# Proficiency attainment of K-16 language students: Implications for language programs 

Boston University

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Fernando Rubio, University of Utah


## ACTFL levels of proficiency



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## How long does it take?

- An English speaker needs 240+ hours of instruction to reach the Intermediate level in Category I (Romance, Dutch, Norwegian)
- 480+ in Category II (Russian, Vietnamese, Turkish)
- Even longer in Category III (Arabic, Chinese, Japanese, Korean)
- Typical university programs provide 180-300 hours of instruction in two years (3-5 hours/week; 30 weeks/year)
"The vast majority of American citizens remain monolingual"
American Academy of Arts \& Sciences, 2017 (p. viii)


## Ideal distribution of the population according to language skills


(Adapted from Abbot et al., 2013)

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K-12
$$

## Percentage of elementary schools offering world languages in the US


(Adapted from Pufahl \& Rhodes, 2011)
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## Percentage of secondary schools offering world languages in the US





## Articulation

- Fewer than $40 \%$ of elementary schools reported some form of articulation with middle school.
- $25 \%$ of high schools reported that their incoming students had not received foreign language instruction during their middle school years. (Pufhal \& Rhodes, 2011, p. 267)
- Only 12 of the 400 K-8 schools surveyed reported having some form of collaboration with other elementary, middle or high schools (American Councils for International Education, 2017, p. 33).


# Proficiency in K-12 



## Chinese STAMP results

Avant STAMP 4S
Chinese Mandarin Simplified Annual Averages (2017-2018) Years of Study Comparison Chart


| 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Novice |  |  | Intermediate |  |  | Advanced |  |
| Low | Mid | High | Low | Mid | High | Low | Mid |

## FrenchSTAMP results



## German STAMP results



## Spanish STAMP results



## Takeaways

- Even after an extended sequence, most students are still solidly at the Intermediate level.
- Reading tends to be the strongest skill
- Speaking is the weakes $\dagger$
- Except for AP students, WL learners are often still in the Novice range after 3 or even 4 years of instruction


## DLI as a potential solution

- Students receive academic instruction in two languages
- Explosive growth:
- 2000 (260 programs)
- 2017 (2000 programs)
- 2019 (3000 programs)
- Different models: 50/50, 90/10, One-way/Two-way
- English learners in DLI programs academically outperform those in other programs (Steele et al., 2017; Watzinger-Tharp et al., 2016)


## The Utah model

- Six languages: Chinese, French, German, Portuguese, Russian, Spanish
- 45,000 students in 2019-2020 year
- 247 schools
- 15 districts


## Dual Language Immersion Instructional Time : Grades 1-3



Math in Target Language (20\%)

Content Areas in Target Language (15\%)
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Target Language Literacy (15\%)

- English L.A. (35\%)
- Math and Content Areas Reinforcement in English (15\%)


## Dual Language Immersion

## Instructional Time : Grades 4-5

Math Reinforcement in Target Language (8.5\%)Target Language Literacy (25\%)Science in Target Language (16.5\%)Math in English
(16.5\%)

English Language Arts
(25\%)
Social Studies \& Content Areas
Reinforcement in English
(8.5\%)

## AAPPL

- ACTFL Assessment of Performance toward Proficiency in Languages (AAPPL)
- Performance (not proficiency) test
- Two forms:
- Form A: Novice-Intermediate (typically grades 5-8)
- Form B: Intermediate-Advanced Low (typically grades 9-12)
- Computer-based
- Assesses all three modes of communication
- Interpretive Listening (IL)
- Interpretive Reading (IR)
- Interpersonal Listening and Speaking (speaking component) (ILS)
- Presentational Writing (PW)

| ACTFL Proficiency Guidelines | ACTFL <br> Performance Scale | AAPPL Measure Performance Score | Form |  |
| :---: | :---: | :---: | :---: | :---: |
| Advanced Low | VANCED | A | A |  |
| Intermediate High |  | I-5 |  |  |
| Intermediate Mid |  | I-4 |  |  |
| Intermediate Mid |  | I-3 |  | B |
| Intermediate Mid | INTERMEDIATE | I-2 |  |  |
| Intermediate Low |  | I-1 |  |  |
| Novice High |  | N-4 |  |  |
| Novice Mid | NOVICE | N-3 |  |  |
| Novice Mid |  | N-2 |  |  |
| Novice Low |  | $\mathrm{N}-1$ |  |  |

## Utah DLI performance benchmarks

|  | Interpersonal <br> Listening/Speaking |  | Interpretive <br> Reading | Interpretive <br> Listening | Presentational <br> Writing |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Grade | Alphabetic <br> Languages | Chinese | Alphabetic <br> Languages | Chinese | Alphabetic <br> Languages | Chinese | Alphabetic <br> Languages | Chinese |
| $\mathbf{3}$ | N3 | N2 |  |  |  |  |  |  |
| $\mathbf{4}$ |  |  | N3-N4 | N2-N3 | N4-I1 | N3-N4 | N3-N4 | N2-N3 |
| $\mathbf{5}$ | N4-I1 | N3-N4 |  |  |  |  |  |  |
| $\mathbf{6}$ |  |  | I1-I2 | N4-I1 | I2-I3 | I1-I2 | I1-I2 | N4-I1 |
| $\mathbf{7}$ | I2-I3 | I1-I2 |  |  |  |  |  |  |
| $\mathbf{8}$ |  |  | I3-I4 | I2-I3 | I4-I5 | I3-I4 | I3-I4 | I2-I3 |
| $\mathbf{9}$ | I4-I5 | I3-I4 |  |  |  |  |  |  |

