

Landmark College
Workshops for Faculty and Staff

Teaching Foreign Languages to Students with Learning Differences

Presented by Linda Hecker, Director of Educational Services
Landmark College, Putney, VT.

For: Brandeis University
March 9, 2006

Linda Hecker
Landmark College Institute for Research and Training
Putney, VT 05346
Phone: (802) 387-6735
Email: lhecker@landmark.edu

Teaching Foreign Languages to Students with Learning Differences

Linda Hecker

lhecker@landmark.edu

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

©2005 Landmark College

Special appreciation to:

Eve Leons, pioneering Landmark Spanish teacher

Christie Herbert who directed the Foreign Language FIPSE grant

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

Framing Questions

General presentation:

- Why is language learning so difficult for some students?
- What is the cognitive basis of language learning: how do language, memory and attention interact?
- Which programs have successfully addressed the needs of struggling FL students?
- What specific instructional techniques support language study for diverse learners?

Why is language learning so difficult for some students?

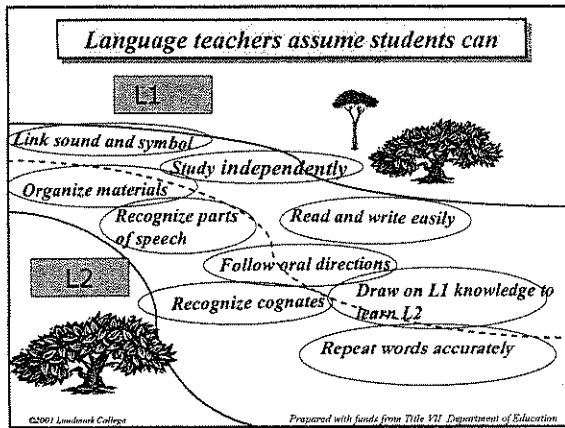
What is the cognitive basis of language learning: how do language, memory and attention interact?

Challenge

Think of a student who has struggled in your FL class despite adequate effort and intelligence
What aspects of language learning were most difficult?

Brainstorm a list

Language Based Difficulties



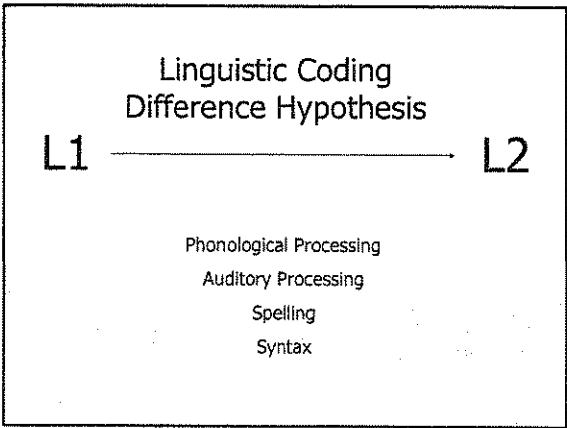
Linguistic Coding Differences Hypothesis (LCDH)

Sparks/Ganschow

- First language skills highly influence second language learning
- High risk FL learners have weaker phonological/orthographic and syntactic (but not semantic) skills than low risk learners

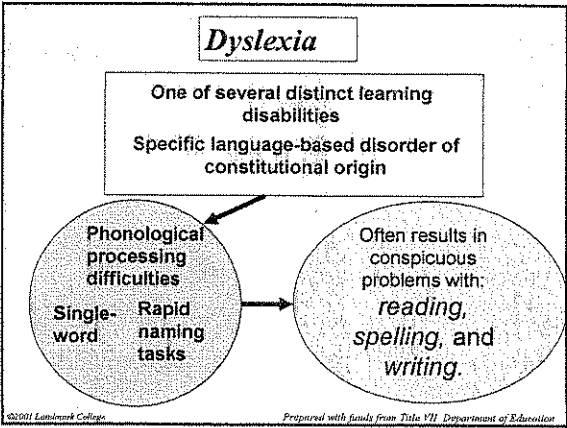
Linguistic Coding Difference Hypothesis

Difficulties with FL learning range from mild to severe and many learners, not just those classified as LD, find foreign language classes problematic.



