Integration of Language Learning Theories and Aids Used for Language Teaching and Learning: A Psycholinguistic Perspective

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Abstract

The maximum use of both human senses and aids for language teaching and learning is more effective than the minimum use of them. This statement has been introduced argumentatively from a psycholinguistic perspective. For achieving this purpose, however, the researcher has introduced first the types of aids which can be used for language teaching, then the theories of language learning and lastly the integration of both aids and language learning theories towards more effective teaching and learning of languages.

Keywords: Language learning theories, Types of aids in language teaching and learning, Behaviourism, Cognitivism, Constructivism, Social psychology, Connectionism, Integration
1. Introduction

Both language learning and language teaching have a long history. Yet, language learning is compared with language acquisition and similarly, language teaching is compared with language instruction. As a matter of fact, learning is a general word which can refer to any process, action, behaviour or whatsoever that leads to learning a new idea, behaviour, method, and so on and so forth. Again, teaching would simply refer to what goes on in the classroom between a teacher and his or her pupils/students, be it a school or a university, etc. For that matter, the words student and pupil are used as parallels to the word teacher rather than the word learner. Thus, when talking about learning and acquisition, the former is directed learning and the latter is not directed learning or say conscious and unconscious. On the other hand, teaching again is a direct process of teaching, whereas the instruction refers to teaching a particular skill which is usually practical and requires the use of some tools.

Theoretically, there are many theories for learning, language acquisition and yet teaching methodology. Some theorists would argue that learning and yet language instruction should be designed in a way that reinforces human behaviour and speak to his or her external abilities (behaviourism theory). Others; however, would disagree to this opinion and assume that language instruction materials should speak to the human internal abilities and take into consideration human’s cognitive abilities (cognitivism theory). Once again, the argument is going on, for some other theorists would claim that we need something which speak to the high abilities of humans (learners); that is, processes which result to independent learners rather than dependent ones (constructivism theory). Last but not the least; some would claim that teaching theories and materials together must consider that learning in social contexts is more effective than individual teaching (social psychological theory).

With reference to what I have mentioned above, the role of the teacher is no more as it was in the past, for now many new teaching aids are appearing one day after another especially in the age of technology. Aids for language teaching and learning; however, have greatly changed the history of teaching and have made things up and down. That is to say, many schools, universities and educational institutions are trying to provide as many available aids as they could so that they can cope with new developments and provide their learners with more effective learning situations. Aids for language teaching can be categorized/classified into six or five categories: visual, audio, audio-visual, action and finally multimedia aids. Instead we can have six categories: text, audio, visuals, motion media, manipulatives (real objects), and finally people.

To sum up, all the above mentioned issues: language learning, teaching, instruction, acquisition theories, types of aids in language teaching and learning and more importantly the relationship between the mentioned theories and the use of aids will be all accounted for.

2. Types of Aids Used in Language Teaching and Learning

Language teaching is being developed one day after another. Actually, many new aids for language teaching are appearing and so language teaching methodology is improved one day after another. In this articles, five types of aids will be discussed, but before that, it would be mentioned critically why do we us these aids? Thus, aids would be divided into two parts to
be introduced: conventional aids and CALL (Computer-assisted Language Learning) aids.

Why do we use aids in language teaching? There are actually many reasons for using aids in language teaching and they include: 1) Attracting attention of learners, but it is not enough to do so; we need to maintain their attention also, 2) maintaining our learners’ attention, 3) clarifying meanings, concepts and utterances: aids do not only help understanding words but also utterances, consider the novel (A Passage to Amazon); we can make use of (videos, maps, audios, and pictures); first they can hear and then things (events) can be visualized, 4) increasing chances of remembrance by adding as many associations as possible: (the more associations a person has with an idea, the better he or she understands it), consider the word apple (taste, colour, eating); it is actually time-saving; using words is time-consuming, (one picture is worth than one thousand words), 5) simulation of language: use of greetings through dramatization by providing a suitable context, acting, role-playing, etc., 6) presenting authentic language: audio, video and radio, 7) compensations for lack of experience on teachers: suppose that a teacher’s pronunciation is poor so a providing an audio material of actual native speakers will be a compensation for such a thing; or a teacher is not good at drawing so pictures will be used as an alternative, 8) individualizing teaching and learning: giving a student a tape to listen at home, it is called programmed instruction (a book frames), consider the following example: [Language consists of sounds, structures and ……… (words), and words consist of ………… (morphemes).], 9) involvement of learners: physical response by using phrases like (stand up and sit down), or by asking the students to prepare aids like (means of transportation), 10) adding variety for the class teaching, (Andryshyna May, 2005, Al-Zubaidi, 1981, Bruess, 2003, and Hunt, 1962). Look also at (Halleck, 2007, Halpin, 2007, Miller, 2010, Reese, 2007, Salies, 2007, and Winke, 2010).

