other observations, comments or suggestions.

The point scores which were given to questions 1-14 are indicated in square brackets. The textual answers to questions 15-17 (in Spanish) can be found in Pocklington, 2015, pp. 83-5.