In the literature you will see a number of terms for the difficulty experienced by students who struggle in FL classes:

- Dyslexia
- Specific learning disability
- weak language processing
- weak native language learning skills
- phonological processing difficulties
- auditory processing difficulties
- LD/Learning disabilities
- LLD/Language learning disabilities
- FL learning problems
- or...being at "at-risk"



Phonological Processing

Receptive

Isolate sounds

Recognize sounds

Recognize similarities

Associate symbols and sounds (read)

Expressive

Blend sounds

Compose words from sounds

Associate sounds and symbols (spell)

Dyslexic Students Learning a L2 may...

- Add letters
- Mix letters
- Omit letters
- Add syllables
- Drop syllables
- Know the beginning & end of the word, but not the middle

Typical Errors of Student with Severe Phonological Processing Problems

Vito=vivo extudiante=estudiante doso=dos
senta setenta sesenta=60
mucho gusto=me gusta
qua quetdio questiado=quieto
ir de pras=ir de compras
amazna=manzana sabador=sabado

Auditory Processing Difficulties

Students who have trouble processing oral language rapidly, accurately

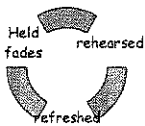
- miss chunks of information
- become mentally exhausted listening
- have trouble learning new vocabulary



Memory difficulties

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

Auditory information in Memory



To be understood, oral language must be both received and processed before it fades

- Verbal material fades quickly unless rehearsed
- phonological information is kept available by cycling it through a rehearsal loop

Memory difficulties - input

- Students with weak phonemic awareness confuse similar sounding words

Sesenta	Setenta
60	70

- Students with weak word analysis skills confuse similar looking words

Cuarto	Cuarenta
4	40

Memory difficulties - processing

- Students don't recognize patterns

dosCIENTOS	tresCIENTOS
------------	-------------

- Students don't automatically link the known and the unknown – (unless it is explicitly taught.)

Ocho - Octagon or Octopus
Vermont - Verde

Memory difficulties – output (retrieval)

Words that start with the same sound(s) will become confused...

Cuesta
Cuenta
¿Cuánto?
¿Cuándo?
Quince
Quinientos



Students may have an unusually long retrieval time

Charlann Simon

"Just because I have *learned* a word,
doesn't mean it will be *available*."

"Words with more than 2 or 3 syllables
fade from memory once I begin to
articulate them, with vowels especially
susceptible to distortion."



Attention Difficulties

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

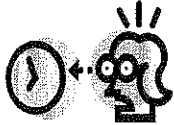
Attention Difficulties

- Students with saliency issues don't focus on key material
- Students with inconsistent focus miss important details

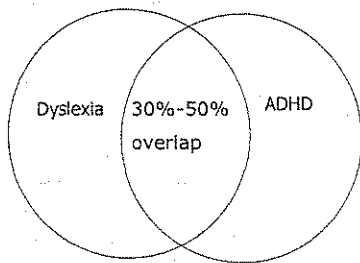


Attention difficulties

- Students with Executive Functioning deficits have trouble with
 - Managing materials
 - Completing work on time
 - Long-range projects
 - Attendance and tardiness
 - Studying independently



Who are the most challenging students?



SUMMARY

Why do at-risk students fail foreign language classes?

Why do at-risk students fail foreign language classes?

- Students' underlying difficulties are "invisible", but relate to fundamental language learning skills
- Instruction does not begin at the student's point of readiness.
- Rate of instruction is too rapid given the complexity of the task.

Why do at-risk students fail foreign language classes?

- Students have insufficient time and strategies for practice
- Many activities overload weak auditory processing (listening to tapes, dialogues, videos)
- Instructional materials may contain elements which exacerbate student difficulties.

Why do at-risk students fail foreign language classes?

