

Latin at the Middle School Level: Who Are Our Students? How Do We Reach Them?

Barbara Hill

University of Colorado, Boulder (retired)

Rickie Crown

National Louis University, Chicago

Tyler Leach

Baker Demonstration School, Wilmette, Illinois

ABSTRACT

“Latin at the Middle School Level: Who Are Our Students? How Do We Reach Them?” is the result of collaboration among three experts in the theory and practice of Latin pedagogy. Barbara Hill, Latin Program Coordinator at the University of Colorado Boulder (now retired), provides explanations of important cognitive factors, which influence language learning, and offers general suggestions for teachers. Phonological processing is the focus of the first section of this article, and memory, especially working memory, takes center stage in the second section. Following the exposition of each cognitive attribute comes models of classroom activities to intrigue and educate middle school students. Rickie Crown, National Louis University, Chicago, contributes a wealth of multisensory classroom activities designed to enhance the phonological and working memory of students. Tyler Leach, Baker Demonstration School, Wilmette, takes the lead in the final section of the article and adds a valuable assortment of digital exercises and assessment measures designed to engage and instruct the active, independent-minded students, who inhabit America’s middle schools.

KEYWORDS

phonological processing, syllabification, multisensory education, categorization, coordination of components, chunking, working memory, automatization, digital assessment

BACKGROUND

Middle school students present to their teachers a continually shifting panorama. They make public statements of their rapidly changing selves via clothes, hairstyles, body modifications, behavior, and conversations as they search for comfortable identities. A survey of people familiar with the “tweenagers”, who populate our middle schools describe them variously as “awkward”, “quirky”, sometimes “desperate”, sometimes “hopeful”, often “needy”, usually “sensitive”, alternately “confused” and “confusing”, and often “overwhelmed” among other terms. Girls tend to be critical of their appearance, and boys are apt to adopt a nonchalant, “cool” attitude intended to demonstrate to others that they don’t care (Heckel). They all, however, do care and are frequently absorbed by their concerns. It is a legitimate question, therefore, to ask “Are middle school students ready for Latin, and our answer is *“Ita, vero!”*”

A characteristic, which makes Latin a particularly good choice for middle school is that all new students start at the same place on the learning curve. Latin classes are not like Spanish classes, for example, populated by students, who have had previous Spanish instruction. Beginning students, moreover, already know the Latin alphabet if they know English, and, when taught properly, can learn Latin pronunciation quite effectively thanks to the facts that Latin consonants and diphthongs produce one consistent sound, vowels produce only two sounds, and there are no silent letters. Despite these advantages, experienced Latin teachers know they face a complicated task. While they can pick out student social groupings with a glance, their initial predictions of Latin learning potential can be erroneous. The blue-haired student with a nose ring in the back row may turn out to be a stellar learner, whereas the quiet, seemingly focused student next to her may struggle to understand sentence structure. The yawning student in the front row may be unable to concentrate due to a family crisis rather than lack of interest. The fashionista in the center of the room may ace every quiz but neglect to turn in her homework. We can, in fact, anticipate that about 20% of our new students will experience problems of noticeable degree.

The purpose of this article is to set forth and explain some important characteristics, which strongly influence the achievement and behavior of individual middle school Latin students but are unobservable to the teacher’s eye. These traits are cognitive, and they come to light primarily through student effort and quality of work. Primary among them is the brain’s ability to process the sounds it hears,

also called phonological processing ability, a topic to be more deeply explored in following paragraphs. In these cognitive processes we witness the basic differences in thinking and remembering, which underlie everyone's processing of language, whether Latin or English.

For most American students, middle school is the time when they first enroll in a truly serious foreign language class, and the "fun and games" of elementary language classes disappear. Their new foreign language class meets daily, all year long, and newly accountable for their performance, students receive grades from their teachers. Some students have been previously diagnosed with learning disabilities and/or ADHD, but others have no idea they will struggle. A few other students have a traumatic brain injury (TBI), which can cause dyslexia-like symptoms when trying to master details of a complicated foreign language. It is common, moreover, that youngsters with a TBI don't know it. They have forgotten about an earlier fall or perhaps a kick to the head, but their brains retain traces. Struggling Latin students, documented and undocumented alike, realize relatively quickly in the first semester that they are not keeping pace with the introduction of new material. While many students master the new content, strugglers see that they can't, but don't know why.

Ideally, middle school classes should be learning labs where students accomplish a lot of their work in ways structured by you, the teacher, so that they learn **how** to learn as they are learning. Classroom activities, which provide practice in organizing, may guide the way to more efficient learning since problems with organization are real deterrents to language acquisition.

