

## Teaching and Learning Vocabulary: Insights from Learning Styles and Learning Theories

Ahmed M. S. Alduais\*

*Institute of International and Comparative Education, Faculty of Education, Beijing Normal University, Beijing, PR China*

\*Corresponding author: Alduais AMS, Institute of International and Comparative Education, Faculty of Education, Beijing Normal University, Beijing, PR China, Tel: +86 132 600 80 166; E-mail: [ibnalduais@gmail.com](mailto:ibnalduais@gmail.com)

Received date: Jan 17, 2018, Accepted date: Feb 05, 2018, Published date: Feb 16, 2018

Copyright: 2018 © Alduais AMS. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

Learning styles like (Visual, Auditory, Kinaesthetic) as in the VAK theory and (Visual, Auditory, Read/Write, Kinaesthetic) as in VARK, and the Mind Styles Model (i.e. concrete vs. abstract perceptual abilities and sequential vs. random ordering abilities)—propose in one way or another individualisation of education (i.e. mainly here learning and teaching languages as in TESL and TEFL). Similarly, learning theories propose different interpretations for the system of learning as in (behaviourism, constructivism, cognitivism, social psychology, and connectionism)—through which learning and teaching should take place. Five models were proposed approaching these issues with the first model for the vocabulary system (i.e. form aspect(s), meaning aspect(s), and distribution aspect(s), the second model for integration of learning theories and five types of aids (visual, audio, audio-visual, action and multimedia aids), the third, fourth and fifth models for three learning styles' theories (i.e. VAK, VARK, and the Mind Styles Model). Given that my approach was only based on my designed models inspired by the original theories, conclusions included that experimental and behavioural based evidence is needed to give credibility for the effectiveness of using learning styles towards more effective teaching of vocabulary. With this in mind, it was proposed that learning styles could be used as indicators other than reliable and valid diagnostic tools for the learners' preferences—helping teachers to consider the use of as many as possible of the five introduced types of aids while teaching vocabulary—enhancing the implications from the learning theories, too.

**Keywords:** Learning styles; Vocabulary teaching; Vocabulary learning; Learning theories

### Introduction

Language is represented through language components and language skills. The former include: sounds, grammatical structures and vocabulary; and latter include: receptive language skills (listening and reading) and productive language skills (speaking and writing) [1,2]. Vocabulary teaching to learners of English as either TEFL or TESL (i.e. Teaching of English as a Foreign Language or Teaching of English as a Second Language) includes controversial arguments about the most effective teaching methods that can result into more effective learning situations [3]. On the one hand, learning theories propose different views on how learning should take place and based on that both learning by learners and teaching by teachers should match such inferred findings about learning these theories including but not limited to those presented in Figure 1 [4]. On the other hand, learning styles are proposed towards more effective learning by learners and teaching by teachers—assuming that when learners know their students' learning styles; they-learners can learn more effectively. Similarly, when teachers know their students' learning styles, they-teachers can use more appropriate teaching methods that would nearly match all the learners' preferences [5-8]. A large number of scholars argue about the efficiency and effectiveness of learning styles [5]. Interestingly, the learning theories themselves are also arguable. By all means, the proposed assumption in learning theories and learning styles seems to be valid and several researches also supported their views and findings. With this in mind, we intended to argue in this paper by presenting a number of models for three learning styles—linking them to a model of

the lexical items structure and a learning theories model—along with the use of teaching aids towards a more effective teaching of vocabulary. This argument is more based on a paper presented by Alduais [3,4] where he claimed the integration of language learning theories and aids would lead to a more effective teaching of language components and language skills.

### Methods

This paper is analytic and based on published research about learning styles, learning theories and teaching of vocabulary [9,10]. The presented models are mainly based on the original works of the proponents of the three learning styles (VAK, VARK and the Mind Styles Model).

### Results: Presentation of Models

The following section is a presentation for the five designed and proposed models by the researcher—reflecting the understanding of vocabulary system, learning theories integration and aids, and three learning styles (Figure 1).