- Students are reluctant to approach the instructor and unsure of what to ask for
- Instructors lack training on how to best meet the needs of this population.

What does research say about instructional principles for students who struggle with language learning?

University of Colorado at Boulder

Study comparing students in the modified foreign language classes (MFL) & students in traditional classes

- measured phonological coding skills, via pig Latin and repetition tasks
- * Found direct evidence for an underlying core phonological deficit in the MFL group (students who had difficulty in traditional FL classes.)

Paired Association Test
Krug, et al 2002

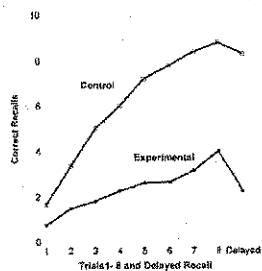


Figure 1. Mean performance rates for the control group and experimental group across all eight of the study-use trials and delayed recall measure.

Copyright © 1992 John Wiley & Sons, Ltd.

Appl. Cognit. Psychol., 16(2):1-11 (2002)

Ann Sax Mabbott, University of Minnesota doctoral research

Interviewed LD-labeled students who became proficient L2 speakers

1. Previously failed FL class
2. Learned L2 in spite of their Learning Disability.
3. Became fluent in an immersion setting.
4. Reported that the L2 class helped them to understand English (morphology, syntax, phonology, semantics) better.
5. Agreed they would be more successful in a class that stressed communicative competence rather than grammar or correct spelling.

Dr. Mabbott – research implications

- Students with language learning difficulties should be encouraged to study language in immersion settings.
- Languages should be given a priority in the elementary grades which would benefit all students, but especially those w/ LDs
- As the best predictor of success in a FL classes is previous experience, students w/ ld's should have the opportunity to take FL classes, not be steered away from them!
- Instruction of students with LD's should take their difficulties into account in order to be successful.

Sparks & Ganschow recommend...

“Bottom up” FL teaching methods that teach directly and explicitly:

- the sound and symbol system (phonology/orthography)
- and grammar (syntax) of the FL

Jonathan Arries
(Spanish professor - College of William and Mary)

"A Spanish course for LD students should not be based on one approach or limited by textbook content. Rather it needs to focus on students' skills and desire to learn on one hand, and on the other, the teacher's organizational skills and command of a variety of teaching strategies."

Which programs have successfully addressed the needs of students at-risk for failing language courses?

Big Picture: FL/LD Models

from an outside review of Gettysburg College

- | | |
|--|---------------------------------|
| I. Mainstreaming/
Inclusion | V. Pre-FL-Study Course |
| II. Self-contained course | VI. Curricular Modifications |
| III. Universal Design | VII. Orton-Gillingham
Method |
| IV. Learning Assistance
Paired Course | VIII. Tutors |

FL/LD Models

- **Inclusion/Mainstreaming** – accommodations at the discretion of the instructor
- **Self-Contained Course** – includes only students who are considered at-risk/ld (such as U. of Co. and LMC)
- **Universal Design** – seeks to design a course that will meet the needs of all learners (UMass)
- **Learning Assistance Paired Course** – students attend a mainstream course, and receive extra tutoring by instructor

FL/LD Models

- **Pre FL Study Course** – teaches linguistic issues in anticipation of FL Study (BU)
- **Curricular Modifications** – Curriculum itself is the focus of modification (Arries/Schwartz)
- **Orton-Gillingham inspired method** (Sparks,Ganschow,Miller, Schneider)
- **Tutors** – students receive individual attention but qualifications of tutors can vary widely.

Highlighted Teacher
Accounts/Program Descriptions

- University of Colorado at Boulder
- Jonathan Arries –College of William & Mary
- EE Bilyeu – Central Washington U.
- Demuth and Smith - Boston University
- Gilbert and Schneider – “MSL”
- Margarita Hodge –NOVA CC
- Landmark College, Gettysburg College

University of Colorado at
Boulder

The University of Colorado at Boulder began offering modified Latin in 1990, and since then has offered modified classes in Spanish & Italian.