In the following article, Barbara Hill is responsible for the introduction and background information on phonological processing, memory, and organization of learning tasks. Rickie Crown is the contributor of sections on multisensory kinesthetic models, and Tyler Leach is the author of the sections on multisensory digital models. The authors suggest that contents of this article are pertinent not only to middle schoolers, but to all levels of Latin instruction. The information provided follows the sequence presented in the following grid:

Challenges of Foreign Language Learning	Teaching Techniques for Managing Learning Challenges	Models: Coordination of Components
<ul style="list-style-type: none"> • Phonological Processing Difficulties 	<ul style="list-style-type: none"> • Multisensory approach • Practice identifying phonemes and syllables • Explicit presentation of vocabulary 	<ul style="list-style-type: none"> • Syllabification with puppets • Individualized oral assessment
Memorization of: <ul style="list-style-type: none"> • Vocabulary • Morphology 	<ul style="list-style-type: none"> • Multisensory approach • Chunking • Morphology grids 	<ul style="list-style-type: none"> • Ablative Hop • Verb Cantata • Chunking exercises
<ul style="list-style-type: none"> • Recognizing morphemes, words, and phrases in context • Processing Speed 	<ul style="list-style-type: none"> • Multisensory Assessment: A Digital Approach • Coordination of vocabulary and morphology with text 	<ul style="list-style-type: none"> • <i>Scriptio continua</i> • Chunking exercises • Oral assessment using interactive technology • Notebook • Coordinating components

PHONOLOGICAL PROCESSING

The purpose of this paper is to set forth and explain some important characteristics which strongly influence the achievement and behavior of individual Latin students but are unobservable to a teacher's eye. These traits are cognitive and come to light primarily through student effort and quality of work, areas where we witness the basic differences in thinking and remembering, which underlie everyone's processing of language, whether Latin or English. Primary among cognitive abilities in language learning is phonological processing, the ability which allows the mind to identify sounds and connect those sounds to meanings. Phonological processing abilities include discrimination among sounds in words (phonemic awareness), discrimination between words in sentences, remembering and applying phonological rules, predicting the spelling of new words presented orally, and remembering and repeating words, phrases, and sentences. Deficits in phonological processing include problems segmenting words into phonemes and syllables, difficulties retaining strings of sounds or letters in short term memory, problems repeating long nonsense words, problems reading writing non-words, even when short, and slow naming. Richard L. Sparks provides a good analysis of the crucial role of phonological processing in second language learning (187-200).

Phonological processing strengths and weaknesses can be assessed as early as preschool. Testers can chart a child's proficiency at repeating correctly and remembering sounds (phonemes) and new combinations or strings of sounds. They can, in addition, count the quantity and complexity of known words (vocabulary or semantics) and the number of words and the ways in which a child makes sentences or is able to analyze them (syntax). The better a child's phonological processing capacity, the greater the potential for learning language and acquiring reading. Phonological processing differences, which have been documented by standardized testing for decades, have also recently been diagnosed in preschoolers by using an EEG to measure directly the response of their brains to sounds in a noisy environment similar to that of most schools, thus predicting which children might need intervention to assist in reading readiness because of their relatively poor phonological processing ability (White-Schwoch et al.).

This area of research is important to middle school Latin teachers because children, who are slow to develop language and experience problems while learning first language, will almost certainly experience similar difficulties when learning a second language (Sparks 194). Since phonological processing ability is such

a significant cognitive variable in second language acquisition, foreign language teachers can, in fact, assess students in a way similar to that used by speech pathologists. Early in the year, after students have practiced Latin's rules of pronunciation, a teacher can create a list of multisyllabic words chosen from upcoming lessons. She can then arrange to meet briefly and individually with each of her students and simply ask the student to repeat the words as she says them. She can assign scores if she wishes. The students who score highest are likely to be the highest achievers, and those who score the lowest are most likely to rank at the bottom.

Why? The weakest students will have trouble with phonemic awareness and struggle to track a teacher's speech. They are likely to have trouble discriminating among words in spoken phrases or sentences uttered in Latin. They will have the similar troubles when teachers try to explain elements of morphology or syntax in English. In fact, the labels describing Latin word forms and/or syntax may seem like a separate foreign language to weaker students. These learners miss part and sometimes all of what is said even if they try very diligently to follow. If a student misses part or all of an explanation, he or she is already behind. Others in the class have successfully decoded the sounds or strings of sounds and connected them to meanings. They may be able to ask or answer questions. They are not saying: "What the heck did she just say? I don't get it."