In this part of the article, types of aids for teaching and learning purposes will be discussed. As a matter of fact, it is important to note down that these different types of aids will be discussed in terms of the effective use of each/all types for teaching either the major components of language (sounds, vocabulary and grammatical structures), or language skills (speaking and listening & and/or writing and reading), [receptive skills (listening and reading), productive skills (speaking and writing)].

2.1 Types of Aids

In general, there at least five types of aids that could be used in language teaching and learning:

1. visual aids (like pictures)
2. Audio aids (like tapes)
3. Audio-visual aids (like TV programmes)
4. Action aids (like drama, trips [for cultural and linguistic purposes])
5. Multimedia aids (like all the above mentioned examples)

In spite of this, it should be noted that such a way of categorization is not standard. In other words, another or others types of categorization for aids which can be used in language teaching are certainly possible. Consider, for instance the following categorization introduced
by (Smaldino, Russel, Heinich & Molenda, 2004: p 9). According to them aids or media as they call it can be categorized into six types, namely, they are: 1) text, 2) audio, 3) visuals, 4) motion media, 5) real objects and models (manipulatives) and finally, 6) people, (look also at Mason, 1957).

To make it clear and with reference to the same authors, text ‘is the most commonly used medium’ and it ‘is alphanumeric characters that may be displayed in any format- book, poster, chalk-board, computer screen, and so on’, (ibid). On the other hand, audio medium is ‘anything you can hear- a person’s voice, music, mechanical sounds, …, noise and so on… live or recorded’, (ibid). In comparison with the above mentioned two aids, visuals are ‘regularly used to promote learning’ and they include ‘diagrams on a poster, drawings on a chalkboard, photographs, graphics in a books, cartoons, and so on’, (ibid). Unlike text, audio and visual media, motion media are media ‘that show motion, including videotape, animation and so no’, (Smaldino, Russel, Heinich & Molenda, 2004: p 9). Manipulatives ‘are there dimensional and can be touched and handled by students’, (ibid). Lastly, people and this would include ‘teachers, students, or subject-matter experts’, (ibid). Thus, the following detailed classification is based on the first categorization; that is, five categories of aids.

2.1.1 Visual Aids

Actually, for visual aids different means can be used:
1. Realia (most effective ones) like chalk to show the meaning of the word chalk
2. Models (three dimensional pictures) games, they look like the real thing itself, animals for example
3. Pictures and drawings: photographic or hand-drawn
4. Simple: a car, boy, man (it has only one object)
5. Composite: a bus with the driver and passengers, a seen in the school year, a seen in the class (it has more than an object)
6. Series and sets: a process of doing something or telling a story and showing the different events of it (series); means of communication for example (sets)
7. Posters: specific size and functions
8. Maps: can be geographical, city plans, floor plans (for listening comprehension and speaking purposes)
9. Boards: smart-boards, active-boards, chalk-boards, white-boards (pen) [boards actually are considered as means and not aids
10. Cards: flashcards (one side picture-one side writing), reading cards, question and answer cards (the question could be simple or difficult according to the level of the learners)
11. Graphs: applied forms (for functional reading and writing)
12. Menus: restaurants (for cultural purposes, learning vocabulary, role playing [conversation]; all of them actually can be used in the form of slides (35mm) or overhead projector slides [the major aim of converting them into OHP is to be shown to all in large classes]
13. Film strips: a set of slides arranged vertically
14. Silent films
15. Comic books: not necessarily comic
16. Facial diagrams: for teaching phonetics and phonology
17. Clock faces and hands: time assigning or vice versa
18. Calendars: days, months, numbers (for listening comprehension)
19. Letters of the alphabets and numbers: for teaching spelling, pronunciation and sound recognition
20. Cross-word puzzles: vocabulary teaching and learning
21. Scrabble of words game: forming words
22. Tables and schedules: for speaking and reading (airlines)