University of Colorado at Boulder

1. Modified classes have controlled enrollment – 15 students
2. Taught by master teachers who are knowledgeable about relevant LD issues who can contact Disabilities Services as needed
3. Teachers commit to working with the same group of students for 3 semester sequence.

University of Colorado at Boulder

Once a student is approved to fulfill the language requirement by taking the modified sequence, students are expected to:

1. Take a reduced load of classes (12 credits)
2. Devote 2 hours of daily study to the class
3. Utilize out-of-class tutoring provided free of charge for the class
4. The students also commit to taking 3 semesters of the language in consecutive semesters

Modified Classes – U of Co at Boulder

- Pace of introduction of new material is slowed
- instruction is highly structured
- course content is designed to provide predictable lessons
- substantial repetition and review

Articles

Hispania –Mar ch 2002 –Vol ume 85 Issue 1, Pages 117-130 ,
Obdulia Castro- "Students with learning differences and
the foreign language" - written in Spanish.

Topics in Language Disorders, February 2001, Vol. 21 Issue
2, Pages 55-67, Downey, Doris M. and Synder, Lynn E.,
"Curricular Accommodations for the College Student with
Language Learning Disabilities."

Jonathan Arries
College of William and Mary

While teaching Spanish at Old Dominion
University, Arries found that a flexible, yet
structured approach works best.

Articles

Arries, J. (1994, March). An experimental Spanish course for learning disabled students. *Hispania*, 77, 110-117.

Arries, J. (1999). Learning Disabilities and Foreign Languages: A Curriculum Approach to the Design of Inclusive Courses. *The Modern Language Journal*, 83, 99-110.

HELDS PROGRAM – Central Washington University

- FIPSE funded project (1980-1983)
- Designed to create models for other post-secondary institutions on how to provide equal academic access for students labeled LD across the curriculum.
- E. Bilyeu participated as a Spanish teacher

Quote from Article Bilyeu

“Remember that the problems of LDs are extremely varied... So, finding a technique that is of particular benefit to one individual may not serve another as well... I have learned that the more teaching modalities I can employ, and the greater the variety of experiences one can provide with each, the greater the chances of success.” (1992, p. 23)

Article

- Bilyeu, E. E. (1992). *Practice makes closer to perfect: Alternative techniques for teaching Foreign languages to learning disabled students in the university*. ERIC Document Reproduction Service No. ED 234558.

“MSL”

- Miller and Schneider, collaborators with Sparks and Ganschow, experimented with using what they termed multi-sensory structured language (MSL) approach.

MSL

- Inspired by the success of the Orton Gillingham method of teaching first language skills, similar methods were used in the teaching of the L2.
- * This approach includes explicit instruction in the sounds of the language & grammar.

Articles

- Sparks, R., Ganschow, L., Kenneweg, S., & Miller, K. (1991). "Use of an Orton-Gillingham approach to teach a foreign language to dyslexic learning disabled students: Explicit teaching of phonology in a second language." *Annals of Dyslexia* 41, 96-118.
- Sparks, R., & Miller, K. (2000). "Teaching a Foreign Language Using Multisensory Structured Language Techniques to At-Risk Learners: A Review." *Dyslexia* 6: 124-132.

Dr. Margarita Hodge
Professor of Spanish (Northern Virginia
Community College)

"Is my teaching unlocking human potential?"

How do I accommodate? Can I remediate? What
kind of compensatory (study skill or language
learning) strategies can I provide?"

Article

Hodge, Margarita, "Teaching Foreign
Language To At-Risk Learners: A
Challenge For The New Millennium",
Journal of Virginia Community Colleges,
Vol 2, #1, 1998, 68-78.

Landmark College

Landmark College and the School for International Training awarded a 3- year FIPSE grant to identify what kind of instruction could enable students with learning disabilities to succeed in the foreign language classes.

