

Chapter 1 : windows 7 upgrade to windows 10 different language issues - Super User

7 Steps to a Language-Rich Interactive Classroom [John Seidlitz, Bill Perryman, This book provides a seven step process that creates a language-rich interactive classroom environment in which all students can thrive.

You can help by adding to it. October Throughout the 20th century, our knowledge of language processing in the brain was dominated by the Wernicke-Lichtheim-Geschwind model. Anatomy of the auditory ventral and dorsal streams In the last two decades, significant advances occurred in our understanding of the neural processing of sounds in primates. Initially by recording of neural activity in the auditory cortices of monkeys [17] [18] and later elaborated via histological staining [19] [20] [21] and fMRI scanning studies, [22] 3 auditory fields were identified in the primary auditory cortex, and 9 associative auditory fields were shown to surround them Figure 1 top left. Anatomical tracing and lesion studies further indicated of a separation between the anterior and posterior auditory fields, with the anterior primary auditory fields areas R-RT projecting to the anterior associative auditory fields areas AL-RTL , and the posterior primary auditory field area A1 projecting to the posterior associative auditory fields areas CL-CM. In contrast to the anterior auditory fields, tracing studies reported that the posterior auditory fields areas CL-CM project primarily to dorsolateral prefrontal and premotor cortices although some projections do terminate in the IFG. Comparing the white matter pathways involved in communication in humans and monkeys with diffusion tensor imaging techniques indicates of similar connections of the AVS and ADS in the two species Monkey, [51] Human [53] [54] [55] [56] [57] [58]. In humans, the pSTG was shown to project to the parietal lobe sylvian parietal-temporal junction- inferior parietal lobule; Spt-IPL , and from there to dorsolateral prefrontal and premotor cortices Figure 1, bottom right-blue arrows , and the aSTG was shown to project to the anterior temporal lobe middle temporal gyrus-temporal pole; MTG-TP and from there to the IFG Figure 1 bottom right-red arrows. Auditory ventral stream Sound Recognition Accumulative converging evidence indicates that the AVS is involved in recognizing auditory objects. A study that recorded neural activity directly from the left pSTG and aSTG reported that the aSTG, but not pSTG, was more active when the patient listened to speech in her native language than unfamiliar foreign language. Intra-cortical recordings from the right and left aSTG further demonstrated that speech is processed laterally to music. Working memory studies in monkeys also suggest that in monkeys, in contrast to humans, the AVS is the dominant working memory store. See also the reviews by [3] [4] discussing this topic. Semantic paraphasias were also expressed by aphasic patients with left MTG-TP damage [13] [91] and were shown to occur in non-aphasic patients after electro-stimulation to this region. The role of the MTG in extracting meaning from sentences has been demonstrated in functional imaging studies reporting stronger activation in the anterior MTG when proper sentences are contrasted with lists of words, sentences in a foreign or nonsense language, scrambled sentences, sentences with semantic or syntactic violations and sentence-like sequences of environmental sounds. An EEG study [] that contrasted cortical activity while reading sentences with and without syntactic violations in healthy participants and patients with MTG-TP damage, concluded that the MTG-TP in both hemispheres participate in the automatic rule based stage of syntactic analysis ELAN component , and that the left MTG-TP is also involved in a later controlled stage of syntax analysis P component. Patients with damage to the MTG-TP region have also been reported with impaired sentence comprehension. Bilaterality In contradiction to the Wernicke-Lichtheim-Geschwind model that implicates sound recognition to occur solely in the left hemisphere, studies that examined the properties of the right or left hemisphere in isolation via unilateral hemispheric anesthesia i. Moreover, a study that instructed patients with disconnected hemispheres i. This bilateral recognition of sounds is also consistent with the finding that unilateral lesion to the auditory cortex rarely results in deficit to auditory comprehension i. This is evidenced via studies that recorded neural activity from the auditory cortex of monkeys, and correlated the strongest selectivity to changes in sound location with the posterior auditory fields areas CM-CL , intermediate selectivity with primary area A1, and very weak selectivity with the anterior auditory fields. Consistently, a working memory study [] reported two independent working memory storage spaces, one for acoustic properties and one for locations. Functional

