



Practical Learning: Exploring the Senses for More Effective Learning **Dr Henry Erhamwenmwonyi Asemota**

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Abstract

Realia describes actual objects that aid in learning and help in developing knowledge and vocabulary. It replicates experiences and provides the opportunity for students to explore the various senses used in learning through interaction with real objects. It may not be always be available for use in the classroom setting at all times; however, it provides students an effective method for experiencing first-hand the available facts about a topic. Imaging is a technique that used to make students to visualize images in their minds in order to facilitate their understanding of concepts or problems to be answered. Teachers verbally stimulate student to make them envision scenarios in their minds that is being discussed in a text or a problem to be solved. Once images are enlivened in students' minds, the teacher urges the students to describe what they see in vivid detail. Teachers provide an opportunity for students to work together with other students in groups. Graphic organizers are visuals or pictorial images created to represent ideas, text or connections between texts. Concept mapping is learning based on visual representation and interaction among different concepts. Story mapping is a technique for graphically representing ideas. It involves applying interactive strategies in learning language. Retraining language teachers on how to employ interactive strategies is important for more productive teaching and learning. Constructivist theorists consider learning to be more effective when students work in groups in a collaborative manner and are actively involved in the learning process.

Key Words: *Effective learning, Media resources, Imaginative learning, Creative thinking, Graphic learning.*

Introduction: The various instructional resources and teaching resources are developed for a more enhanced learning process. These resources are often developed with the goal of allowing greater student-teacher and student-student interaction. Many of these interactive sources rely on the ability to effectively engage the senses in the learning process thereby making learning a more complete and holistic activity that is seen to be more stimulating, effective, motivating, efficient and productive.

Opportunities to use all Senses, Realia in learning: Realia is a term that is used in describing factual things - concrete objects – which when used in learning serves to develop knowledge and vocabulary. Realia aids in simulating experiences that aid in creating a practical foundation and a sense of reality on which students can build a knowledge base and afford students the opportunities to explore the various senses in learning (Echevarria, Vogt & Short, 2010). While it may not be possible to use realia in the classroom at all times, it offers students the best option for acquisition of all the available facts about a topic. Realia enables students to see, feel, hear and even smell the

object being studied. If the actual object is unavailable, the teacher could progressively employ alternatives along a continuum from using the actual (concrete) object, to using a replica in the form of a model, or to using a two-dimensional (semi-concrete) object in the form of a photograph or pictorial illustration. Of note, each progressive movement along the continuum results in some partial loss of some sensory information that could have potentially aided the students' comprehension. See table-1 for some suggestions of classroom realia beneficial in creating powerful learning experiences.

Table 1 Realia for Powerful Learning

Category	Realia	Uses
Household items	Eating utensils, kitchen appliances (from different culture) Miniatures items, household items, pieces of furniture, non-commonplace items rarely seen commonly seen	It provides students with an active learning experience; language development, vocabulary development, role-playing, story-telling restoration, practical oral language activity, problem-solving skills, practical math stories
Food	Regular food items; vegetables; fruit; spices; rare food items; non-perishable food items; food items unfamiliar to children; plastic food items available for classroom use	Promotes participatory skills; sensory experiences; develop communicative skills; word using; vocabulary development; play-acting; story telling; grammar activities (singular, plural).
Clothing	Old clothing items; rare hats; outdated wears; blazers; gloves; knickers; sweaters; jackets; boots; scarves; other forms of ethnic clothing to support understanding	Role modeling and laying; acting; Vocabulary building; story reenactment; creative writing; poetry; oral language practice; developing word mastery
Literacy materials	Rare Books; old magazines; newspapers; journals; encyclopedias; other references texts; checkbooks; bank books and ledgers	Role- playing, vocabulary, development, easy access for research, exposure
Farm or occupational items	Machetes; spades; rakes; winnowers; plows; harnesses; rare and outdated tools; baskets; sickles; hay; nails; models of barns; silos; scarecrows; wagons; farm carts.	Pre-reading activities, role playing, vocabulary development, knowledge of size and weight.
Flowers and plants	Rare flowers and plants that are studied; unusual plants; large sunflowers; pumpkins; decorative plants	Vocabulary development; sensory experiences; size comparisons; Creative thinking
Animals	Insects; Classroom pets; house pets; farm and zoo animals; birds	Language development; Sensory experiences; size comparisons; vocabulary development
Crafts	Knitting, crocheting, tatting, sculpting clay, potter's wheel, spinning wheels, loom	Vocabulary building; role playing, sensory experiences; creative writing; pre-reading activities
Ethnic items	Shields; Swords; Banners; Piñatas;	Culture appreciation; language history;