1998-2001

Article

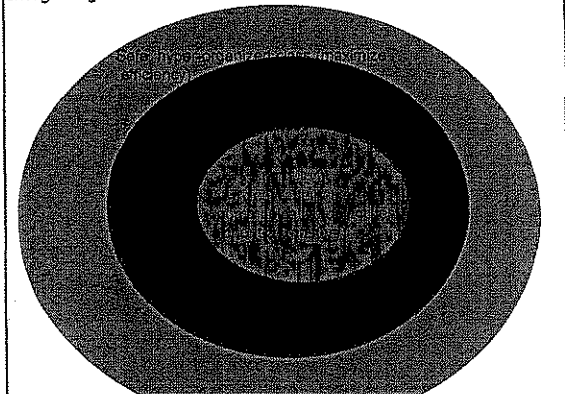
Leons, E, and Herbert, C. "World Languages and the Student with Learning Disabilities: Best Practices"

What specific instructional techniques support language study for diverse learners?

“The relationship between time and memory can be considered a ratio of the quantity of material in the curriculum to the total time on task available to the student... There are two ways to maximize this ratio. The first is to reduce the syllabus and prioritize the mastery of fundamentals rather than the completion of a textbook... The second is to maximize instructional efficiency.” –

Arries (1999, p. 106)

Integrating Curricular Elements



Best Practices Top 12!

1. Make careful choices in curriculum & materials
2. Build in individualized instruction
3. Teach multi-modally
4. Structure activities for success
5. Teach to mastery
6. Support students w/ phonological weaknesses

Best Practices Top 12!

7. Use writing to support the learning of spoken language
8. Create a learner friendly classroom
9. Incorporate memory strategies and development of metacognition
10. Test both orally & in writing
11. Encourage students to use technology
12. Make language learning fun!

1. Make careful choices in curriculum and materials



- Personalize the curriculum.
- Focus on practical uses of the language.
- Focus on what you want students to be able to communicate. Don't get lost in grammar.
- You may need to cover less material in a semester.



Common Problems w/ Textbooks

- Multiple objectives – new grammar embedded in new or overwhelming vocabulary
- Students unclear of exactly what they are responsible for
- Multiple activities on a page
- Small font size, busy layout
- Inadequate pronunciation support

What to look for in a multi-media CD ROM

- clear instructions
- video clips with optional captions
- clear audio without background noise
- electronic assignment tracking
- clearly established meaning – you may see a picture and the word in the target language, but the exact meaning is still unclear
- tasks that move students from recognition to retrieval of language.

2. Build in individualized instruction

Working one on one

- A little extra help can make the difference between success & failure
- Working with a student one on one will help you become a better diagnostician
- Your students will teach you to teach. Once you see breakdowns, you can redesign your classroom activities



3. Teach multi-modally

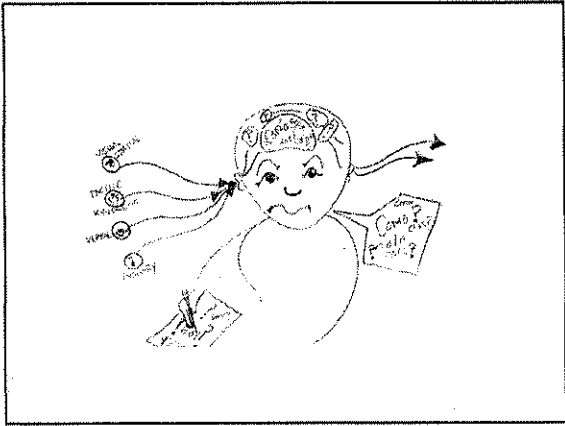
"The more you speak, write, draw, move, and think the language, the more complete your learning process will be."