imaging studies that contrasted sound discrimination and sound localization reported a correlation between sound discrimination and activation in the mSTG-aSTG, and correlation between sound localization and activation in the pSTG and PT, with some studies further reporting of activation in the Spt-IPL region and frontal lobe. Evidence for the role of the ADS in encoding sounds into working memory is provided via studies that trained monkeys in a delayed matching to sample task, and reported of activation in areas CM-CL and IPS during the delay phase. Influence of this spatial information on eye movements occurs via projections of the ADS into the frontal eye field FEF; a premotor area that is responsible for guiding eye movements located in the frontal lobe. This is demonstrated with anatomical tracing studies that reported of connections between areas CM-CL-IPS and the FEF, [46] and electro-physiological recordings that reported neural activity in both the IPS and the FEF prior to conducting saccadic eye-movements toward auditory targets. However, electrophysiological recordings from the posterior auditory cortex areas CM-CL and IPS of monkeys, as well a PET monkey study reported of neurons that are selective to monkey vocalizations. One of these studies also reported of neurons in areas CM-CL that are characterized with dual selectivity for both a vocalization and a sound location. A monkey study that recorded electrophysiological activity from neurons in the posterior insula also reported of neurons that discriminate monkey calls based on the identity of the speaker. This study thus suggests that the ADS is capable of identifying voices in addition to discriminating them. For example, two functional imaging studies correlated circumscribed pSTG-PT activation with the spreading of sounds into an increasing number of locations. For instance, in a meta-analysis of fMRI studies in which the auditory perception of phonemes was contrasted with closely matching sounds, and the studies were rated for the required level of attention, the authors concluded that attention to phonemes correlates with strong activation in the pSTG-pSTS region. An intra-cortical recording study in which participants were instructed to identify syllables also correlated the hearing of each syllable with its own activation pattern in the pSTG. Another study has found that using magnetic stimulation to interfere with processing in this area further disrupts the McGurk illusion. The study reported that the pSTS selects for the combined increase of the clarity of faces and spoken words. This study reported the detection of speech-selective compartments in the pSTS. In addition, an fMRI study that contrasted congruent audio-visual speech with incongruent speech pictures of still faces reported pSTS activation. For a review presenting additional converging evidence regarding the role of the pSTS and ADS in phoneme-viseme integration see. Conversely, IPL damage results in individuals correctly identifying the object but incorrectly pronouncing its name e. Consistent with this finding, cortical density in the IPL of monolinguals also correlates with vocabulary size. Based on these associations, the semantic analysis of text has been linked to the inferior-temporal gyrus and MTG, and the phonological analysis of text has been linked to the pSTG-Spt-IPL Phonological working memory Working memory is often treated as the temporary activation of the representations stored in long-term memory that are used for speech phonological representations. This sharing of resources between working memory and speech is evident by the finding that speaking during rehearsal results in a significant reduction in the number of items that can be recalled from working memory articulatory suppression. The involvement of the phonological lexicon in working memory is also evidenced by the tendency of individuals to make more errors when recalling words from a recently learned list of phonologically similar words than from a list of phonologically dissimilar words the phonological similarity effect. The origin of speech is the exchange of contact calls between mothers and offspring used to relocate each other in cases of separation. Offspring of early Homo modified the contact calls with intonations in order to emit two types of contact calls: The use of two types of contact calls enabled the first question-answer conversation. In this scenario, the offspring emits a low-level distress call to express a desire to interact with an object, and the mother responds with a low-level distress call to enable the interaction or high-level distress call to prohibit it. The use of intonations improved over time, and eventually, individuals acquired sufficient vocal control to invent new words to objects. At first, offspring learned the calls from their parents by imitating their lip-movements. As the learning of calls improved, babies learned new calls i. Individuals became capable of rehearsing sequences of calls. This enabled the learning of words with several syllables, which increased vocabulary size. Further developments to the brain circuit responsible