The above model was proposed for analysing a lexical item to contrast two lexical systems of two languages, dialects, etc. [11], and for testing lexical items [10]; and finally for teaching and learning vocabulary using the different types of aids [9]. A systematic teaching and/or learning should include all these aspects and the order and priority of which aspects should go first or to be included is determined by the learning purposes. In other words, form with all its aspects, meaning with its aspects and distribution with its aspects would rarely be completely targeted by both TESL and TEFL learners.

Regardless of which aspects should be taught to who and when, in this model it is assumed that learning theories and learning styles apparently fail to approach this framework comprehensively. The gap among learning styles, learning theories, use of aids for teaching and learning vocabulary will be discussed below.

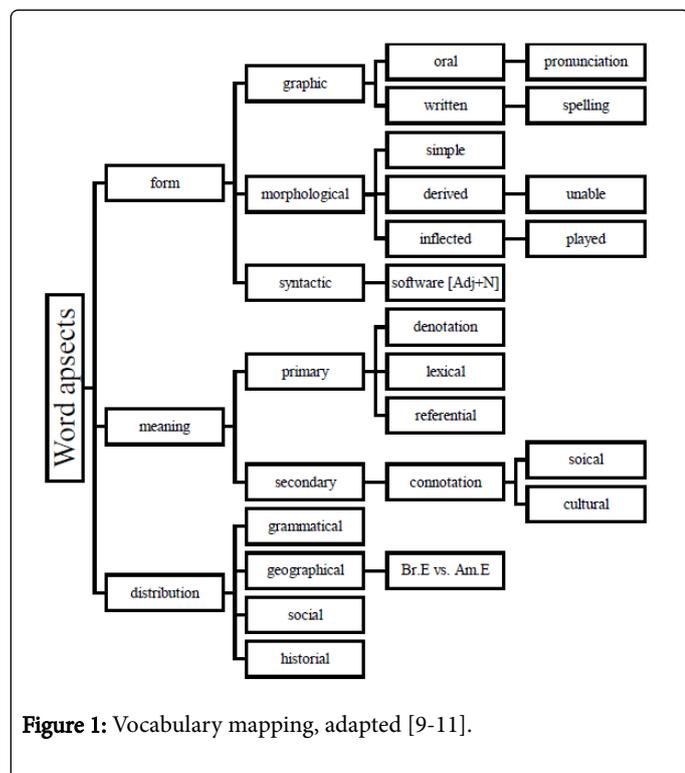


Figure 1: Vocabulary mapping, adapted [9-11].

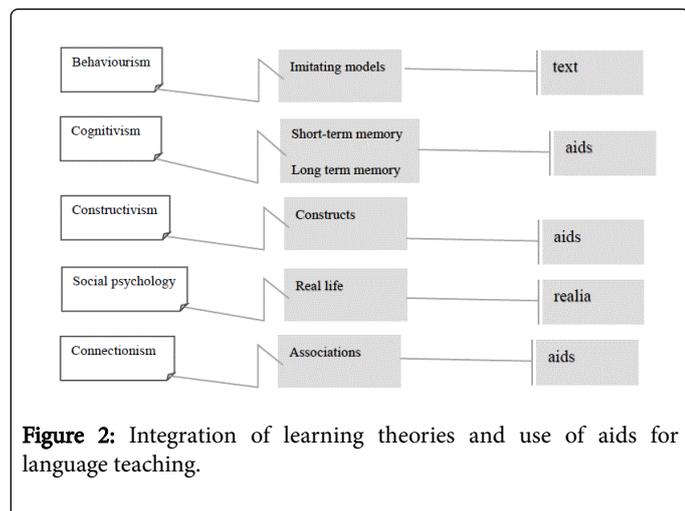


Figure 2: Integration of learning theories and use of aids for language teaching.