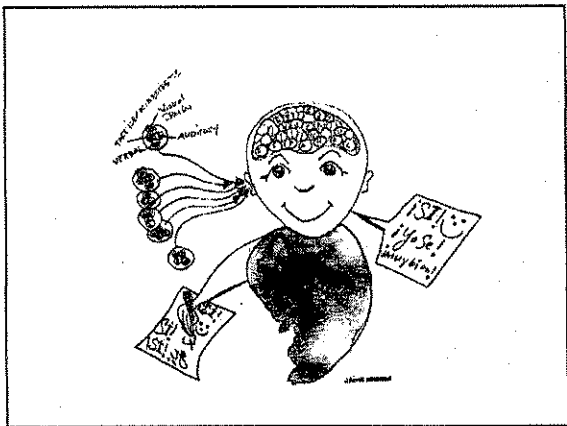
K.B. - Landmark Student

*Incorporate visual, kinesthetic, and motor elements into instruction.

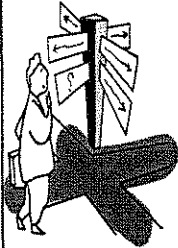
*Combine hearing & speaking the language with seeing and "doing"







Visuals support auditory input,
however...



- Visual input needs to be carefully designed & may need to be explained. Ex. Family trees
- Instead of realia + spoken word
– consider realia + index card
w/written word+spoken word

4. Structure activities for Success

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

Designing the Activity

1. Are you presenting a learnable chunk of material given the complexity of the task?



Asking where someone lives

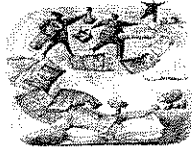
Saying where you are from

A) ¿ Dónde vives?

B) Vivo en _____.

Designing the Activity

2. Are you including several learning channels?



Structure Activities for Success In the classroom

1. Have you explained your visuals?
2. Have you modeled what you want students to do?
3. Are you giving student enough processing time & practice time?
4. Are you teaching diagnostically?

Structure Activities for Success

Long term Assignments

Micro-unit large assignments: Break them into smaller steps— each with a deadline



Written Assignments

Proofreading Checklist

1. _____ I have double checked the order of my nouns and adjectives - nouns first then adjectives

Remember: In Spanish you always know WHAT you are talking about BEFORE you describe it.

ex. el sombrero azul

5. Teach to Mastery

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

- Give students ample time and opportunity to practice/work with a given skill or task.
- Have students practice until the skill/task becomes automatic.
- Encourage students to retake tests
- Use a draft approach on key assignments



6. Support students with phonological weaknesses

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

You have one minute to memorize these words

1. Zlxfeovm- (n) underwater picture window.
2. Blepning- (n) rose colored underwater light.
3. Bltkelgx- (n) sticky residue on a person after living in space.
4. Spatfog- (n) fork shaped moon mining tool.

Use the theater technique of repeating one phrase with various emotions

Create picture symbols for words



S Z D @ N TAY - condiente
 who? @ ix - júbilo
 con @ " @ O" - inguino
 @ Pa " VOR - por Sear
 @ E H A guiso
 @ @ @ @ - guiso
 X @ @ V @ @ @
 D A @ @ TAY @

Pronunciation Practice

Directions:
 Alone, or with a partner, practice saying the following words.

1. Quien
2. Que
3. casa
4. coro
5. cucú
6. cine

etc.

Use "key words" for vowel sounds

Name of the letter = key word = sound

A = Ana = "a"

Ana Banana va a la casa blanca.

Show students how sounds are formed

Cue vowels by exaggerating the correct shape of the mouth

Have student watch your mouth as you speak



*'Clap' vowels (A, E, I, O, U) with visual visible

*Incorporate writing for kinesthetic reinforcement

* Design dictations which allow students to practice vowels & cognates.

Syllabicate vocabulary

*Use fingers to show syllabication

*Physically demonstrate syllable stress

* Visually syllabicate new vocabulary

Spanish	English	Syllabicated	Clues
los huevos	eggs	HUE vos	"W A Y" v o s

7. Use writing to support learning spoken language

"Let them move from the writing to the oral." -Margarita Hodge, Northern Virginia Community College

Written Language Supports Oral Language

- Written language supports consolidation of oral language: allows slower retrieval times and structured practice..
- Chat formats encourage students to practice creating with language in a scenario which can be supported (by instructor, other students, Franklin electronic dictionaries) and in not quite real time.