for rehearsing poly-syllabic words resulted with individuals capable of rehearsing lists of words phonological working memory , which served as the platform for communication with sentences. Based on the papers: Evolution of language It is presently unknown why so many functions are ascribed to the human ADS. The roles of sound localization and integration of sound location with voices and auditory objects is interpreted as evidence that the origin of speech is the exchange of contact calls calls used to report location in cases of separation between mothers and offspring. The role of the ADS in the perception and production of intonations is interpreted as evidence that speech began by modifying the contact calls with intonations, possibly for distinguishing alarm contact calls from safe contact calls. The role of the ADS in encoding the names of objects phonological long-term memory is interpreted as evidence of gradual transition from modifying calls with intonations to complete vocal control. The role of the ADS in phonological working memory is interpreted as evidence that the words learned through mimicry remained active in the ADS even when not spoken. This resulted with individuals capable of rehearsing a list of vocalizations, which enabled the production of words with several syllables. Further developments in the ADS enabled the rehearsal of lists of words, which provided the infra-structure for communicating with sentences.

Chapter 2 : Process Language

Anyone who has been around children who are learning to talk knows that the process happens in stages—first understanding, then one-word utterances, then two-word phrases, and so on. Students learning a second language move through five predictable stages: Preproduction, Early Production, Speech.

Did you have any problem changing the Windows 7 language? Take a full Windows backup Changing the Windows 7 language is an action that affects the system at a basic level. As the old adage says, better safe than sorry. For this, we suggest the use of AOMEI Backupper, a free application which is exceedingly easy to use and can recover our full Windows installation in mere minutes. There are a few updates that, if missing, will block us from the Windows 7 language change. Once we get the results, we should select all of the updates. Not just the "important", which are pre-selected After we install the updates and reboot, we should make a final check in Windows update, that there are no additional updates available. If there are more, we must install them too. The latest version, as of this writing, is v2. We can safely disable this prompt. After all, changing the Windows 7 Language is usually a one-time deal. For the example, it is bit Windows 7 SP1. There, we download the language of our choice. For the example, we will change the Windows 7 language from English to Spanish. The size of the Spanish language file is just shy of MB. What we do is, on Vistalizador, click on the "Add languages" button and select and open the file from our download folder. Vistalizador will check the file integrity, and prompt us to install the language of our choice. The program claims it might take up to 20 minutes, but it will usually take much less, typically under five minutes. After that, it will ask us to change the Windows 7 Language. The current Vistalizador version 2. We just need to download a particular Windows update, by clicking on the link. Yes, even after we have installed hundreds of megabytes of updates. As with the language files, this is an official package from Microsoft. This file is a "Microsoft Update Standalone Package". After a successful installation, we return to Vistalizador. We will still get the error After that, we just need to close the program. It will prompt us to restart. We should do so. And we are ready. If we want to revert to English Windows, we just fire up Vistalizador, choose English and click on "Change language". Most problems with Vistalizador are solved by manually installing the Windows updates the program suggests.

Chapter 3 : Language as a process | William A. Croft

Windows 7 language packs are available for computers that are running Windows 7 Ultimate or Windows 7 Enterprise. The Windows 7 language packs can be installed only from the Optional Updates section in Windows Update.