Learners with phonological processing weaknesses also have trouble connecting the sounds they hear with their written representation. This is termed the phonological/orthographic or sound/symbol link. Weaker students may miss entirely the fact that a word pronounced orally is the same word they see in a book or on a board. They also struggle to remember and apply rules of phonology so they can't easily predict the pronunciation of new words they see in print or the spelling of new words they hear spoken.

Researchers have proved through extensive testing programs that individual second language learning potential exists on a continuum from very good to very poor. That means that most learners fall into the middle ranks (Sparks 192). Our job as teachers is to build inclusive classrooms and bring as many of our students as we can along with us. Not only are we invested in maintaining the strength of our programs, but also we care about individual students. How many times do we see a student, whose language learning potential is weaker than that of peers, begin to believe that he/she is less intelligent, develop a negative self-perception, and perhaps opt out of activities or cause diversionary disruptions? For these students especially,

it is important to note that “good and poor FL learners do equally well on semantic and IQ measures” (Sparks 192).

So how can we help? The following models will define ways in which we can explicitly teach and assess student mastery of Latin’s sound system. “Phonology first” is a motto we can adopt, motivated by positive effects of explicit, systematic instruction in Latin phonology, which bring significant improvement in students’ FL aptitude skills, measures of language phonology and receptive vocabulary measures (Sparks, Ganschow, Fluharty and Little).

MODELS OF TEACHING TECHNIQUES DESIGNED TO IMPROVE PHONOLOGICAL PROCESSING

It is our imperative as teachers to support students’ cognition with the use of techniques which foster adept phonological processing and memorization. What does this look like in a Latin classroom? This section of our article will present models, which illustrate ways of achieving these goals. While not an exhaustive list of methods, it is our hope that teachers may use these methods as “jumping off” points for their own creative thinking. These techniques were developed in conjunction with the Baker Demonstration School Latin faculty from 1985-2009. There is an appendix at the conclusion of this article. It contains further directions and worksheets which teachers may use to adapt these techniques for use in their own classrooms.

Hearing, seeing, saying, and writing or otherwise working with new words, is, in a nutshell, **multisensory education**, the importance of which is generally accepted by all who analyze effective teaching techniques. The use of a multisensory methodology, combined with practice identifying phonemes and syllables, is essential for success for students experiencing the challenge of phonological processing weaknesses when learning a foreign language. A syllabification exercise provides an almost assured way of accomplishing this goal. This exercise which divides the text being studied into phonemes, provides oral, aural, and kinesthetic input for students. It allows students who might otherwise hear language as a stream of sounds without word demarcations to learn the sounds of a language in the developmental sequence of language learning which infants experience naturally. We often expect our Latin students to jump in and learn at the word level, skipping over the “silent” and “babbling” periods of language development. This is hard enough for individuals with language learning abilities that come naturally; it is extremely difficult for students facing cognitive challenges.

ar		se		it									
al		det											
ra		et											
na		le											
fa		te											

ECCE ROMANI CHAPTER II

A	Ā	E	Ē	I	Ī	O	Ō	U	Ū	AE	AU	EU	OE
a		que	ē	di	mī	quo	nōn	sunt	rūs	cae			
am		sed	dē	in	vī	ho		bu					
lant		bre	strē	rit	grīs	po		nu					
sa		tem	tē	ti	vīl			cur					
iam		re		quid				unt					
a		fes		ci				us					
tan		dem						ius					
a		ex											
ad		len											
lam		e											
cam													
fa													

ECCE ROMANI CHAPTER XV

A	Ā	E	Ē	I	Ī	O	Ō	U	Ū	AE	AU	EU	OE
ap	tā	ex	rē	di	trī	lon	tō	gus	ū	tae	plau		
ta	pā	spec	bēs	bis	rī	ro	ō	cul	nū	prae			
tar	ā	re	nēs	bi		pro	bōs	um		ae			

tas		ve		vis		o		pul					
quat		ne		ris		bo		strum					
tan		te		il		for		nus					
		se		lim		or		dus					
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						quot		tu					
						ho		du					
								tum					
								num					

*Syllabification Grids created by Mary Joan Masello – Baker Demonstration School, Evanston, Illinois.