8. Create a learner-friendly classroom

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

Help Students Stay Organized

- Provide a class calendar with major assignments noted.
- Require a 3 ring binder w/ tabs labeled according as professor instructs.
- Give students assignment sheets – avoid having them copy from the board. (color coded, dated, front of binder).
- Use an electronic grading program. Give students timely feedback on missing assignments, absences, & overall grade.

Create a learner-friendly classroom

- Spiral back: explicitly relate newly introduced material to prior learning
- Help students prepare for tests
- Create routines 
- Make expectations/deadlines clear
- Hold students accountable

9. Incorporate memory strategies and metacognition

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

Burden Easing Strategies

- “Deluxe” and electronic flashcards
- Color coded verb charts
- Mnemonics created by class
- Computer based supports: Quia, Kurzweil, Conjuguemos, spell check, CD ROMS.
- Creative repetition which is “low cost” in terms of student time and emotions.

Actively use strategies in class

- Help students become aware of their strengths and weaknesses as learners.
- Take a collaborative approach to determine what strategies work best for a given student.

Questions for the Learner Reflection Sheet

1. How do you learn best?
2. Is there something that you have discovered that really helps your learning?
3. Is there something that really gets in the way of your learning?



Strategy Examples

Español 101
E. Leons
Date: _____

Family Listening Activity

Directions:

1. Listen to the description of my family member
2. Guess what I am saying

- 1.
- 2.
- 3.
- 4.

How did you figure out what I was saying? Jot down some of your comprehension strategies here.

Strategy Examples

Mnemonics Are Your Friends

1. **abrazar** - TO HUG - use your brazos to hug
I embrace you with an abrazo a bra hugs
2. **andar** - TO WALK - "Andy - I'll walk with you anywhere"
3. **bailar** - TO DANCE - "Bye Lar, I don't want to dance with you!"
I am going to the ballet to see bailar

Strategy Examples
Flashcards

Word _____
Sounds like _____
Reminds me of _____
Phrase _____
Picture this:

Definition

Strategy Examples
Flashcard Sample

Word: Puedo
Sounds like: Pway do
Reminds me of: Play dough
Phrase: I CAN play with play dough
Picture this:

Definition: Puedo - I can - from the verb
poder

Strategy Examples
Geography mnemonics

Spanish speaking countries in Central
America: **M**other **g**oose **e**ats **h**ot
noodles, **c**hildren & **p**oodles. (Mexico,
Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica,
Panama)

Spanish speaking countries in South
America:
Victoria **c**onducts **P**uerto Rican **b**ands
constantly **p**laying **u**nknown **a**nthems.
(Venezuela, Colombia, Peru, Bolivia, Chile, Paraguay, Uruguay,
Argentina)

Metacognitive/Metalinguistic
Language Learning Strategies

Awareness of Self as
Language Learner

Improved Use of
Language

Self-Advocacy &
Understanding of L1

**10. Test both
orally and in
writing**

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

•Written tests can be very inaccurate
measures of what a student knows.

Ex. Shape recognition of vocabulary

Anaranjado

•Testing students orally gives a clear
indication of what each student knows.



Sample Oral Test

Week 5 Can Do Check List

1. _____ I can invite someone to do something with me & respond to an invitation.

Invitations - ¿Quieres + activity+ conmigo?

Ex. A) ¿Quieres ir de compras conmigo?

B) ¿Cuándo?

A) A las 7.

B) ¿Dónde?

A) En Nueva York.

2. _____ I can say what my plans are for this coming weekend using at least **7** different activities.

11. Encourage students to use technology



- This is a separate topic, but I wanted to make sure technology made it into the top 12!