Double - check feasibility of implementing the program Document the analysis Add on later Design the Program[edit] Programs use algorithms which are like equations that tell the computer what task to perform. The aim of the programmer is to create algorithms that are clear and simple. Algorithms are expressed first in logical hierarchical form known as modularization. Using modules or a complete thought the programmer creates a logical thought process for the computer to follow. After that the program is broken down in greater detail using pseudocode. Pseudocode uses terms like if, else, and, then to relate the programs rules to the computer. A module, a processing step of a program, made up of logically related program statements. A hierarchy chart, which represents top-down program design, explains the main purpose of the program. Pseudocode, a way of designing a program which uses normal language statements in order to describe the logic and the processing flow. Program flowcharts, graphically shows the detailed series of steps Three control structure: Using the pseudocode and logic requirements from step two an appropriate programming language must be selected. As stated in the introduction, coding languages differ in specifications and usability. Once the appropriate code language has been chosen, it is imperative that the programmer follow the syntax rules with as little deviation as possible in order for the program to have high accuracy. Select the appropriate high-level programming language Code the program in that language following the syntax carefully Test the Program[edit] After the program is written it then enters the programming debugging and testing phase of the Program Development Life Cycle PDLC. During this time the programmer will be looking for errors in both logic and syntax, as well as exploring other areas that may cause the program to either not work properly or to not run at all. However, with a careful eye paid to program design and coding the amount of time spent debugging can be cut considerably. As stated, debugging will uncover errors in both logic and syntax. Syntax errors will prevent the program from executing. They can be such simple things as misspelled words or can involve breaking the syntax rules of the programming language used. On the other hand, logic errors will allow the program to run but will provide incorrect results. Errors of this kind may consist of merely using the wrong relational operator or larger, mistakes in writing formulas. Once the programmer locates the errors they are then fixed and the program is run again. The program will then enter the testing phase. The Bug hard at work inputting errors. Morley, Deborah and Charles S. Understanding Computers Today and Tomorrow, 13th Edition. Testing the program comes in two phases, alpha and beta. Alpha testing is the process of reading through the program in search of errors in logic. The second step is to run a diagnostic program to search for syntax or input errors. Beta testing involves using the program in the real world to see if it contains any bugs or other deficiencies. Document and Maintain[edit] Documentation should be ongoing from the very beginning because it is needed for those involved with program now and future. Upon completion User Documentation for commercial use, Operator Documentation for people who run computer systems, and Programmer Documentation for programmers charged with maintenance. Every program requires certain processing time and memory to process the instructions and data. As the processing power and memory are the most precious resources of a computer, a program should be laid out in such a manner that it utilizes the least amount of memory and processing time.

Chapter 4 : Six Stages of Language Development | Edublox Online Tutor

The 'from where to what' model of language evolution hypothesizes 7 stages of language evolution: 1. The origin of speech is the exchange of contact calls between mothers and offspring used to relocate each other in cases of separation.

Questions requiring more than a sentence response Advanced Fluency The student has a near-native level of speech. You also want to begin asking students at this stage questions that require a phrase or short sentence. Speech Emergence students should be asked to answer questions that require a short-sentence response. It is OK to sometimes ask these students questions requiring a multiple-sentence response, but it is not OK to ask them questions requiring a pointing or one-word response. How about Intermediate and Advanced Fluency students? It is OK to ask them questions that require a lot of verbal output, but it is not OK to ask them questions requiring minimal verbal output. You can use tiered questions to include all ELLs in whole-class activities or one on one to check comprehension or content learning. Classroom Example To improve her ability to ask tiered questions, a 1st grade teacher asks the school ESL teacher to demonstrate the strategy in her class during a discussion of *The Three Little Pigs*. For each stage of second language acquisition, the ESL teacher asks the following types of tiered questions: Ask questions that students can answer by pointing at pictures in the book "Show me the wolf," "Where is the house? Ask questions that students can answer with one or two words "Did the brick house fall down? Ask "why" and "how" questions that students can answer with short sentences "Explain why the third pig built his house out of bricks. Ask "What would happen if â€" and "Why do you think â€" questions "What would happen if the pigs outsmarted the wolf? Ask students to retell the story, including main plot elements but leaving out unnecessary details. After reading the lesson, match the sample student responses at the end to their respective stages of second language acquisition. You may be asked to share your responses with the larger group. In fact, in more than half of their interactions, students did not produce any oral language; when they did, they engaged in simple recall. You may ask yourself, "How can I possibly ask a Preproduction or Early Production student a high-level question if the most that student can do is point or give a one-word response? For some reason, many people think that students in the initial stages of acquisition can only answer low-level questions and that those in the advanced stages are more likely to answer high-level questions. However, this is not the case. English language learners at all stages of acquisition should be asked questions at all levels of thinking. We want to challenge their thinking and speaking abilities. Bring out one premade game board and set of cards for each table or small group see Appendix 9. How would you engage students across all stages of second language acquisition at all levels of thinking? Place the activity cards on the most suitable space on the game board. No part of this publicationâ€"including the drawings, graphs, illustrations, or chapters, except for brief quotations in critical reviews or articlesâ€"may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission from ASCD. Requesting Permission For photocopy, electronic and online access, and republication requests, go to the Copyright Clearance Center. Enter the book title within the "Get Permission" search field. To translate this book, contact permissions ascd. Learn more about our permissions policy and submit your request online.