MEMORY AND MEMORIZATION

There's more, of course. Think of memory and memorization. Students with poor phonological processing skills have trouble retaining strings of sounds in their short term memory, and if the representation isn't there for the short term, it certainly won't be around for the long term. Furthermore, even if knowledge does make it into the long term memory of challenged individuals, it is often difficult for them to pull it out. We call this phenomenon of pulling out information from long term memory "naming" or "word retrieval". Basically, building quicker word retrieval is why we spend so much time teaching vocabulary. We are trying to build the automatic recall of pronunciation, form, and meaning. In other words, we are working toward "**automatization.**" Nicholson and Fawcett, in fact, have proposed an Automatization Deficit Hypothesis to explain characteristics of individuals with dyslexia. They believe that "dyslexic children and adults have trouble making their skills automatic, and therefore need to use conscious compensation to perform at normal levels." Only with time and attention are dyslexic children are able to reach the same good levels of performance, which "normally achieving children reach without thinking about it" (89).

Working memory (WM) is the mental capacity we use when we have to hold information briefly so that we can perform a task with it. We are using our working memory to read this article, and we use it whenever we listen, read explanations in English, or try to elicit the meaning of a Latin story. It is related to reading comprehension in both English and Latin and affects individual processing time. Working memory is highly dependent on vocabulary knowledge, and vocabulary

knowledge is in turn highly dependent on phonological processing ability. If, therefore, we don't recall vocabulary terms or we just can't keep the meanings of words or clauses in mind, we miss things, experience slowdowns in processing, or sometimes forget entirely—difficulties we teachers witness frequently, particularly in our weaker students. Miyake and Friedman present evidence that working memory may be the “central component” of foreign language aptitude (339) because the “linearity of language necessitates temporarily storing the intermediate and final products of computations as a reader or listener constructs and integrates ideas from the stream of successive words in a text or spoken discourse” (341).

Establishing word to meaning links is essential to using any language. We should be sure to present new words in contexts which learners can use to assist recall, to model pronunciation as students view these words, and students, in turn, should repeat and write or otherwise work with the words. This is a multisensory approach. We should, furthermore, review frequently. Why? It is because we are trying to help build the students' working memory when using the Latin language.

An early challenge that beginning learners of Latin face is that of memorizing case endings for nouns, adjectives, pronouns and verbs. Grigorenko identifies the most important ways in which languages differ in difficulty of acquisition (101). According to Grigorenko's list, Latin falls into the “hard” category in two of the areas: morphological complexity and grammatical differences.

CLASS ACTIVITIES

The challenges of memorization and organization are often met by activities which combine multi-sensory activities with categorization tasks. These techniques have many incarnations in the Latin classroom. Latin students are faced with memorizing extensive morphology and developing an automatic recall of this morphological information. Two activities which accomplish these ends are embodied by The Ablative Hop and The Verb Cantata. Both activities are easily adaptable to the learning of other Latin, i.e. an Ablative Hop may easily be adapted to a Dative Dance or a Genitive Jump. A Verb Cantata may be used to reinforce subjunctives and conditionals, as well as active and passive systems. A third activity which lessens the load on short-term memory for students is Chunking. Chunking activities which also support reading comprehension may be adapted to all levels of texts, from the most basic level to the most complex. Teachers should look at these models and then use their imagination to create additional activities.

THE ABLATIVE BUNNY HOP

One methodology for facing the challenge of memorizing Latin morphology is embodied in the Ablative Hop, an exercise used to support the automatic recall of ablative case endings. This exercise, once again, provides oral, aural, and kinesthetic input and practice for students. It supports their memorization of morphology and aids in their phonological processing. The Ablative Hop is easily adaptable to the memorization of other case and conjugation information. Read the directions, get up, and see what it feels and sounds like.



Ablative Case Endings Song

Dance: "Ablative Bunny Hop"*

for Noun Declensions I, II, III

-1 st declension	2 nd declension	3 rd declension
-ā (right foot)	-ō (left foot)	-e (right foot)
-ī s (hop)	-ī s (hop)	-i bus (hop)

*Song/dance originally created by Rickie Crown, Baker Demonstration School

In order to learn the ablative endings for 1st, 2nd, and 3rd declensions, the teacher can teach the students the Ablative “Bunny Hop.” Using the traditional Bunny Hop dance, students should stand in a line with their hands on the shoulders on the person in front of them. For the singular ablative endings, *-ā -ō -e*, the students should kick out right, left, right. Then for the plural endings, *-īs -is -ibus*, the students should hop three steps forward. Then repeat. The Ablative Hop line can move forward with increasing speed.