2.1.2 Audio Aids
1. Tape recorder
2. Reel tape recorder: easy to manage, higher quality of sound (master recording purposes)
3. Audio reel tape
4. Phonographs: CDs like recorders [needle-reading] [CDs are electronically read], now have been replaced by CDs, all the above mentioned aids can be combined in a lab
5. Radio

2.1.3 Audio Aids
1. TV
2. Video tapes
3. DVDs
4. Video CDs (the relationship between video tapes and DVDs is like the relationship between tapes and CDs)

2.1.3.1 Advantages of sophisticated language labs
1. Listening and recording at the same time
2. Instant repetition (listen again and again to any part you want/like)
3. Sound movies: opposed to silent movies
4. Video tapes: (we have the facility of muting the sound), students watch a segment then they act out the characters and/or the sounds
5. Slide-sound-synchronization: sound: (good morning), picture (words synchronized)

2.1.4 Action Aids
1. Dramatization: (I am walking), physical response (open the window)
2. Pantomiming
3. Charade game (acting and others predict what is next)
4. Party games
5. Rumor game: whispering at the ears if one of the students, the process goes on and the last one speaks out
6. Twenty questions game
7. Language teaching games: designed for teaching purposes
8. Field trips: vocabulary and culture purposes
9. Role-playing: conversations
10. Physical response: consider (telling a student to give his or her pen to the student next the door)

2.1.5. Multimedia Aids

This can be done by combing all/as many as possible of the above mentioned aids. Yet it should be noted that computers (advanced technology means) which can have such a characteristic. As a matter of fact, computers have made the process of teaching even easier than the above traditional aids. In other words, all the above mentioned aids can be brought together (multimedia) with using computers. Additionally and more recently laptops, hand-dictionaries, hand-encyclopedias, mobiles especially (technically advanced), blackberries, I-phones, and even I-pods can all help as aids for both language teaching and learning. However, it should be noted that the above mentioned aids are more commonly used for self-learning rather; that is, student-directed learning rather than teacher-directed learning. For that matter, some anti-technologists would merely consider such aids as teacher-rivals.

In addition to what I have mentioned above, and what has made both language teaching and learning easier is the internet (WWW: world wide web), using internet for language teaching and learning including couture of other parts of the word in relation to language is being encouraged and promoted for one day after another, increasingly and remarkably, (Windeatt, Hadistry, and Eastment, 2000 and Tomaline, and Stempleski, 1993).

Actually, both computers and internet have more advantages than all the traditional aids. Consider, for instance the following ones: 1) individualization of both teaching as opposed to instruction and learning as opposed to acquisition, 2) multimedia characteristics of computers and internet, 3) immediate reinforcement, 4) assessment of learning and, 5) diagnostic reports on learners or follow up a report to the learners, (Ramdhony, 2004, Wang, 2005 and Wang 2008).

Strictly speaking, aids in general can be disadvantageous as a result of misusing them. Collaboration is a very important feature for aids preparation, so it is important to know how to use aids to teach both language components (sound system, vocabulary and grammatical structures) and language skills (listening, speaking, reading and writing). Moreover, some general programmes for language teaching will be mentioned. Simply, we can talk about non-computer aids and computer aids for language teaching.

To return to the requirements for the proper use of aids, consider the following ones:
1. Decide on aim: why particular aid is better than another?
2. How effectively to use including time and manner: at the beginning, middle or end of the class, that is a documentary film will create the suitable atmosphere through listening or and may be watching, but the question is when do I use it? Shall I use as a whole or segments it? How, why and or when shall I use it?
3. Knowing how to use the used machine, printer or whatsoever (how to use it)
4. Making sure that the used machine is usable.