## Proficiency data from Utah DLI (2017-18)

- Students tested: 23,546
- Total number of tests: 42,528
- ILS: 12,799
- PW: 9,814
- IL: 9,952
- IR: 9,963
- Districts: 26
- Schools: 96

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# Spanish data 

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## Spanish ILS-3rd grade

Form A ( $\mathrm{n}=2840$ )
Benchmark: N3


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## Spanish ILS-5th grade

Form A ( $\mathrm{n}=2168$ )
Benchmark: N4-II



Spanish ILS-7 ${ }^{\text {th }}$ grade


## Spanish ILS-9 ${ }^{\text {th }}$ grade

Form B ( $n=451$ )
Benchmark: |4-I5


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## Spanish PW-8 ${ }^{\text {th }}$ grade



## Takeaways from Spanish data

- By $5^{\text {th }}$ grade students are already well into the Intermediate range in speaking
- Most students reach IH/A in speaking by the end of $9^{\text {th }}$ grade
- Writing progresses at a similar rate, with students at IM by $8^{\text {th }}$ grade


# French data 

## French ILS-3rd grade



## French ILS-5 ${ }^{\text {th }}$ grade



## French ILS- $7^{\text {th }}$ grade

Benchmark:
|2-I3


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## French ILS-9 ${ }^{\text {th }}$ grade

Benchmark:


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## French PW-8 ${ }^{\text {th }}$ grade



## Takeaways from French data

- More than half of the students are IM by $5^{\text {th }}$ grade
- Almost half are IH in $9^{\text {th }}$ grade ( $20 \%$ Advanced)
- Writing progresses at a slower rate but still solidly $1 M$ in $8^{\text {th }}$ grade


# Chinese data 



## Chinese ILS-3rd grade

| Benchmark: N2 | 14 13 12 11 N4 N3 N2 | - $2 \%$ <br> - $3 \%$ <br> $-5 \%$ | $17 \%$ | 45\% | $\begin{array}{\|c\|} \hline \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \mathrm{N} 1 \\ \text { Below } \mathrm{N} 1 \end{array}$ |  |  |  | $\begin{aligned} & 98 \% \\ & 100 \% \end{aligned}$ |
|  | SECOND LANGUAGE <br> TEACHING \& RESEARCH CENTER |  |  |  |  |

## Chinese ILS-5 ${ }^{\text {th }}$ grade

Benchmark:
N3-N4


## Chinese ILS-7 ${ }^{\text {th }}$ grade



## Chinese ILS-9 ${ }^{\text {th }}$ grade



## Chinese PW-8 ${ }^{\text {th }}$ grade



## Takeaways from Chinese data

- Slower progress through the Novice level
- By 9th grade, the majority are at the lower end of the Intermediate level in speaking
- Similar growth pattern in writing


## Articulation

- What happens post-AP?
- The Utah Bridge Program for Advanced Language Learning
- Why take AP early when it's the highest/final language course offered?
- High schools are not prepared to offer language beyond AP
- University programs don't normally articulate well with K-12
- Most of these students are not prototypical language majors
- Advanced language pathway for high school students who have passed the AP Language and Culture exam.
- Partnership between all Utah institutions of higher education and school districts with DLI programs.
- Students can complete one to three Bridge courses while in high school earning both high school and university credit.
- 2018-2019 Bridge numbers:
- Three languages: Chinese, French, Spanish
- 1401 Students
- 39 Schools


## Bridge Program

for Advanced Language Learning


- 61 Sections


## Multiple entry points



# Post-Secondary 



## The Flagship Proficiency Initiative



Susan Gass
Paula Winke


Dan Soneson


Jane Hacking
Fernando Rubio

## The FPI

- Measure proficiency in speaking, reading and listening in Arabic, Chinese, French, German, Korean, Portuguese, Russian and Spanish
- ACTFL tests: OPIc, RPT, LPT
- Background questionnaire to gauge previous experience and extracurricular language use


## Background Information (Institutions)



## Results

- Average learner results by language, by year in program for:
- OPIc (speaking)
- RPT (reading)
- LPT (listening)

| The \#s | Language | 1st yr | 2nd yr | 3 rd yr | 4th yr | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spanish | 587 | 1339 | 1447 | 706 | 4079 |
|  | French | 364 | 695 | 508 | 275 | 1842 |
|  | Chinese | 199 | 263 | 255 | 107 | 824 |
|  | Russian | 209 | 243 | 223 | 63 | 738 |
|  | German | - | 348 | 60 | 70 | 478 |
|  | Arabic | 191 | 92 | 41 | - | 324 |
|  | Korean | 44 | 153 | 78 | 22 | 297 |
|  | Portuguese | 25 | 126 | 107 | 13 | 271 |
|  | Italian | 96 | 50 | 11 | - | 157 |
|  | Japanese | - | 40 | 5 | 10 | 55 |
|  | Total | 1715 | 3349 | 2735 | 1266 | 9065 |