VERB CANTATA

One has long been able to identify Latin students as they walk through life mumbling verb tense endings for practice. O, S, T, MUS, TIS, UNT murmurs one. BAM, BAS, BAT, BAMUS, BATIS, BANT mumbles another. A Verb Cantata allows practice of all six tense endings at one time. A class is divided into six small groups and each group is given a set of verb endings. In other words, one group has present endings, another imperfect, and so on. The groups are given five minutes to create a chant, a song, or a rap of their assigned endings. The teacher then organizes each of the student groups as though they are sections of a choir (alto, soprano, baritone, etc.). The teacher then conducts the choir, bringing in each in each section varying the volume of each section and silencing each section one at a time. The piece lasts as long as the teacher/conductor decides. By the conclusion of the exercise, each group has practiced its one set of endings intensively and has been listening to the other verb endings. Students develop automatic recall the verb tense endings which are embedded in their own song.

The Verb Cantata employs oral, aural, and musical input. It also makes people laugh. These four factors make information easier to learn, and far easier to recall. Try it!

CHUNKING AT THE MIDDLE SCHOOL LEVEL

Chunking tasks also support the efficiency of working memory by lowering the load on short term memory. It makes reading comprehension easier for students as it helps them hold information from the beginning of the sentence to the end while they are reading. Read the explanation of Chunking and try the exercises.

What is Chunking?

Chunking may be defined as breaking words into individual morphemes or breaking sentences into syntactic components. Many types of grammatical chunks may be identified. For purposes of this lesson, we will focus on subject chunks and prepositional phrase chunks.

Why is Chunking important?

Chunking helps the efficiency of working memory. Each of us is said to have access to seven bits of working memory. Without chunking, each word of text equals or takes up one bit of memory.

How does Chunking impact Reading Comprehension?

Additionally, Chunking helps readers organize the information in a text to support reading comprehension. Chunking bridges both memory and organization.

Example

<u>Claudius</u>	<u>&</u>	<u>Publius</u>	<u>sit</u>	<u>under</u>	<u>the</u>	<u>tree.</u>
1	2	3	4	5	6	7

With chunking, each bit of working memory can hold more than one word.

English Example:	<u>Claudius&Publius</u>	<u>sit</u>	<u>(under the tree).</u>
	Subject Chunk	Verb	Prepositional Phrase
	1	2	3

Latin Example:	<u>(Claudius et Publius)</u>	<u>(sub arbore)</u>	<u>sedet</u>
-	Subject Chunk	Prep Phrase	Verb
	1	2	3

Chunking Tasks

Given a Latin text, complete these tasks:

Task 1

1. Find a partner.

2. Explain to a partner why each of the words in the parentheses is a Latin Chunk.
 - (Iulia et frater suus) (ad portum) mane festinabant.
 - Aquitania (a Garumna flumine) (ad Pyrenaeos montes) et eam partem Oceani quae est (ad Hispaniam) pertinent . . . (I.I.VII CAESARIS COMMENTARIORVM DE BELLO GALLICO LIBER PRIMVS)

Task 2

1. Read the Latin sentence out loud.
2. Put parentheses around any chunks you see.
3. Label the type of chunk:
 - Subject chunk
 - Prepositional phrase chunk
- Vadit inde (Horatius) (in primam partem pontis) et (ipso miraculo audaciae) obstupescit hostes. (Livy II.10.5)

MULTISENSORY ASSESSMENT: A DIGITAL APPROACH

When it comes time for us to assess a student's phonological processing skills and memory, traditional pencil-and-paper quizzes and tests give us a relatively small set of data. In order to develop a sense of what our students actually know, we must supplement these assessment scores with observation from class and day-to-day conversations with our students.

While it is often easy for our trained ears to hear student success or error in phoneme identification during a read aloud, for middle school student, there is more at stake during this type of assessment than simply mispronouncing a word or botching syllabification. Regardless of whether it is happening or not, all eyes and ears seem to be trained on the individual who is reading, and the simplest of errors opens up the door to ridicule. Even in a properly managed classroom, the fear

of being wrong in such a public way puts many of our middle school students in a state of heightened anxiety before they have even started reading, and in turn, they are already more likely to rush, to speak quietly and swallow their words, or even to sabotage their reading to earn a laugh from their peers.

The following assessment uses the screencasting application Educreations for iPad® to help get closer to the truth of knowing exactly what students know by giving them the chance to record their own work in a safe, inclusive, lower-stakes environment. During the assessments, every student reads text aloud at the same time, and there is less focus on what others are thinking and more focus on getting through the whole passage. Even the soft voices are recorded by the iPads, and when the assessment ends the teacher is left with a full set of valuable information for each student that can be reviewed anywhere an internet connection is available.

For teachers and students who do not have access to iPads, screencasting is still a possibility; however, the process may require adding software to your computer, and there are a few key factors, which I have addressed in the Appendix, that should be considered before starting your first screencasting assessment.