In conclusion, types of aid which can be used for language teaching and learning have been introduced with taking into consideration the possible different categorizations for aids. Again, major advantages, disadvantages for the use of aids along with the basic requirement for the use of aids have been listed and mentioned. Nevertheless, for more reading about the methodology of using them for teaching, a reader can consult the following references: (Bender 2003, Harmer 1998, Hudson 2007, Jordan 2008, Kelly 2000, Richards and Rodgers 2001, Schellekens 2007, Thornbury 1999, Thornbury 2002 and Toolan 2009).

3. Theories of Language Learning

It is well-known that I learn, you learn, she learns, he learns, they learn from each and everything we do or pass by in our day-to-day life. In spite of this, some would argue and differentiate between what we learn through day-to-day life directly and indirectly. More accurately, it is argued that a person acquires (unconsciously) bits of knowledge in day-to-day life, but he or she learns (consciously) bits of information or knowledge when being taught or instructed. As a result of the above argument and other arguments, theories attempting to interpret both the process of language learning and acquisition have evolved. And because it has been difficult to decide or state finally what goes on when a man learns and even how the process of learning goes on, in each and every theory we have proponents (those who defend their own theory) and opponents (those who disagree either partially or totally to a certain theory and suggest an alternative theory or may be put some modifications). Thus, the following is a brief account for the major theories of learning mostly from a psychological perspective. Yet, it should be noted that the purpose of mentioning these theories is to account later for the use of aids for language teaching and how both the use and design of such aids can be influenced by such theories. Hence, the following account is based on (Jordan 2008, Lighthown and Spada, 2006, Mitchell and Myles 2004, Muller 2009, Pritchard, Skinner 1957, Skinner 2005, Smaldino, Russel, Heinrich and Molenda 2004 and Tennant 2003).

To start with behaviourism, it has evolved nearly in the 1950s and was lead by the psychologist, Skinner. Actually from among the famous behaviourists is also Pavlov, but for our concern we will focus on Skinner and his theory of reinforcement, (Skinner, 2005 and Skinner, 1957).

Behaviourists believe that the process of learning is going on depending on what they call stimuli, response and reinforcement. They stress, however, on observation. In other words, we observe our learners’ behaviours and then we can decide what do they need to learn, how learn it and may in what occasion they can make the most of it. For that matter, Skinner and his followers does not may consider anything related to mental processes or cognitive abilities of the human’s mind, (Lighthown and Spada, 2006).

More importantly, learning and acquisition occur more and can be achieved by imitation, practice, drills and exercises. On the basis of this, one can infer that both learning and acquisition here are dependent in relation to learners as they only imitate. Put it another way, teachers here actually are doing everything; learners are only imitating the models they have been provided with. Even in language acquisition, they only hear models from day-to-day life.
and then gather up the language they want to acquire or learn. At all rates, all here are observers; theorists observe behaviours of people and then decide and produce theories. Again, language teaching professionals are observers; they observe what teachers need on the basis of the theories and then design teaching and learning materials. Once again, teachers observe their learners and learners observe people around them including their teachers and the process goes on.

Unsatisfied with the behaviourism perspective, a new theory in the late half of the 20th century has evolved. Cognitivism which was lead by both the Swiss epistemologist and psychologist Piaget and Vygotsky stress on the mental cognitive ability of the human’s mind or/and brain, (Lightbown and Spada, 2006 and Jordan, 2008).

Unlike behaviourists, cognitivists stress on the internal abilities and factors of learning. For that matter, dissimilar to behaviourists who observe, cognitivists attempt some speculations and predictions.

Above all and compared with the behaviourism; cognitivism interpret the process of learning in terms of short-memory and long-memory storing of the learned or acquired information. As a result of this, for them the process of learning here is less dependent and one can say semi-independent learning.

Partially satisfied with the cognitivism, a new theory derived and influenced partially by such a theory called constructivism has evolved. For constructivists learning and acquisition is achieved when learners are coerced with as many authentic situations and facilities as possible. For that matter and compared with both behaviourists and cognitivists, constructivist interpret learning in terms of engaging learners with learning situations. Once again, for them a teacher must not teach, instead he or she must instruct and act as a guide for his or her learners so that construction of learning and acquisition can be achieved by learners as much independently as it could be.