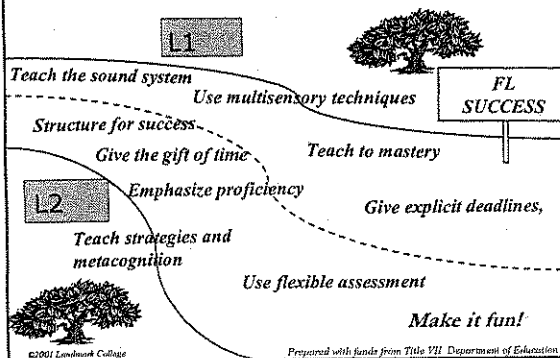
12. Make Language Learning Fun!

LANDMARK COLLEGE
INSTITUTE FOR RESEARCH AND TRAINING

- If students are having fun, they won't mind the extra work they have to do
- If something is fun, it's often more memorable
- If it's fun, your students will continue to take language classes & (hopefully) seek out immersion opportunities.



Help students make the leap from L1 to L2



Discussion of the FL requirement

- Approximately 75% of 4 year institutions in the US reported degree requirements in FL for the BA in a 1999 survey (Goldberg & Welles, 2001)
- Many 4 year institutions are rethinking waivers and course substitutions, making them harder to obtain.

Some Student "Strategies" for the FL Requirement

- Struggle to Pass (student may do well initially, but may fall behind as the classes require students to be able to juggle more)
- Switch languages
- Opt for a major that doesn't require FL study
- Petition for a waiver/course substitution
- Attempt to take the class at another college so that grade won't appear on transcript
- Transfer to a college w/o a requirement

Articles

- Students Classified as LD who Petitioned for or Fulfilled the College Foreign Language Requirement – Are they Different?, Sparks, Phillips, Javorksy, 2003
- Foreign Language Learning: A Process for Broadening Access for students with Learning Disabilities, Scott and Manglitz, 2000.
- The Case for Course Substitutions as a Reasonable Accommodation for Students with FL Learning Difficulties, Shaw, 1999.

Thanks!

Update to Selected References on Foreign Language Learning in relation to At-Risk Students and Students with Foreign Learning Problems (since 2001)

Calvin, Lisa M.; Rider, N. Ann. "Not Your Parents' Language Class: Curriculum Development Revision to Support University Language." *Foreign Language Annals* v37 n1 (2004) p 11-25

DiFino, Sharon M.; Lombardino, Linda J. "Language Disabilities: The Ultimate Foreign Language Challenge" *Foreign Language Annals* v37 n3 (2004) 390-400

Krug, Kevin; Shafer, Ted; Dardick, William; Maggalis, Chris; Parenté, Rick. "A test of foreign language acquisition: paired-association learning." *Applied Cognitive Psychology* Vol.16 Issue 2 (2002) 211-21

Perevatt, Frances; Protor Briley. "The Relationship between Learning Difficulties in Foreign and Math in a Sample of College Students." *Learning Disabilities: A Multidisciplinary Journal* v12 n2 (2003) 41-48

Sparks, Richard L.; Philips, Lois; Javorsky, James. "Colleges Students Classified with ADHD and the Foreign Language Requirement" *Journal of Learning Disabilities* v37 Issue 2 169-178

Sparks, Richard L.; Philips, Lois; Javorsky, James. "Students Classified as LD Who Receive Course Substitutions for the College Foreign Language Requirement." *Journal of Learning Disabilities* Vol. 35 Issue 6 (2002): 482, 18

Sparks, Richard L.; Philips, Lois; Javorsky, James. "Students Classified as LD Who Petitioned for or Fulfilled the College Foreign Language Requirement—Are They Different?" *Journal of Learning Disabilities* Vol. 36 Issue 4 (2003): 348, 15

Sparks, Richard L.; Javorsky, James; Philips, Lois. "College Students Classified with ADHD and Foreign Language Requirement." *Journal of Learning Disabilities* Vol. 37 Issue 2 (2004): 169-78

Van Handle, Donna C. "Universal Instructional Design and world Languages." *Equity and Excellence in Education* vol. 37 Issue 2 (2004) 161-166