	Necklaces; chopsticks; wok; tortilla press; earthenware; tea sets; clothing	cultural history; cross cultural experiences
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Exploring new vocabulary in newer practical ways is made possible through the use of realia (Nation, 2005). Employing realia in teaching promotes effective and practical learning in a number of ways. By bringing in real objects that can be seen, touched and manipulated provides a unique way to connect vocabulary and language learning to real life. The purpose of using realia in teaching primarily is to motivate students, and because they are able to in actuality experience the real object, this helps to fortify the knowledge and information gained whilst improving their likelihood of using newly learned vocabulary appropriately. Realia creates an authentic and practical approach for many lessons. Using real objects for illustrating a point conveys a greater sense of meaning in ways that even photograph or pictures can. It eliminates any dispute or confusion concerning the dimensions, size, weight, feel or smell of any object, fruit, or tool. Sometimes, providing several objects for comparison in order to see the range of possibilities may be beneficial, for example providing several different kinds of apples, fruits, or tiny sunflowers to be compared with those that are found in other regions of the world. On the whole, the use of realia affords teachers the opportunity to be creative, extremely innovative and to communicate instructional material to students in a very practical sense, and facilitates interaction with students in a more meaningful way.

Imaging: Imaging is an approach that encourages students to visualize images in their minds to facilitate an enhanced understanding of concepts or problems to be answered (Chamot and O’Malley, 1994). The teacher verbally stimulates the student which has the effect of helping them envision scenarios in their minds that is being discussed in a text or a problem to be solved. Once the images are enlivened in the students’ minds, the teacher then urges the students to describe in vivid detail what they can see. This affords the teacher an opportunity to work together with students in a bid to further their understanding of the topic being taught. Research in reading comprehension has proved that the use of imaginative techniques as described above is an important attribute of effective readers, which is not often the case with poor readers (Irwin, 1991). For this reason, it is a key strategy to teach. It is particularly necessary to teach the strategy and to encourage students to describe the images, even more so with the nascent English language learners to ensure that they do not form faulty images as a result of misconceptions related to language misunderstanding. See Table 2 below.

Table 2: Possible curricular uses of Imaging

Curricular areas	Imaging use
Vocabulary	Picture a – in your mind. Does it look like this? (show an illustration or photograph) What does yours look like?
Comprehension	Close your eyes and picture the scene in your mind. What do you see? (Question for details)
Mathematics	Use with word problems. After the word problem is read, have the students close their eyes and picture the people, animals and things involved in the problem. (Ask questions related to the relative size, number and quantity in the problem)
Summarizing	After a section of a text is read, have the students close their eyes and create a

	mind-picture of the text. Question about the overall scene they see and the important details pictured
Art	Before having the students begin to create images in art media, have them close their eyes and picture what they want to create. Question them about the features of line, proportion, color, and movement that they see
Music	As the students listen to music, have them close their eyes and picture what the music is suggesting. Ask them to describe their mind-pictures
Writing	Before the students write a passage, have them close their eyes and picture the image they want to create with the words. Encourage them to verbalize the image they want to create before they write the words.

To assess the students’ understanding and progress, have the students describe or draw what they were able to picture in their minds. Encourage them to compare their images with the images of other students and discuss the sources of the differences. Sometimes, this type of discussion brings out nuances of meaning in English vocabulary. Other times it helps students become aware of the need to listen carefully.

- Technologically, it is helpful in the initial stages of activities to have students draw the images on transparency film so that the images can be shared and discussed with the class. This also adds an element of interest for some students because of the use of unusual media. Imaging can also be done using drawing games such as the magic slates. As is often said in the old saying, “a picture is worth a thousand words” is very true. When readers or listeners can visualize new vocabulary, the words are more easily understood and remembered (Harvey & Goudvis, 2000). Indeed, imaging can be used in wide variety of classroom situations. Being able to picture images related to the written word is especially vital for English learners. It is helpful to students because often their inability to image or “picture in their minds” indicates that they don’t really understand. Teachers cannot assume that students know how to image since research indicates that poor readers do not image (Irwin, 1991). It may be necessary for students to actually draw pictures paper before they can paint pictures in their minds, but teaching imaging as a tool for understanding as well as self-monitoring strategy can help students to become more responsible for their own learning.