One more additional major theory in language learning is the social psychology theory. According to this theory, more effective learning and language acquisition occur in social life situations; that is, communicating with other. As a matter of fact, social psychologists stress on the idea that collaborative and group learning and teaching situations where in the place of learning is social-life-like, is the possible interpretation for how effective learning occurs.

Last but not the least and in my opinion the most important theory which supports the use of aids is the theory of connectionism. Actually from the name of the theory one can infer that there is something like connecting/ correlating two things together or associating something with something else, etc, (Lightbown and Spada, 2006).

According to this theory, learning or/and acquisition occurs in terms of associations. Say it differently, a certain word is associated with its basic meaning, for example. Later on and in advanced stages, it will be associated with extra meanings-say metaphorical meaning(s). Moreover, not only words associate with words but the process extends to association of words with phrases and phrases with sentences and so on and so forth. It should be noted that such a theory has be greatly influenced by computer simulations (computer analogy). To make clear, in the computer simulation theory computer can perform nothing unless the data is valid or has been inserted earlier, yet certain actions can be performed based on some
probabilities, connections and association which have not been necessarily inserted earlier. As a result, human brain and how it learns and acquires language can be dealt with alike.

4. Integration of Language Learning Theories and Aids Used for Language Learning and Teaching

It occurs frequently that learners learn what is learnable yet teachers teach what is teachable! But, one could ask and for the sake of our argument here: is it possible to say that learners acquire what is acquirable and instructors instruct what is instructed? Actually, teaching language is a worldwide phenomenon be taught as a first language, (mother tongue language as standard), foreign language (for example, English as a foreign language EFL, English as a second language ESL. Similarly, in the case of purposes of learning a certain language be it cadmic (like English for cadmic purposes EAP, or English for specific/special purposes ESP). Teaching methodologies, however, starting may be from audio-lingual method teaching, translation method, and communicative teaching method and so on and so forth have proposed and argued in favour their teaching approaches just like theories have produced theories for language learning. Therefore, theorist have more influence on language teaching methodologists as the majority of teaching methodology approaches have their bases from language learning theories.

Regardless of the endless argument and seemly impossible agreement between and among language teaching methodologists and language learning theorists as well, the involvement and integration of language teaching aids in language teaching and learning have greatly and clearly changed the picture of language teaching and learning. In other words, aids for some have made the process of teaching and learning easier and more effective. On the other hand, for some others, such aids are teacher-rivals as the teacher with using such aids is making nothing except giving instructions.

I should note that I will use the term (teacher-rivals) for language teaching aids in general in favour of anti-aids and anti-technology use in language teaching and learning. Once again and philosophically some would consider the use of aids as dehumanizing aids or as some would call it mechanizing human people. Again and economically, some would consider such aids as money-consuming for they are expensive sometimes especially if they are not even fulfill the goals they have been bought for. Needless to say, such opponents are referring to the negative side of aids; that is, they can be extremely disadvantageous if misused.

Nevertheless, we should not make it as a fact that teaching without using aids be it traditional or technological is useless. Yet, we can accept the equation that teaching plus using aids equals more effective teaching and more importantly learning. Conversely, teaching minus using aids equals less effective teaching and more importantly and with reference to the connectionism perspective less chances of remembrance of what has been learned.

Well, it should be noted that aids can be categorised to either five or six types as mentioned earlier: realia, audio, audio-visual, action and multimedia aids with taking into consideration that audio-visual aids include visual aids alone like pictures and audio-visual-aids like TV. Alternatively, we can use another categorisation: text media, audio, visuals, motion, manipulatives (real objects) and people. Of course, computers, laptops, handheld dictionaries, blackberries, I-phones, I-pods, mobiles and internet will all go under computer and
technology aids, and all other traditional aids where computers are not involved are considered as non-computer aids.