# Cross-sectional data 



OPIc by Course Year by Language


RPT by Course Year by Language


LPT by Course Year by Language


## Means, All Skills, All Langs.



Correlating assessment data and background information

- Profile of our language majors
- The role of high school experience
- Course grades and proficiency


## Background Information Collected (Survey Data)

Fontext of Exposure $\quad$ Formal Education $\quad$ Abroad Experience $\quad$| Family members |
| :--- |
| Community |
| Friends |

## Language major profile (Winke \& Gass, 2018)

- Michigan State analyzed the results of 884 declared majors enrolled in $3^{\text {rd }}$ or $4^{\text {th }}$ year (Russian 22, French 227, Spanish 635)
- Spanish: reading (6.49) > listening (5.45) > speaking (5.20)
- French: reading (6.22) > speaking (5.81) > listening (5.58)
- Russian: speaking (4.64) > reading (4.50) > listening (3.64)
- They then compared the performance of language-only majors to double (hybrid) majors.

$$
\text { SCORING: } \mathrm{S}=10, \mathrm{AH}=9, \mathrm{AM}=8, \mathrm{AL}=7, \mathrm{IH}=6, \mathrm{IM}=5, \mathrm{IL}=4, \mathrm{NH}=3, \mathrm{NM}=2, \mathrm{NL}=1
$$

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## Majors that reach Advanced level

| Group | Language | Count | Speaking | Reading | Listening |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Secondary or <br> Dual Major | French | 186 | $27 \%$ | $48 \%$ | $32 \%$ |
|  | Russian | 20 | $1 \%$ | $15 \%$ | $1 \%$ |
|  | Spanish | 553 | $11 \%$ | $55 \%$ | $25 \%$ |
|  | Total | 759 | $15 \%$ | $52 \%$ | $26 \%$ |
| Language- <br> only Major | French | 41 | $54 \%$ | $71 \%$ | $46 \%$ |
|  | Russian | 2 | $0 \%$ | $0 \%$ | $0 \%$ |
|  | Spanish | 82 | $30 \%$ | $72 \%$ | $48 \%$ |
|  | Total | 125 | $32 \%$ | $70 \%$ | $46 \%$ |

## What predicts proficiency?

- Based on responses to the background questionnaire, three types of predictors were identified: study abroad, heritage status and motivation.

| Correlating predictors | Reading | Listening | Speaking |
| :--- | :--- | :--- | :--- |
| Study abroad | + |  | + |
| Heritage level |  | + | + |
| Learning language for fun | + | + |  |
| Learning language for <br> travel |  | + | + |
| Learning language to <br> satisfy a requirement | -- |  |  |

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## The extracurriculars

Predictors of Advanced status


## Curricular factors (U of Minnesota)

2014-2017 ACTFL Ratings of students in 4th semester
French, German, Spanish
Listening
Reading
Speaking

HS Years
0.7

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## Who are our advanced students?



## Pedagogical/curricular implications

- More time on task needed
- Additional opportunities (requirements?) to practice the language outside the classroom:
- Service-learning opportunities
- Research opportunities
- Discussion groups
- Practical projects
- Articulation
- Emphasis on all 4 skills and modes of communication
- Redesigned curricula that reflect students' goals and interests
- What do our students want? How do they plan to use their language skills? What do our majors do after they graduate?
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## Course grades and proficiency

- Arabic, Chinese, Korean, Portuguese, Russian
- We acquired final course grades for all students tested in 2015-17.
- Letter grades were converted to grade points using the following scale:
- $\mathrm{A}=4.0, \mathrm{~A}-=3.7, \mathrm{~B}+=3.3, \mathrm{~B}=3.0, \mathrm{~B}-=2.7, \mathrm{C}+=2.3, \mathrm{C}=2.0, \mathrm{C}-=1.7$,
- $D+=1.3, D=1.0, D-=0.7, E=0.0$
- Assessment scores were converted to numerical scores.
- Composite scores were calculated by averaging speaking, reading, and listening assessments scores. Composite scores were only calculated for students who took all three assessments at the end of a given semester.


## Course grades and proficiency

## Research questions:

- Are grading practices aligned with proficiency?
- Does the relationship between course grades and proficiency outcomes vary depending on the language or the course level?
- What role does immersion experience play in this relationship?

All 1020 Courses


Grade Point Earned in Course

All 2020 Courses



All 3060 Courses


## Take-aways

- Grading practices are not clearly aligned with proficiency measures (see also Brown, 2013; Brown et al., 2018).
- This lack of alignment is more evident when students have a non-classroom learning background.
- This may indicate that grading is based to a large extent on classroom-related behaviors (attendance, participation, extra credit, etc.) and other factors that are unrelated to (or separate from) proficiency.