In one 5-10 minute lesson, all students are first tasked with reading through a passage of *scriptio continua* to identify and pronounce each individual word.¹ Next, students are instructed to schematize the text, identifying verbs in green and subjects in yellow. Finally, students are required to return to the beginning and to translate the passage they have just inked in digital pen.

To view the process in action, click [here](#):

Step 1: Read Aloud

Students use the inking feature of the application to record pen strokes and to divide a passage of *scriptio continua* into individual words. This stage of the assessment gives them the chance to process every word in their minds before attempting to read the word aloud. This process of previewing each word before reading it out loud not only gives students a chance to process each phoneme and syllable before attempting to pronounce the word, but it also leads to excellent post-assessment discussions about new vocabulary and the role of morphology and syntax.

Step 2: Schematization

The basic schematization exercise, while seemingly simple, is a useful assessment tool on two levels. First, it shows each student's facility with morphologi-

¹ To convert any text already digitized, one can simply copy and paste it into Wesley Wood's *No-Spaces* and it will render it in *scriptio continua* or as an interpuncted script.

cal analysis by having students identify parts of speech and basic syntax through ending recognition. It is often at this point in the Educreations for iPad® video that you will hear something like “This ending makes this word look pretty verby.” Secondly, when the students finally go back to translate the passage, those who are able to make sense of the information they produced during the schematization exercise often produce the most fluent translations on their first attempt.

Step 3: Translation

“I don’t know this word, so I’m going to look it up . . .” has become one of my favorite phrases when listening to student videos. As a teacher, if the only information I have from an assessment is what has been written on the page, I am often left with only a flick of a pen to identify the error; however, it is rare that this pen mark will motivate a student to learn his or her vocabulary. By allowing students to look up vocabulary in real time, when they are tasked with watching their own video and reflecting on what they would do differently on their final draft, students are better motivated to internalize the words they missed on the first go.

Step 4: Review and self-reflection

The review and self-reflection processes happen, once again, in a safe, inclusive, low-stakes environment: each student watches his or her own video and listens to the narration through a pair of headphones. During the final review, students learn to engage in the process of metacognition by writing down where they would like to improve and by identifying changes they will make for their final translation. For students who are actively engaged in the process, this period of reflection often brings with it groans, feverish note taking, and finally, a well-constructed translation of the text complete with a video and set of notes that demonstrate true progress.

CONCLUSION

A student cannot even begin to achieve if he or she can’t find the paper on which an assignment is written or has forgotten the book or last night’s homework. Problems with organization also delay processing speed, and processing speed is very important to middle school students. Students at this level often seem to be in a race to get their work done so they can socialize. Unfortunately, those who need more time often rush through tasks at hand, unless, of course, those tasks are engaging, enjoyable, and inclusive. One helpful idea is that of making a Latin notebook part of a course requirement. It works well to set guidelines for the inclusion of

materials so students know where to look to find homework and study materials, but allowing students to be creative in other respects. The most memorable notebooks are often hand decorated by budding artists or full of pictures providing context for vocabulary words or stories.

Gathercole, Lamont, and Alloway have studied how differences in working memory affect student achievement. In an effort to achieve learning success for as many as possible, it is important “to identify the learning activities that will place heavy memory demands” (235). They furthermore note that the “most commonly observed memory-related failure” they observed was “an inability to follow instructions from the teacher” (226). They suggest “keeping the instructions as brief and linguistically simple as possible” and breaking those instructions down into smaller steps (235). A step-by-step set of directions for any Latin assignment is an ideal inclusion at the start of each project. Teachers can insert these directions at the top of a handout or a web page or write them on a board. This guide must be in easy view of all and will be of special value to weaker students, who often miss steps explained orally.

Gathercole and her team also advocate assisting students when “complex learning situations . . . place significant processing and storage demands” (236), as is the case when students translate Latin sentences or stories. A productive pedagogical technique in this regard is that of **coordinating components**. The Latin language can be viewed as containing five components: phonology, morphology, semantics, syntax and pragmatics. Beginning students must learn items within each component category at the same time as they learn how individual items work together to create meaning in sentences. Deriving meaning from Latin sentences is typically the most challenging task we ask of our students. If, therefore, they can focus on sentence syntax and not have to look away to flip through pages in their book or on the web to search for vocabulary or check on a word form, their work becomes more manageable, and their processing speed increases. When working on new noun declensions or such words as **is, ille, hic** or **qui, quae, quod** or verb paradigms, it is helpful to print the word forms on the top of a passage so students don’t have to look in another source to see them. Teachers, however, must never think that the coordination of components is a job that falls to them alone. One or two students can create a list of vocabulary words used in a particular story, and copy the list so all students use it. Student teams can also create English introductions to Latin stories and lists of relatively difficult items in those stories accompanied by explanations. We should

always be aware that “learning is based on success” and “errorless learning,” in which errors are prevented, is of much greater benefit, especially for students with deficits in memory, to “errorful learning,” in which students approach problems using the “trial and error” method (Gathercole, 231).