As a matter of fact, teaching with aids is entirely different from teaching without them and similarly in the case of learning. This actually can be even tested by each and every one of us. For instance, suppose that you are learning a new a language or even you want to learn certain new word in your native language. Let us, however, choose the word pig. Pig is a concrete word and it refers to a type of animal which lives in a forest; that is a wild animal. Actually, you may know the pig in your native tongue language, but when it comes to you in a new language which not your, you have started to imagine many animals attempting to find out to which animal such a word is referring to. What I have just mentioned can be applied to the behaviourism perspective in terms of using aids and designing aids. It seems that a learner is not given the chance to think, he or she only imitate the given models to him or her. in other words, in the case of behaviourism, language aids should act as simplifiers and clarifier of the external picture for any language item be it related to language components (sound system and grammar structures) or language skills (speaking, writing, reading and listening).

To move to the second theory, may be the use of aids here is more effective and useful since the process of learning is interpreted in term of cognitive abilities. Additionally, cognitivists would stress also here on short-memory and long-memory storing of the learnt and acquired items of language. For that matter, one can infer that fact that the more use of aids for teaching a certain item of languages, the more certain we are that this or that certain item has been rehearsed to the long-term memory which is the major goal of learning. In other words, all bits of information which are not rehearsed to the long-term memory will be directly and automatically deleted from the short-memory. To make clear, and with reference to the same example given above, if the learners is given a picture of a pig without indicating the word. Then the learner is being asked to search for the word, before that actually the learner has may be tried to guess and has been imagining and re-imagining the picture many times to the extent at the first time he looks for the word he will memorize. Thus, in this case we have given the learner a chance to do something and more importantly we have tried to use aids with taking into consideration that they help in sending learned bits of information to the long-term-memory instead of being on the edge; that is , the short-term-memory.

On the other hand, in the case of the constructivism perspective, we should provide our learners with as many aids as possible so that they can construct certain items. Put it another way, our job as teachers and with the help of aids is to facilitate and instruct our learners rather than teaching them. For constructivists learning can occur more in authentic situations and this can be achieved with using aids obsessively and minimizing the process of teaching or say dependent learning. For instance, a learner could be given not only the explanation of the word pig (text media) and the picture (visual media), but as many aids for them same item as possible.

As for social psychologists, they would stress on the use of real objects and models more explain the reason behind this for that fact that learning is just like life it occurs more effectively in collaborative learning. Say it another way, since aids function effectively and lead to communication and interaction between the learners and what they learn so their use must encouraged and promoted for.
Last but not the very least is the connectionism who as it has been mentioned earlier stress on the fact that the more associations a linguistic items is provided with, the more understandable, interesting, remembered, recalled it will be [prospectively].

Put it another away, since language acquisitions for connectionists is achieved by exposing our learner/child to more chances and situations of language occurrence, so similarly in the case of language teaching and learning, the more use of aids will a give the pupil/students nearly full exposure to certain linguistic items be it in language components or language skills. Once again, using more aids for either teaching or learning a certain linguistic item will form in the mind many associations for one thing. As a result, has any association from among the large number of associations, namely aids, been removed from the memory, so other remaining associations will last for a long a time especially visual and action aids, yet will help the student to recall this or that certain linguistic items, be it a word, phrase, sentences, rules or whatsoever [prospectively].

Needless to say, even with the application of this theory, still the fact that all abstract linguistic items become harder to remember and recall even with the use of all the above mentioned types of aids. Yet and from a psychological point of view, abstract language elements depend on the person himself/herself for some people will have have certain situations, circumstances which give him/her the chance to be interested in abstract linguistic items and the result is interest and learning with interest makes any learned element less forgettable.

5. Conclusion

To conclude this part, integration of language aids in both language teaching and learning is greatly advantageous whenever used properly. In other word, a teacher can make his or her class more interesting (psychologically), more learning chances especially for difficult language items which need more clarifications, more effective teaching, and more importantly can help his or her learners build many associations for a certain linguistic item which results to more understanding. On the other hand, the process of learning by itself is becoming more effective, more individualized, and even the students are exposed to authentic language especially in the case of using aids of teaching and learning a second or foreign language.

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References


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