Alduais [4] accounted for learning theories and language teaching aids where he emphasized on the integration of these towards a more effective language teaching and learning. The above model summarises his argument where five learning theories were introduced as in the first set of boxes (Figure 2). The boxes in the centre represent the views of these theories for learning and the third set represents the possible aids that match the proposed assumptions of each theory. As can be seen in both behaviourism and social psychology, there is a limitation in the use of aids. Other theories imply the use of as many aids as possible to build the maximum number of constructs as in

(constructivism), to make sure that words are not only stored in the short-term memory, but also the long term-memory through different aids as in (cognitivism), and to make the maximum number of association for each lexical item as in (connectionism).

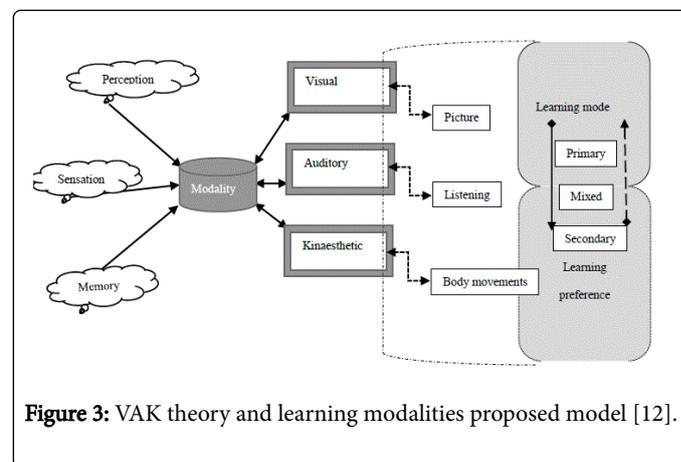


Figure 3: VAK theory and learning modalities proposed model [12].

Learning modalities was proposed in 1979 by Walter Burke Barbe and colleagues and it is based on perception, sensation and memory where three learning styles are formed: visual, auditory and kinaesthetic (i.e. recently known as VAK theory). In this model, it is proposed that every learner will have a primary learning style and secondary one(s). However, this division is further divided into two types: preference-based learning style and genetic-based learning style. Acquired learning style and developmental learning style will be proposed. Acquired learning style represents that learning style(s) we learn and develop through our lives and this acquisition is based on our needs. On the other hand, the developmental learning style is formed genetically in the brain and is almost influenced by some factors like inherited intelligence (Figure 3).

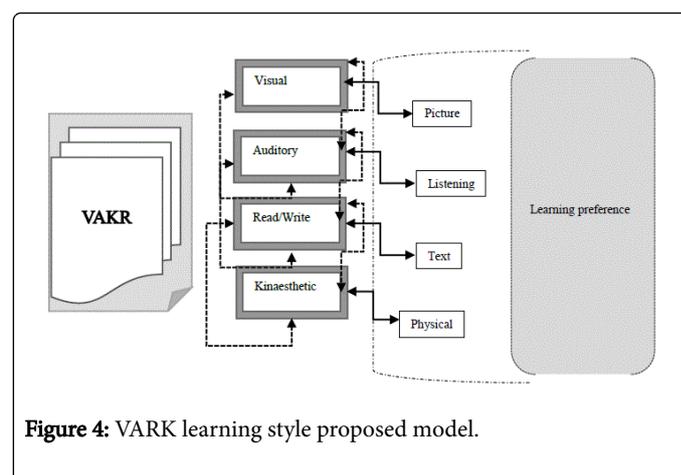


Figure 4: VARK learning style proposed model.

Fleming and Mills [6] proposed a learning style model similar to VAK but one further modality and different interpretation for the learning styles processes. This model proposes visual, auditory, kinaesthetic and read/write learning style (i.e. well-known as VARK). Unlike the VAK model, in this model, its proponents do not claim the VARK as a learning style, rather a part of what a learning style could be. Further, VARK is no more than a learning preference tool according to them (Figure 4). Besides, there are situations where equal learning style could occur where there is no observed significance

difference in the scores among the four learning modalities. Moreover, the authors do not agree to the inclusion of texts within the visual modality and for this reason they proposed the (R) learning modality (i.e. VARK) as compared to (VAK).