Graphic organizers: They are visuals or pictorial images created to represent ideas, text or connections between texts. Graphic organizers facilitate a grasp of language by making it possible for readers to label key aspects of a text, using languages that are derived from that text to visually demonstrate and form links between events and characters. There are a number of graphic organizers that are used to stimulate the interest of students in reading and language comprehension (Bromley, Irwin-Devitis & Modlo, 1995). There are essentially four basic types of graphs.

- a) Picture graphs which compare quantities using pictures. Picture graphs are easier to read than the other types. Visualization of data is aided by use of this type of graph. The reader must remember, however, that only approximate amounts can be indicated by pictographs, making it necessary to estimate amounts when interpreting these graphs.
- b) Circle or pie graphs: These are particularly good for depicting proportional fractions or parts of the whole. They illustrate the percentage of the whole that each individual part represents.

- c) Bar graphs: Bar graphs are practical for comparing the volume and sizes of different items. It is also applicable for comparing the size of a particular item measured at different time points. These graphs are represented either horizontally or vertically.
- d) Line graphs: Line graphs show trends and changes in amounts over a period of time. These graphs have both vertical and horizontal scales. Individual points plotted on a line graph have values on both scales.

Summarily, since pictures are representation of experiences, they may be utilized as vicarious means of adding to a student’s store of knowledge. Teachers should help students mine information from pictures in their textbooks by encouraging them to study the picture before and after reading the text, looking for the purpose of the picture and specific details presented. This picture study may aid in retention of the material involved.

Venn diagrams are often employed in comparing different items or variables for areas overlap or may compare a learner’s experience with text representing them as overlapping circles. Put simply, Venn diagrams are a visual or graphic representation of ideas. Flow charts are utilized for visual characterization of event sequence contained in a text. The number of different ways in which graphic organizers can be used to support understanding in readers is endless. So, matching the graphic organizer to the purpose of the lesson is vital. See Table 3 below.

Table 3: Suggestions and Teaching Use

Graphic Organizer	Teaching Use
Main idea mountain Ideas/details E chart	Main idea/supporting details
Know/what to find/learned (KWL) Time line Chain of events Flow chart	Basic research Sequence of events
Venn diagram’s	Compare-contrast
Characters, problem, solution Beginning, middle, end KWS (KWL + Sources) ISP (information, source, page)	Story structure
Prediction/outcome Text connection Cause/effect charts Who, what, when, why, how	Comprehensive strategies Cause effect
Fact & Opinion chart	Fact vs. Opinion
Describing wheel	Descriptive writing
Word definition Word clusters Persuasion map	

The use of graphic organizers in reading analysis encourages and enables students to examine text from a variety of perspectives. The graphics presented here are examples of organizers that support readers in making sense of text, relating it to past experiences, and understanding connections made in text. Students can work in cooperative groups to create graphic organizers and

discuss the meanings of materials they are reading. Seeing the structure of text represented visually supports students who are having difficulty with comprehension and helps them to work through vocabulary and concepts that are unclear to them. Using graphic organizers has been shown to encourage students to become more analytic in their reading and to reflect more deeply on the meaning and contextual clues found in text (Bromley, Irwin- Devitis & Modlo, 1995). Indeed, Graphic organizers support English learners by taking a lot of potentially confusing English vocabulary and concepts and presenting them in an organized, visual format (Echevarria, Vogt & Short, 2010).

Concept Map: This is an interactive activity which uses a diagram in showing relationships among concepts. It is method of learning based on a visual representation of the relationship and interaction among diverse concepts. Concept maps are graphic tools that aid in categorizing, sorting and representing information. The benefit of concept mapping technique and other collaboration learning strategies is evident in the students' appreciation of facts and concepts and how these may relate across different subject areas. The value of this strategy and its applicability in science subjects and other fields has been widely researched and documented empirically (Danmole, 2011).

Story Map: This represents another technique by which ideas and facts can be graphically represented. It involves applying interactive strategies in the learning of English language. These strategies can be applied effectively in tutoring English language as it facilitates the achievement of English language curriculum objectives. Retraining English language teachers on how to employ interactive strategies should be prioritized for more productive teaching and learning. Also, making use of qualitative interactive strategies can create a substantial improvement in students' attitude towards language learning (Dornyei, 2003). Concerning the importance of the social environment in learning, Bruner, a social constructivist, highlights the importance of the social environment in learning. Bruner's philosophy based on ideas offset by Vygotsky indicates that learning is an active, social processes in which students construct new ideas based on existing knowledge. Simply put, learning is best if learners work in groups to share their perspectives, which has the advantage of enabling them to bring their prior knowledge to bear on the task. Constructivist theorists speculate that learning becomes more effective when students work in groups in a collaborative manner and are actively involved in the learning process rather than working alone or in isolation. Below are some of the available interactive strategies that are used to facilitate English language teaching and learning.