Chapter 5 : 7 Major Elements of Communication Process

A Sterling Connect:Direct® Process uses its own scripting language that defines the work that you want the Process to do. The following are the statements used in Sterling Connect:Direct Processes: PROCESS Defines general Process characteristics. This statement is always the first statement in a.

Pictured here is an MRI image of a human brain. Story highlights The regions of the brain involved with language are not straightforward Different words have been shown to trigger different regions of the brain The human brain can grow when people learn new languages CNN. The content is produced solely by Mosaic, and we will be posting some of its most thought-provoking work. CNN If you read a sentence such as this one about kicking a ball, neurons related to the motor function of your leg and foot will be activated in your brain. Similarly, if you talk about cooking garlic, neurons associated with smelling will fire up. Since it is almost impossible to do or think about anything without using language -- whether this entails an internal talk-through by your inner voice or following a set of written instructions -- language pervades our brains and our lives like no other skill. Damage to either of these, caused by a stroke or other injury, can lead to language and speech problems or aphasia, a loss of language. Here are some other examples: Hide Caption 1 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” Sandra Bullock was born in Virginia but raised in Germany, the homeland of her opera-singer mother. Hide Caption 2 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” The Boston-born, Maryland-raised Edward Norton spent some time in Japan after graduating from Yale. He worked for a foundation created by his grandfather, real-estate developer James Rouse. He says his Japanese is rusty but he can still speak it. Hide Caption 3 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” "Gossip Girl" star Leighton Meester is a capable French speaker, and broke out a few phrases in an interview. Hide Caption 4 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” Oscar winner Natalie Portman was born in Israel and is a dual citizen of the U. She can speak a number of languages, including Hebrew , German and French. Hide Caption 5 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” "The Ballad of Jack and Rose" actress Camilla Belle grew up in a bilingual household, thanks to her Brazilian mother, and can speak fluent Portuguese. Hide Caption 6 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” Ben Affleck learned Spanish while living in Mexico and still draws upon the language, as he did when being interviewed about "Argo. Stars who speak other languages Stars who speak other languages â€” Bradley Cooper speaks fluent French, which he learned as a student attending Georgetown and then spending six months in France. The Internet loves it when he conducts interviews in the language. Hide Caption 8 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” NBA star Kobe Bryant grew up in Italy, where his father was a player. He can still speak the language. Hide Caption 9 of 14 Photos: Hide Caption 10 of 14 Photos: He has family in Germany as well and is capable of a bit of Deutsch. Hide Caption 11 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” Joseph Gordon-Levitt loves French culture and knows how to communicate in the language. Hide Caption 12 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” Though raised in London, singer Rita Ora was born in Kosovo and has Albanian heritage. Hide Caption 13 of 14 Photos: Stars who speak other languages Stars who speak other languages â€” Jack Black has taught himself both French and Spanish. One thing that helps: Hide Caption 14 of 14 More recent findings show that words are associated with different regions of the brain according to their subject or meaning. Neurologists aiming to make a three-dimensional atlas of words in the brain scanned the brains of people while they listened to several hours of radio. Different words triggered different parts of the brain, and the results show a broad agreement on which brain regions are associated with which word meanings -- although just a handful of people were scanned for the study. Those taking part were all native English speakers listening to English. The next step will be to see where meaning is located for people listening in other languages -- previous research suggests words of the same meaning in different languages cluster together in the same region -- and for bilinguals. Raising bilingual children has its benefits and doubters Bilingual people seem to have different

neural pathways for their two languages, and both are active when either language is used. As a result, bilinguals are continuously suppressing one of their languages -- subconsciously -- in order to focus and process the relevant one. [Read More](#) The first evidence for this came out of an experiment in , in which English--Russian bilinguals were asked to manipulate objects on a table. In Russian, they were told to "put the stamp below the cross". But the Russian word for stamp is "marka", which sounds similar to "marker", and eye-tracking revealed that the bilinguals looked back and forth between the marker pen and the stamp on the table before selecting the stamp. Neurologists are already having some success:

Chapter 6 : Language processing in the brain - Wikipedia

7 Great Theories About Language Learning by Brilliant Thinkers Theories of language learning have been bandied about since about as far back as one would care to look. It may be surprising to know that the problems that philosophers in Ancient Greece and 16th century France were concerned about are largely still relevant today.