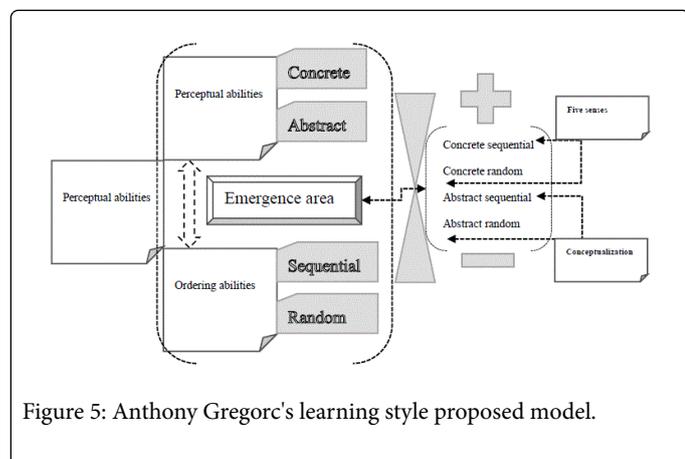


Figure 5: Anthony Gregorc's learning style proposed model.

Gregorc [7] proposed Mind Styles Model which is essentially based on perceptual abilities. These are divided into perceptual abilities and ordering abilities (Figure 5). While the perceptual abilities are divided into concrete and abstract ones, the order abilities have also two forms, namely sequential and random ordering abilities. In this model, neither of the perceptual abilities is absolute, rather there is a dominating one that a person would use more comfortably than the other. It is not clear though whether this generalisation is applicable to the four formed modalities. In other words, if there is a dominating perceptual ability and a dominating ordering ability, would that formula be applicable to a dominating learning modality (e.g. concrete sequential)? If this is allowed within this model, then it contradicts the first view that either concrete or abstract should be the dominant perceptual ability. And it also contradicts the view that either sequential or random should be the dominating ordering ability!

## Discussion

Have introduced the above five models, now each of the three learning styles in relation to the the learning theories model and the word aspects model will be discussed. First, it should be noted that the framework for possible aids that can be used for teaching language is based on the division of aids into five types: 1) visual aids (e.g. charts), 2) audio aids (e.g. tapes), 3) audio-visual aids (e.g. TV programmes), 4) action aids (e.g. trips for cultural and language learning purposes), and 5) Multimedia aids (e.g. a mixture of any of the above four). According to the VAK theory, we assume that anything realised through eyes, then this would go with the visual learning style and anything realised through listening, this would go with the auditory learning style, and finally anything that is realised through physical acts would go for the kinaesthetic learning style. This would match visual aids, audio aids and action aids, respectively. In other words, if we consider the two lexical items (mind and brain), then a visual learner would prefer the use of visual aids to first understand these two lexical items, then recognise the different between them. There will be different stages for covering all the aspects of these two items in terms of form, meaning and distribution. There will be a difficulty explaining the abstract lexical item (mind) through the visual aids although a definition of the word in the form of text would be considered as a visual aid too! The meaning aspect is apparently easier to be processed

and presented though the visual aids. On the other hand, there is a need to switch to the auditory learning style, yet the audio aids for a proper oral form of the lexical items—both the abstract and the concrete lexical items (i.e. mind and brain). At the same time, kinaesthetic learning style which requires physical actions to be achieved does not necessarily match all the lexical items, especially the abstract ones. It would be easy to present to your students something reflecting the brain but it would not be the same level of easiness for the case of abstract words. While some techniques of acting like taking the students to somewhere to contemplate might indicate this meaning, but this again would be tied to the learners' level and age.

To move to the VARK model, a major different in this model is that first it excludes texts from the visual learning style—adding the (R) learning style. Second, it assumes that learners only have learning preferences, other than learning preferences and learning modes as in the VAK theory. Based on this, visual learners can learn (brain and mind) through visual aids (e.g. realia, models, drawings, etc.); while Read/Write learners can learn these though dictionaries and pedagogical books. Moreover, auditory learners can follow audio aids and kinaesthetic learners can follow the action aids. More importantly, multimodal learners who have equal learning preferences as proposed in this model, can switch to the multimedia aids towards more effective methods of vocabulary learning.