- a) Graphic organizers
- b) Concept mapping
- c) Group activities
- d) Venn diagram
- e) Story map
- f) Cognitive apprenticeship etc. (Izuagba, 2012).

Most of the interactive strategies are encouraged in order to take care of the different styles of learning, enhance practice and skills. Additionally, these strategies encourage students to collaborate and work in groups, enhances their physical activity as they move about during the class sessions. Employing interactive strategies in language teaching, helps students improve their listening ability. It also helps them to learn and develop negotiation skills as well as take responsibility for their learning (Knowles, 1975). The interactive strategies in English language teaching usually involve small group activities; hence specific collaborative tasks are completed, through the combined effort

and abilities of the group. Various authors including Okebukola (1991) and Danmole (2011) corroborate these aforementioned advantages of interactive strategies in enhancing learning.

Recommendations: Teachers and learners should clearly understand that the place of instructional resources cannot be over-emphasized in the teaching of English Language (Nwaedozi (2006); Oyedele (1991)). They include the following:

- a) Instructional resources enhance the teaching ability of English language teacher in the environment.
- b) Instructional resources help to bridge the communication gap between the teachers and learners by assisting the teachers to explain concepts better.
- c) Instructional materials help the English teachers to reduce the amount of talking and thus make their teaching more interesting and successful.
- d) Instructional materials provide opportunity for learners to see, hear and handle their own learning through group and collaborative learning.
- e) Instructional resources offer a reality experience which stimulates self-activity on the part of learners
- f) The use of instructional resources make learning more concrete, crystallized, practical, applicative and meaningful.
- g) They enhance the rate of retention of what the learners are taught and learnt.
- h) They change the role of the teacher as sole dispenser of knowledge to that of coordinator, director and facilitator of learning experiences. They make explanation clearer.

References:

1. Bromley, Irwin-Devitis & Modlo (1995). *Graphic Organisers*. New York: Scholastic Books
2. Chamot & O'Malley (1994). *The CALLA Handbook Implementing the Cognitive academic Language Learning approach*. Reading, M.A Addison- Wesley.
3. Danmole, B.T. (2011) *Emerging Issues on the Universal Basic Education Curriculum in Nigeria: Implications for the Science and Technology Component*, *Pakistan Journal of Social Sciences*. 8(1) 62-68.
4. Dornyei, Z (2003). *Attitudes, Orientations and Motivations in Learning advances in Theory, research and application: Language Learning* 52(51) 3-32.
5. Echevarria, J, Vogt M., & Short, D. (2010). *Making Content Comprehensible for Elementary English students*. Boston: Allyn & Bacon.
6. Harvey S. & Goudris, A. (2000). *Strategies that Work: Teaching Comprehension to enhance Understanding*: Portland, M.E. Stenhouse.
7. Irwin J (1991). *Teaching reading comprehension processes* (2nd ed.) Needham Heights, M.A (Allyn & Bacon)
8. Izuagba, A.C (2012). *Constructivists' Strategies in Teaching and Learning; A workshop paper presented at the in-house capacity building members of the Alvan volunteer services august 2012*.
9. Knowles, M (1975). *Self-directed learning: a guide for learners and teachers*. Chicago: Follett Pub. Comp.
10. Nation I.S.P (2005). *Teaching and Learning Vocabulary*. In E. Hinkel (Ed), *Handbook of Research on Second Language teaching and learning* (pp. 581-596) Mahwah, NJ: Erhbaum.

11. Nwaedozie, S.H (2006). Instructional Resources for the Implementation of Business Education Curriculum in Nigeria. *Nigeria Journal of Teachers Education and Teaching*, 2(3) pp. 82 – 89.
12. Okebukola, P (1991). Concept Mapping with a Cooperative Learning flavour. *The American Biology Teacher*, National Association of Biology Teachers, 54(4) p.218
13. Oyedele, J.F (1997). Faculties for Business Education for Self-Reliance. *Business Education Journal* 2 (4) Pp.138-139.