

MEASURING LANGUAGE PROFICIENCY AND GAINS

among learners with varying educational backgrounds

As the survey shows

Language requirements are the norm in European migration policies

As a rule, there are no exemptions for LESLLA learners

The typical level requirements are A2/B1

Two routes to A2


Route 1: Education

| | |
|------------|----------|
| ≥ primary | Slow 1 |
| | Slow 2 |
| secondary | Standard |
| > Tertiary | Fast 1 |
| | Fast 2 |

Two routes to A2

Route 1: Education

| | 0 – A1 | A1 – A2 |
|----------|--------|---------|
| Slow 1 | 240 | 240 |
| Slow 2 | 160 | 160 |
| Standard | 120 | 120 |
| Fast 1 | 80 | 80 |
| Fast 2 | 60 | 60 |



Two routes to A2

Route 1: Education

Route 2: Test    

What if

... we made the A2 test obligatory for all learners?

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Population $N = 1058$

Age med 32 mean 34

In B med 2 mean 4

52% female

25% employed

54% AI

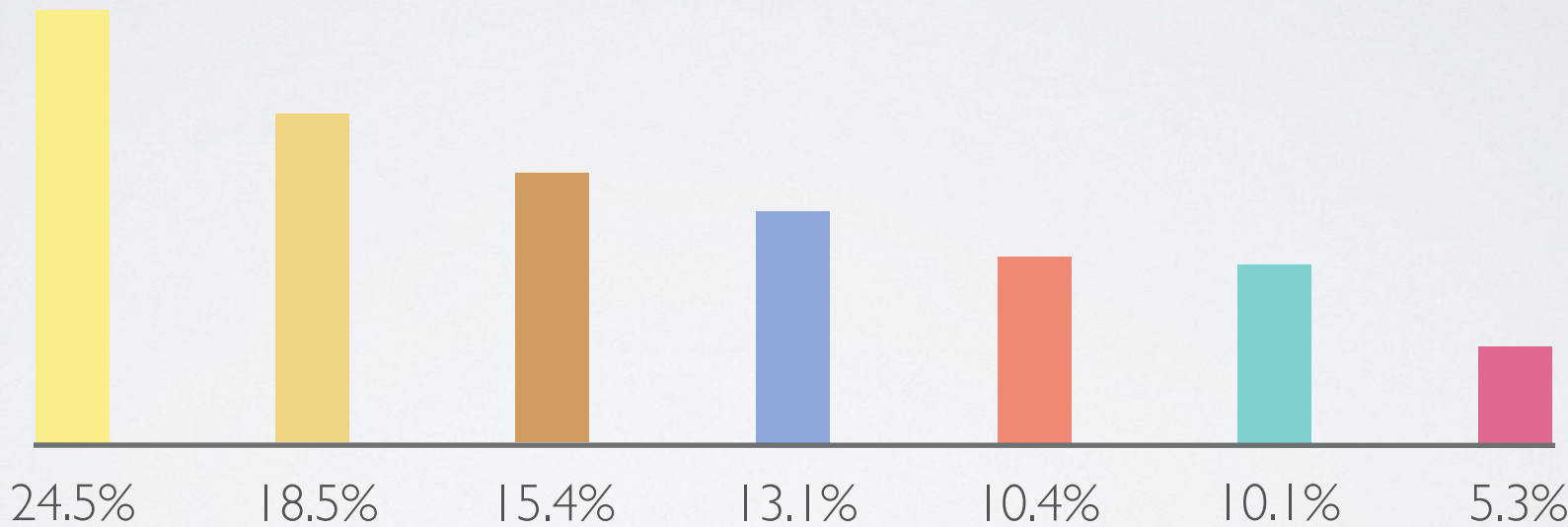
What if

... we made the A2 test obligatory for all learners?