In the third learning style model, namely, the Mind Styles Model, it is assumed that both concrete and abstract learning styles exist together in all learners with a bit difference in favour of one of these. It is assumed that the use is the possible interpretation for this emerging difference between the two styles. I would argue it is rather genetic and affected by the intelligence type and level of each learner. In this regards, seven behavioural-based experiments were conducted by Alduais and colleagues examining the effect of interference, motivation and attention on short-term memory recall using free, cued serial recall paradigms. Their results reported minor differences in favour of the concrete words recall in some cases and in favour of the abstract words recall in some other cases—implying in one way or another that learning styles awareness might increase vocabulary learning chances and support vocabulary teaching [13-19]. At any rate, we could assume that the lexical system is also represented though either concrete or abstract lexical items regardless of the aspects of each lexical item in regard to form, meaning and distribution. All aids are possible to support these two learning styles, albeit, the case of the abstract lexical items will not go as soundly as that in the case of the concrete ones.

Put all together, the use of all types of aids is one way or another matching the implications of the presented three learning styles in all their variations. Similarly, the use of all types of aids approaches those findings raised through the learning theories model. That said, while integrating learning theories, learning styles and aids can possibly result into a more effective teaching of vocabulary, the application of this integration and the form of this integration, at first—remains vague and requires experimental and behavioural research that would really evidence the effectiveness of following this approach. Learning styles can help teachers know about their students' preferences; although, they do not seem to be valid, reliable and practical diagnostic tools as they are generally based on subjective answers [20-23]. Instead, they can be used as indicators for the teachers so that they can balance and attempt matching the students' preferences. This also applies to the learning theories which teachers can use to understand and approach the learners' difficulties in learning vocabulary—following a research-based teaching approach towards realising a certain improvement in

the vocabulary level of their learners. Hence, aids stand in the middle of both learning theories and learning styles supporting the teaching methods (i.e. the teacher) to validate the existence and effectiveness of such theories and learning styles towards better teaching yet learning of the vocabulary system.

## Conclusion

The researcher presented three learning styles' models in relation to a model of learning theories and aids-accounting for the effectiveness of these two towards a more effective teaching and learning of vocabulary. For this reason, the VAK theory (Visual, Auditory and Kinaesthetic), VARK (Visual, Auditory, Read/Write and Kinaesthetic), and the Mind Styles Model were presented proposed models with reference to five learning theories (behaviourism, constructivism, cognitivism, social psychology, and connectionism) and the integration of these with the five types of aids. This argument was based on views-inferred from these learning theories and the learning styles-matching them with the possible aids that could be used while teaching lexical items in all their aspects: form, meaning and distribution (i.e. use). Thus concluded that experimental and behavioural based evidence is required to support the effectiveness of these learning styles and if they really would effectively and efficiently impact the teaching and learning of vocabulary. The use of learning styles as indicators for learning preferences and then yet possibly a more effective teaching is highly recommend. Similarly, using the implications of the learning theories to approach the learners' difficulties in learning vocabulary might also make a more effective teaching of vocabulary. In both cases, teaching vocabulary with reference to learning styles and learning theories is time-consuming for teachers and would requires materials prepared based on these two, training for teachers based on them, learning environment that would allow the application of such recommendations and above all emphasising on the majority in the classroom. In other words, individualisation of education-the essence of learning styles-is not possible at all environments.