Windows 7 language packs are available for computers that are running Windows 7 Ultimate or Windows 7 Enterprise Content provided by Microsoft Applies to: The Windows 7 language packs can be installed only from the Optional Updates section in Windows Update. More Information How to install a Windows 7 language pack To download and install a Windows 7 language pack, follow these steps: To do this, click Start , type Windows Update in the Search programs and files box, and then click Windows Update in the Programs list. Click the optional update links for the language packs. Under the Windows 7 Language Packs category,select the desired language pack. Note If you install many additional language packs, the disk space and system performance are affected. In particular, disk space and system performance are affected during servicing operations, such as Service Pack installations. Therefore, we recommend that you only add a language pack to your computer if you will use the language pack. Click OK, and then click Install updates to start the download and installation process. How to change the interface of Windows 7 after a language pack is installed When you install a language pack, you can change the interface language of Windows 7 to the language that you select. Language packs also let multiple users who share a computer select distinct display languages. For example, one user can select to see the dialog boxes, menus, and other text in Japanese, whereas another user can select to see the same content in French. To change the display language, follow these steps: Click Start, and then type Change display language in the Start Search box. Click Change display language. In the drop-down list that appears, select the language that you want, and then click OK. How to uninstall a Windows 7 language pack To uninstall a language pack, follow these steps: Click Start, and then type Uninstall display language in the Start Search box. Click Install or uninstall display languages. Click Uninstall display languages. Select the language or the languages that you want to uninstall, and then click Next. Follow the rest of the steps to uninstall this language or these languages. After you install the desired language packs, you can hide unwanted language packs in Windows Update. To hide unwanted language packs in Windows Update, follow these steps: Click the Windows 7 Language Packs category in the Select the updates you want to install page to highlight all the language packs. Right-click the highlighted updates, and then select Hide update. If this article does not answer your question, click this button to pose your question to other community members at Microsoft Community:

Chapter 7 : The Stages of Second Language Acquisition

mental processes that are involved in acquiring, storing, retrieving, and using information and that include sensation, perception, imagery, concept formation, reasoning, decision making, problem solving, and language.