In summation, knowledge gleaned from research combined and models developed by experienced teachers make it possible to modify teaching methodologies to match the cognitive needs of middle school students. Our goal is to assist all our students-- the blue haired student with the nose ring, the studious, focused learner who can’t understand sentence structure, the yawning student with the family crisis, the fashion obsessed teen who doesn’t turn in homework, and all their peers succeed as Latin students. Their success is our success.

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APPENDIX

Syllabification duplicates the babbling process for students, allowing them to develop the skill of hearing the phonetic construction of the words they will be asked to read. This exercise makes correct pronunciation possible for students who have cognitive processing issues with phonemic awareness. This overt practice allows for more rapid phonemic facility for students without cognitive processing issues.

Preliminary Teacher Tasks

Task 1

- Create a syllabification list for vocabulary by chapter of your text for each chapter in the book.
- In order to do this use the syllabification vowel and diphthong list in the syllabification table.
- Turn to a chapter vocabulary list you will be using and break down each word by syllable.
- List the syllables for the vocabulary in the correct list under the vowel or diphthong list they represent.
- By the end of this task you will have created a list of syllables representing each vowel or diphthong used in the chapter. (It looks like random syllables, but when spliced together, these syllables create the vocabulary that your students are responsible for pronouncing and reading.)

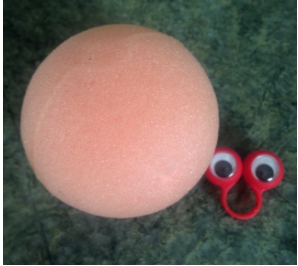



Task 2 – Sponge Ball Puppet

- Project and direction courtesy of Marilyn Price, puppeteer.

TALK TO ME!

A puppet partner for language and literacy development

Marilyn Price: www.marilynprice.com

	<p>Materials: Sponge ball, eyeball puppet, scissors & glue!</p>
	<p>Draw lines and then cut with scissors!</p>
	<p>Insert eyeball ring puppet with a bit of glue!</p>
	<p>Holding ball in your dominant hand squeeze with pressure from your thumb to make the mouth open and close!</p>

Notes:

- Either teacher or students may make puppets.
- If you wish to, students may use the eyes by themselves as puppets.
To do so, slide the eyes onto index finger to create a finger puppet.
To make this puppet talk tap index finger to thumb.

Class Activity Directions

To do this task, students and teacher need the syllabification list for the chapter plus a puppet (see above). If you wish, a puppet can be created by simply using your four fingers to tap up and down vertically on your thumb.

To begin, the teacher models sounds, reading one syllable at a time out loud, using the puppet to speak each sound. The class and its puppets echo each syllable after the teacher. Use approximately three to five minutes of class time to do this exercise on a daily basis. As students become more familiar with the phonemes of the language, you may increase the number of syllables you say in a group (la-ha-tat) and you may compare/contrast long and short vowels by saying them in sequence (la-stā).

After students become proficient in the phonemes teachers may give the leadership role of this task to the class. For many classes this exercise becomes a rapid-fire warm-up for each day's activities. Then the puppets are put away and the lesson proceeds.

[illegible]

Verb Cantata

Materials Needed:

- Pack of multi-colored 3x5 index cards (six colors needed in total – may use white)
- Markers

To prepare for the Verb Cantata, select one index card of each color:

- Write on one color the PRESENT verb tense person endings (o-s-t/mus-tis-nt)
- Write on another color the IMPERFECT verb tense endings (bam-bas-bat/bamus-batis-bant)
- Write on another color the FUTURE verb tense endings (bo-bis-bit/bimus-bitis-bunt)
- Write on another color the PERFECT verb tense endings (i-isti-it/imus-istis-erunt)
- Write on another color the PLUPERFECT verb tense endings (eram-eras-erat/eramus-eratis-erant)
- Write on another color the FUTURE PERFECT verb tense endings (ero-eris-erit/erimus-eritis-erunt)

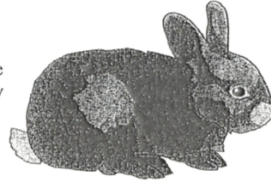
During the Verb Cantata:

- Divide class members into six (6) groups.
- Give one verb tense card to each group along with enough blank cards of the corresponding color for each member.
- Each member of the group should copy the group's verb tense endings on his/her own card.
- Each group is to create a rap, a chant, or a song around its assigned verb tense endings.
- Give them three to five minutes to do so.