Population $N = 1058$

| | | | | |
|------|----------|---------|-----|-----------------------------------|
| Age | med 32 | mean 34 | 15% | ≤ primary |
| In B | med 2 | mean 4 | 41% | secondary |
| 52% | female | | 28% | tertiary |
| 25% | employed | | 16% | other (e.g., religious education) |
| 54% | A1 | | | |

What if when



What when

‘Importbruid Fatima enkel welkom na inburgeringstest in land van herkomst’

31/03/2019 om 16:57 door Marjan Justaert



Liesbeth Homans (N-VA)

Daags na de V-dag over migratie van haar partij, maakt Vlaams minister van Integratie en Inburgering Liesbeth Homans (N-VA) de boodschap concreet. Gezinshereniging moet gevoelig verstrengd worden, vindt ze. ‘Wie naar Vlaanderen wil komen moet eerst slagen in een basisexamen Inburgering in het land van herkomst.’

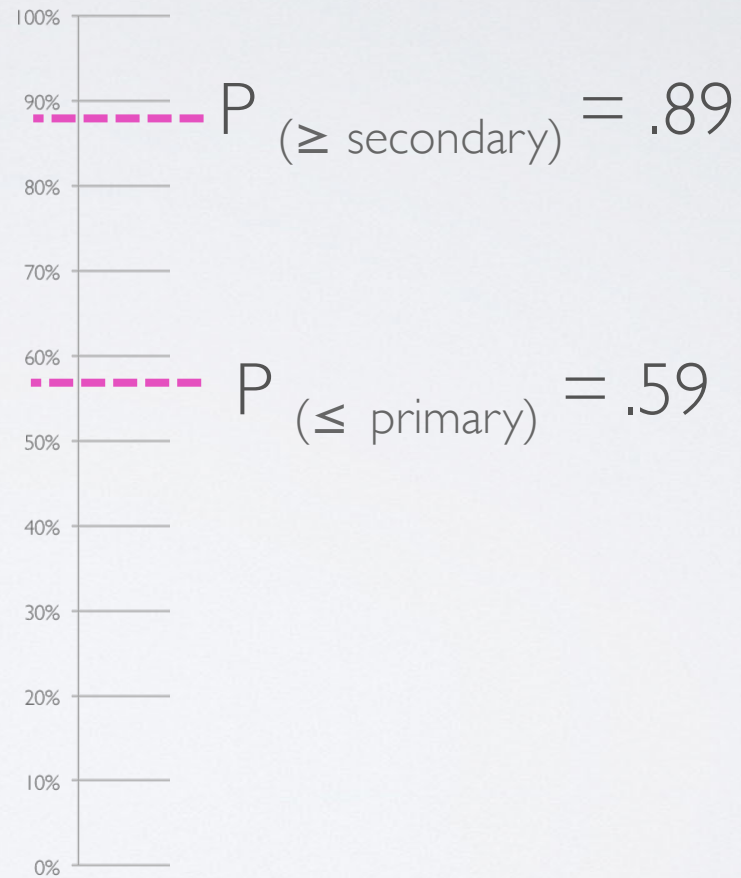
Vlaams N-VA-kopstuk Liesbeth Homans is niet tégen gezinshereniging, maar: ‘het mag de samenleving niet onder druk zetten, en dat is vandaag helaas wel het geval’, aldus de minister vanmorgen in *De Zevende Dag*. Zij en haar partij

What when

“the very existence of pre-entry tests for people seeking family reunification can breach their human rights”