Oil on board, Humans have speculated about the origins of language throughout history. The Biblical myth of the Tower of Babel is one such account; other cultures have different stories of how language arose. Some theories are based on the idea that language is so complex that one cannot imagine it simply appearing from nothing in its final form, but that it must have evolved from earlier pre-linguistic systems among our pre-human ancestors. These theories can be called continuity-based theories. The opposite viewpoint is that language is such a unique human trait that it cannot be compared to anything found among non-humans and that it must therefore have appeared suddenly in the transition from pre-hominids to early man. These theories can be defined as discontinuity-based. Those who see language as being mostly innate, for example psychologist Steven Pinker, hold the precedents to be animal cognition, [10] whereas those who see language as a socially learned tool of communication, such as psychologist Michael Tomasello, see it as having developed from animal communication in primates: A prominent proponent of this view is archaeologist Steven Mithen. Researchers on the evolutionary origin of language generally find it plausible to suggest that language was invented only once, and that all modern spoken languages are thus in some way related, even if that relation can no longer be recovered. Theories that stress continuity often look at animals to see if, for example, primates display any traits that can be seen as analogous to what pre-human language must have been like. And early human fossils can be inspected for traces of physical adaptation to language use or pre-linguistic forms of symbolic behaviour. Among the signs in human fossils that may suggest linguistic abilities are: However, a study on *Ardipithecus ramidus* challenges this belief. Some scholars assume the development of primitive language-like systems proto-language as early as *Homo habilis*. Ferdinand de Saussure developed the structuralist approach to studying language. Noam Chomsky is one of the most important linguistic theorists of the 20th century. Linguistics and History of linguistics The study of language, linguistics, has been developing into a science since the first grammatical descriptions of particular languages in India more than years ago, after the development of the Brahmi script. Modern linguistics is a science that concerns itself with all aspects of language, examining it from all of the theoretical viewpoints described above. For example, descriptive linguistics examines the grammar of single languages, theoretical linguistics develops theories on how best to conceptualize and define the nature of language based on data from the various extant human languages, sociolinguistics studies how languages are used for social purposes informing in turn the study of the social functions of language and grammatical description, neurolinguistics studies how language is processed in the human brain and allows the experimental testing of theories, computational linguistics builds on theoretical and descriptive linguistics to construct computational models of language often aimed at processing natural language or at testing linguistic hypotheses, and historical linguistics relies on grammatical and lexical descriptions of languages to trace their individual histories and reconstruct trees of language families by using the comparative method. However, Sumerian scribes already studied the differences between Sumerian and Akkadian grammar around BC. Subsequent grammatical traditions developed in all of the ancient cultures that adopted writing. In the 18th century, the first use of the comparative method by British philologist and expert on ancient India William Jones sparked the rise of comparative linguistics. Early in the 20th century, Ferdinand de Saussure introduced the idea of language as a static system of interconnected units, defined through the oppositions between them. Saussure also introduced several basic dimensions of linguistic analysis that are still fundamental in many contemporary linguistic theories, such as the distinctions between syntagm and paradigm, and the Langue-parole distinction, distinguishing language as an abstract system *langue*, from language as a concrete manifestation of this system *parole*. According to this theory, the most basic form of language is a set of syntactic rules that is universal for all humans and which underlies the grammars of all human languages. This set of rules is called Universal Grammar; for Chomsky, describing it is the primary objective of the discipline of linguistics. Thus,

he considered that the grammars of individual languages are only of importance to linguistics insofar as they allow us to deduce the universal underlying rules from which the observable linguistic variability is generated. Formal theories of grammar seek to define the different elements of language and describe the way they relate to each other as systems of formal rules or operations, while functional theories seek to define the functions performed by language and then relate them to the linguistic elements that carry them out. Cognitive linguistics is primarily concerned with how the mind creates meaning through language. The production of spoken language depends on sophisticated capacities for controlling the lips, tongue and other components of the vocal apparatus, the ability to acoustically decode speech sounds, and the neurological apparatus required for acquiring and producing language. Neurolinguistics and Language processing in the brain Language Areas of the brain. The brain is the coordinating center of all linguistic activity; it controls both the production of linguistic cognition and of meaning and the mechanics of speech production. Nonetheless, our knowledge of the neurological bases for language is quite limited, though it has advanced considerably with the use of modern imaging techniques. The discipline of linguistics dedicated to studying the neurological aspects of language is called neurolinguistics. In this way, neuroscientists in the 19th century discovered that two areas in the brain are crucially implicated in language processing. People with a lesion in this area of the brain develop receptive aphasia, a condition in which there is a major impairment of language comprehension, while speech retains a natural-sounding rhythm and a relatively normal sentence structure. People with a lesion to this area develop expressive aphasia, meaning that they know what they want to say, they just cannot get it out. Other symptoms that may be present in expressive aphasia include problems with fluency, articulation, word-finding, word repetition, and producing and comprehending complex grammatical sentences, both orally and in writing. Those with this aphasia also exhibit ungrammatical speech and show inability to use syntactic information to determine the meaning of sentences. This shows that the impairment is specific to the ability to use language, not to the physiology used for speech production.

Chapter 8 : Language - Wikipedia

Slide 3: The study of second language acquisition involves: 1. how second languages are learned (the process); 2. how learners create a new language system with limited.

Chapter 9 : How to Change The Windows 7 Language in Home Premium and Pro | calendrierdelascience.

Language is a system that consists of the development, acquisition, maintenance and use of complex systems of communication, particularly the human ability to do so; and a language is any specific example of such a system.