## References

1. Alduais AM (2015) A Brief Account of Abstract and Concrete Elements of Language. *The Int J Indian Psychol* 1: 49-52.
2. Alduais AM (2016) Mentalese : The Conflict Between Language and Thought. *Res Result J-Theor Appl Linguist Ser* 6: 22-23.
3. Alduais AM (2012b) The Use of Aids for Teaching Language Components: A Descriptive-study. *Int J Learn Develop (IJLD)* 6: 136-145.
4. Alduais AM (2012a) Integration of Language Learning Theories and Aids Used for Language Teaching and Learning: a Psycholinguistic Perspective. *J Stud Educ* 4: 108-121.
5. Fleming ND (1995) I'm different; not dumb. Modes of presentation (VARK) in the tertiary classroom. In *Research and Development in Higher Education, Proceedings of the 1995 Annual Conference of the Higher Education and Research Development Society of Australia (HERDSA)*, HERDSA 18: 308-313.
6. Fleming ND, Mills C (1992) Not another inventory, rather a catalyst for reflection. *To Improve the Academy* 11: 137-155.
7. Gregorc A (2018) *Mind Styles*.
8. Harrington-Atkinson T (2017) Barbe's VAK Learning Style.
9. Alduais AM (2013a) *Language and Technology Use: An introductory course for using aids to teach and learn language components and language skills*. (N. Seetaram, edn.), Lambert Academic Publishing LAP, Saarbrucken, Deutschland, Germany.
10. Alduais AM (2013b) *Language Testing: An introductory course to design tests to language components and skills with exercises, assignments, and a final test*. (N. Seetaram, edn.), Lambert Academic Publishing LAP, Saarbrucken, Deutschland, Germany.
11. Alduais AM (2013c) *Lectures in Contrastive and Error Analyses with a Sample Study of CA*. (M. Schmöltz, edn.), Lambert Academic Publishing LAP, Saarbrucken, Deutschland, Germany.
12. Li M, Alduais A (2018) Exploring learning styles and their possible effect on academic performance among university students in Glasgow. *Res Result: Pedagogy Psychol Educ*, In review.
13. Almukhaizeem YS, Alduais AM (2014) On Arabic Abstract and Concrete Words Recall Using Serial Recall Paradigms: Is It Abstractness, Concreteness, or Zero Effect? *Pensee J* 76: 40-64.
14. Alduais AM, Almukhaizeem YS (2015a) Examining Effect of Attention on Short-Term Memory Recall of Arabic Abstract and Concrete Words Using Free, Cued, and Serial Recall Paradigms. *Educ Res Int (ERInt.)* 4: 76-109.
15. Alduais AM, Almukhaizeem YS (2015b) Examining Effect of Interference on Short-Term Memory Recall of Arabic Abstract and Concrete Words Using Free, Cued, and Serial Recall Paradigms. *Adv Lang Lit Stud* 6: 7-24.
16. Alduais AM, Almukhaizeem YS (2015c) On Arabic Abstract and Concrete Words Recall Using Free, Cued, and Serial Recall Paradigms: Is It Abstractness, Concreteness, or Zero Effect? *Indian J Appl Res (IJAR)* 11: 1-11.
17. Al-Mansour NS, Almukhaizeem YS, Alduais AM (2015) On Arabic Abstract and Concrete Words Recall Using Free Recall Paradigms: Is It Abstractness, Concreteness, or Zero Effect. *Psychol Behav Sci* 4: 154-164.
18. Almukhaizeem YS, Alduais AM (2015a) On Arabic Abstract and Concrete Words Recall Using Cued Recall Paradigms: Is It Abstractness, Concreteness, or Zero Effect? *Res Result J-Theor Appl Linguist Ser* 1: 49-68.
19. Almukhaizeem YS, Alduais AM (2015b) Examining the Effect of Motivation on Short-term Memory Recalling of Arabic Abstract and Concrete Words Using Free, Cued, and Serial Recall Paradigms. *Int J Indian Psychol* 2: 69-104.
20. Manolis C, Burns DJ, Assudani R, Chinta R (2013) Assessing experiential learning styles: A methodological reconstruction and validation of the Kolb Learning Style Inventory. *Learn Individ diff* 23: 44-52.
21. Pashler H, McDaniel M, Rohrer D, Bjork R (2008) Learning styles: Concepts and evidence. *Psychol Sci Public Interest* 9: 105-119.
22. Rohrer D, Pashler H (2012) Learning Styles: Where's the Evidence?. *Online Submission* 46: 634-635.
23. Scott C (2010) The enduring appeal of 'learning styles'. *Aus J Educ* 54: 5-17.