- After five minutes, have each group perform their rap, chant, song for the rest of the class.
- Then, arrange the groups to stand together in clumps, as though they were sections in a chorus.
- You, the teacher, become the choral director.
- Bring each group in, in the order you choose, and once a group begins singing, their job is to continue repeating their rap, chant, song.
- Spend about three minutes bringing groups in and changing volume (softer/louder) before you bring the choral work to a conclusion.

*The Ablative Bunny Hop***Ablative Hop**

Students and teachers usually enter Latin class knowing the Bunny Hop. This dance may be used as a kinesthetic memory device to help keep ablative endings under control.

1st 3 steps for singulars

right foot out to side
say "Ā"



left foot out to side
say "Ō"



right foot out to side
say "Ē"

2nd set of 3 steps for plurals

jump with legs together
say "Is"



jump with legs together
say "Is"



jump with legs together
say "Ibus"

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These same six motions of the Ablative Bunny Hop may be used to reinforce memorization and phonological processing for the morphology of Latin case endings.

Chunking at the Middle School Level

What is Chunking?

Chunking may be defined as breaking words into individual morphemes or breaking sentences into syntactic components. Many types of grammatical chunks may be identified. For purposes of this lesson, we will focus on subject chunks and prepositional phrase chunks.

Why is Chunking important?

Chunking helps the efficiency of working memory. Each of us is said to have access to seven bits of working memory. Without chunking, each word of text equals or takes up one bit of memory.

Example

<u>Claudius</u>	<u>&</u>	<u>Publius</u>	<u>sit</u>	<u>under</u>	<u>the</u>	<u>tree.</u>
1	2	3	4	5	6	7

With chunking, each bit of working memory can hold more than one word.

English Example:	<u>Claudius&Publius</u>	<u>sit</u>	<u>(under the tree).</u>
	Subject Chunk	Verb	Prepositional Phrase
	1	2	3

Latin Example:	<u>(Claudius et Publius)</u>	<u>(sub arbore)</u>	<u>sedet</u>
-	Subject Chunk	Prep Phrase	Verb
	1	2	3

Chunking Activity

Materials Needed

- Your Latin Textbook (or Latin text being studied)
- Writing Implement

Task 1

Given a Latin text, bracket the subject chunk and any prepositional phrase chunks.

Ask students to complete Task 1 for the text:

- Find a partner.
- Explain to a partner why each of the words in parenthesis is a Latin chunk.

Task 2

Identify a Latin Text which your students are reading which contains subject and prepositional phrase chunks.

Read the text out loud to your students asking them to:

- Put parenthesis around any chunks they see/hear.
- Label the type of chunk--- subject chunk or prepositional phrase chunk.

Multisensory Assessment: A Digital Approach

A quick search on the internet for “screencasting” will yield several articles and recommendations for screencasting software. While I only use Educreations for iPad®, the following general recommendations aim to help set up a classroom for screencasting without iPads:

- Make sure you have enough hardware for each student to participate at the same time. Each student should be able to complete the exercise on his or her own device at the same time. Each device needs to be equipped with a microphone that can clearly capture the voice of the student sitting directly before it while also cancelling out some of the background noise of the other students in the room. Be sure to test this before you begin.
- Use screencasting software that allows for each student to record his or her own voice while also editing the text on the screen in real time. This software does not have to be costly (Educreations for iPad can be downloaded for free!)
- Develop a plan for how you will gain access to each student’s video. Educreations stores all of the videos in the cloud, which makes it easy for to access all of the videos from one class in a central location. If your sceencasting software does not also come with cloud storage, you may need to have students email you their files.
- Be sure that you are comfortable using the screencasting software that you have chosen for your students. There will certainly be questions about how to navigate the software, and I have found that while there are many applications that have more features than Educreations for iPad®, the simple user interface and limited menu of inking options help to keep my distractible students focused on the task at hand.
- Let your students “play” with the software before actually using it for assessment. When presenting screencasting for the first time to my sixth graders, I show them the absolute basics of the application

and then I tell them to explore. These explorations have led to some wonderful discovery and have also helped me to identify students who will be adept at helping their classmates troubleshoot technology problems in real time.