Real-world impact

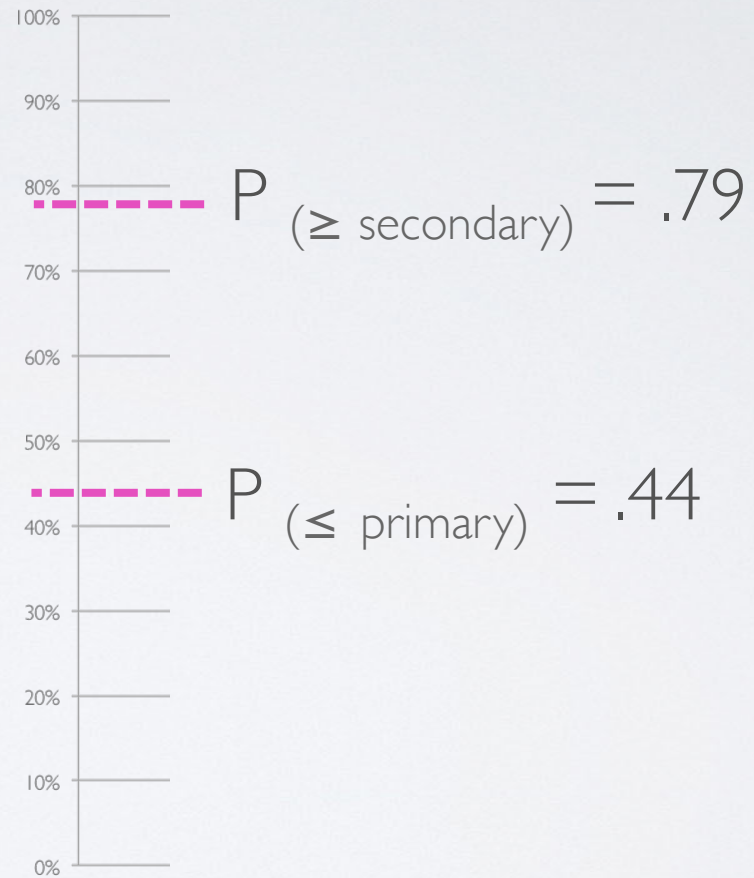
Listening



$W = 10040, p < 0.0000, d -0.839$

Real-world impact

Reading



$W = 9251, p < 0.0000, d -0.833$

Impact of education

Pronounced and significant performance differences

$$(\chi^2(3) = 370.5, p < .000)$$

Impact of education

Pronounced and significant performance differences

$$(\chi^2(3) = 370.5, p < .000)$$

Substantial impact on score variance

Listening outcome ~ educational background:

$$B(SE) = 0.203 (0.03), 95\% \text{ CI } 1.226, p < 0.000$$

$$R^2 = 0.11 \text{ (Nagelkerke)}$$

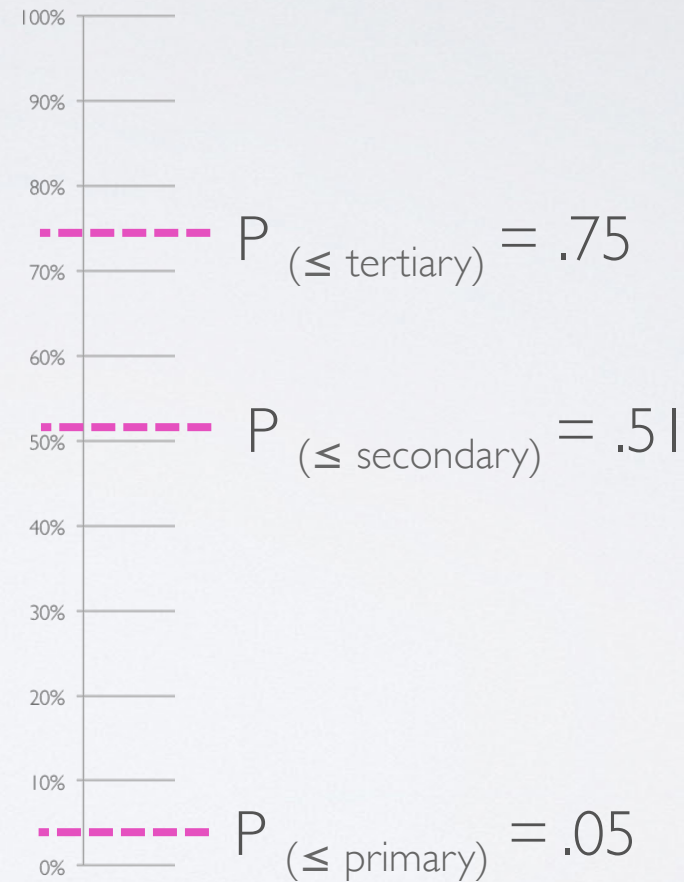
Reading outcome ~ educational background:

$$B(SE) = 0.269 (0.034), 95\% \text{ CI } 1.308, p < 0.0000$$

$$R^2 = 0.15 \text{ (Nagelkerke)}$$

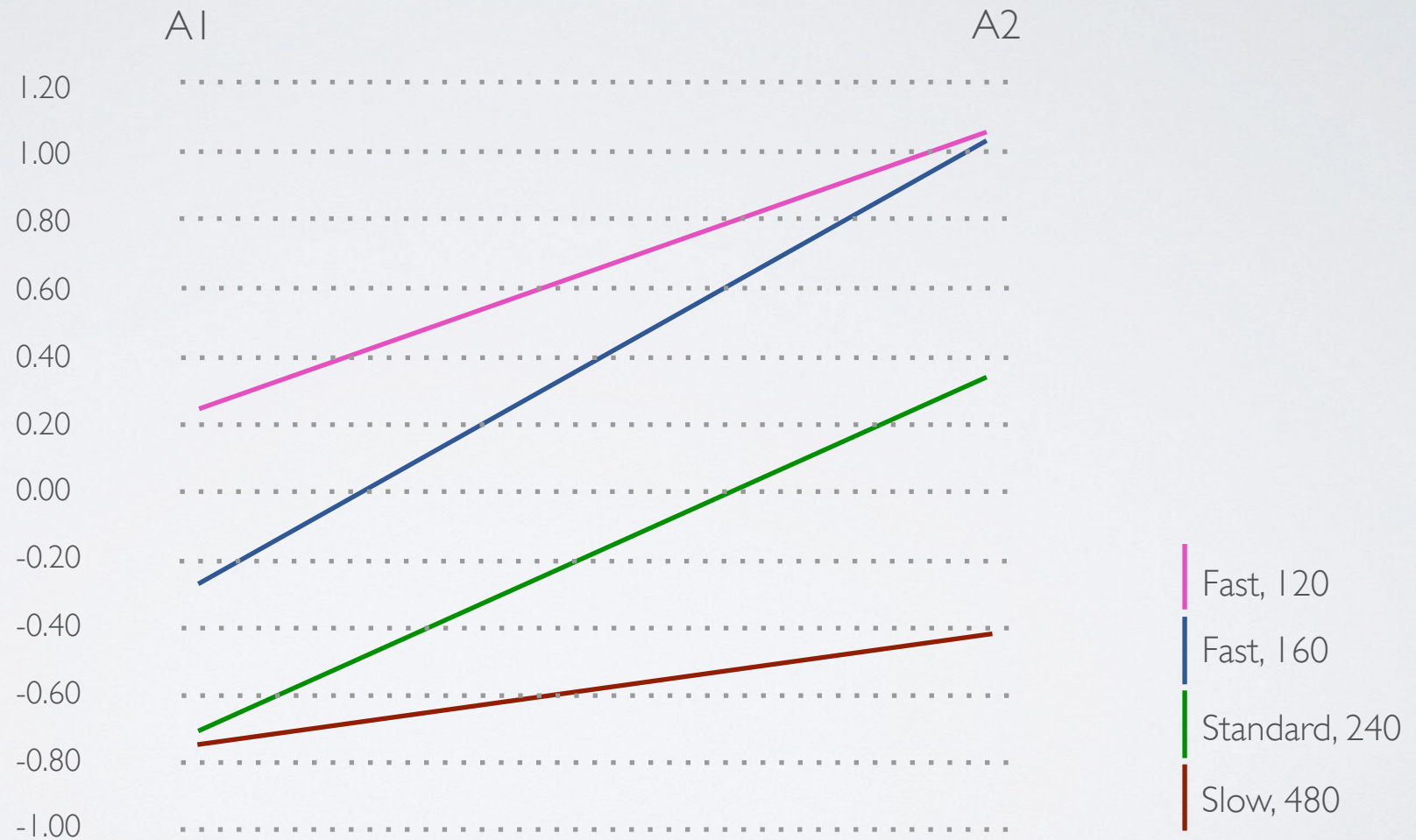
Real-world impact

Speaking



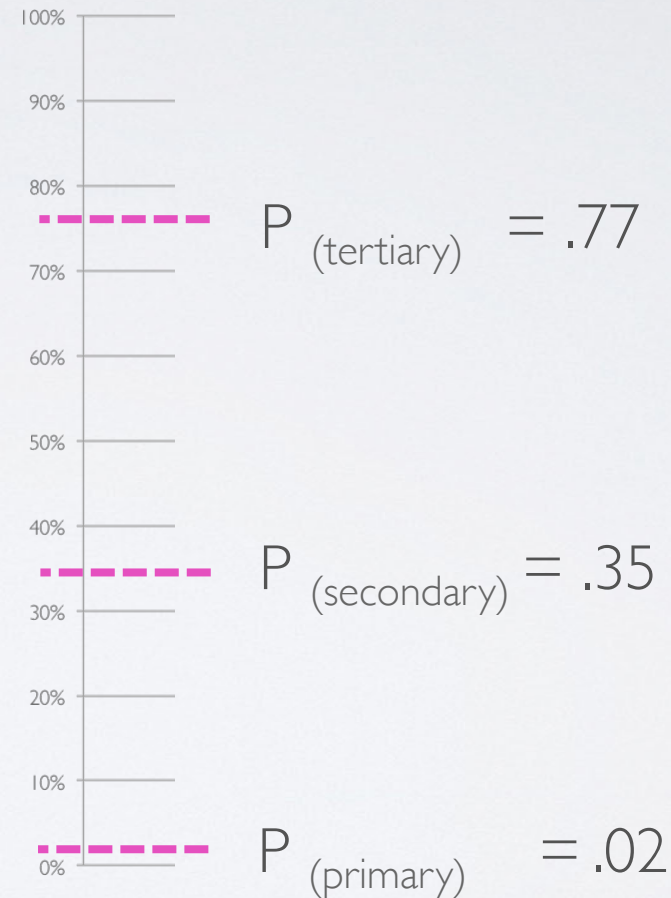
| | | |
|----------------------|-------------|-----------------------|
| Primary / Secondary | $W = 816,$ | $p = 0.002; r -0.309$ |
| Secondary / tertiary | $W = 1268,$ | $p = 0.006; r -1.194$ |
| Primary / tertiary | $W = 508,$ | $p = 0.000; r -1.956$ |

Speaking gains (by measure)



Real-world impact

Writing



| | | | |
|----------------------|-------------|-------------|--------------|
| Primary / Secondary | $W = 46256$ | $p < 0.000$ | $r = -0.367$ |
| Secondary / tertiary | $W = 62912$ | $p < 0.000$ | $r = -0.432$ |
| Primary / tertiary | $W = 14893$ | $p < 0.000$ | $r = -0.727$ |

Real-world impact

Writing pass probability: track type matters!

| Logistic regression: Pass/Fail ~ school type, region, age, LI | | | | | |
|---|----------------|----------|-----------------------|------------|-------|
| | B (se) | <i>p</i> | 95% CI for odds ratio | | |
| | | | Lower | Odds ratio | Upper |
| (Intercept) | -2.288 (0.255) | .000 | | | |
| School type | 0.658 (0.120) | .000 | 1.533 | 1.931 | 2.458 |
| LI | 0.047 (0.014) | .000 | 1.019 | 1.048 | 1.078 |
| Region | 0.083 (0.025) | .000 | 1.036 | 1.087 | 1.142 |
| Age | -0.143 (0.042) | .000 | 0.796 | 0.866 | 0.941 |

Note. Nagelkerke Pseudo R² = .44

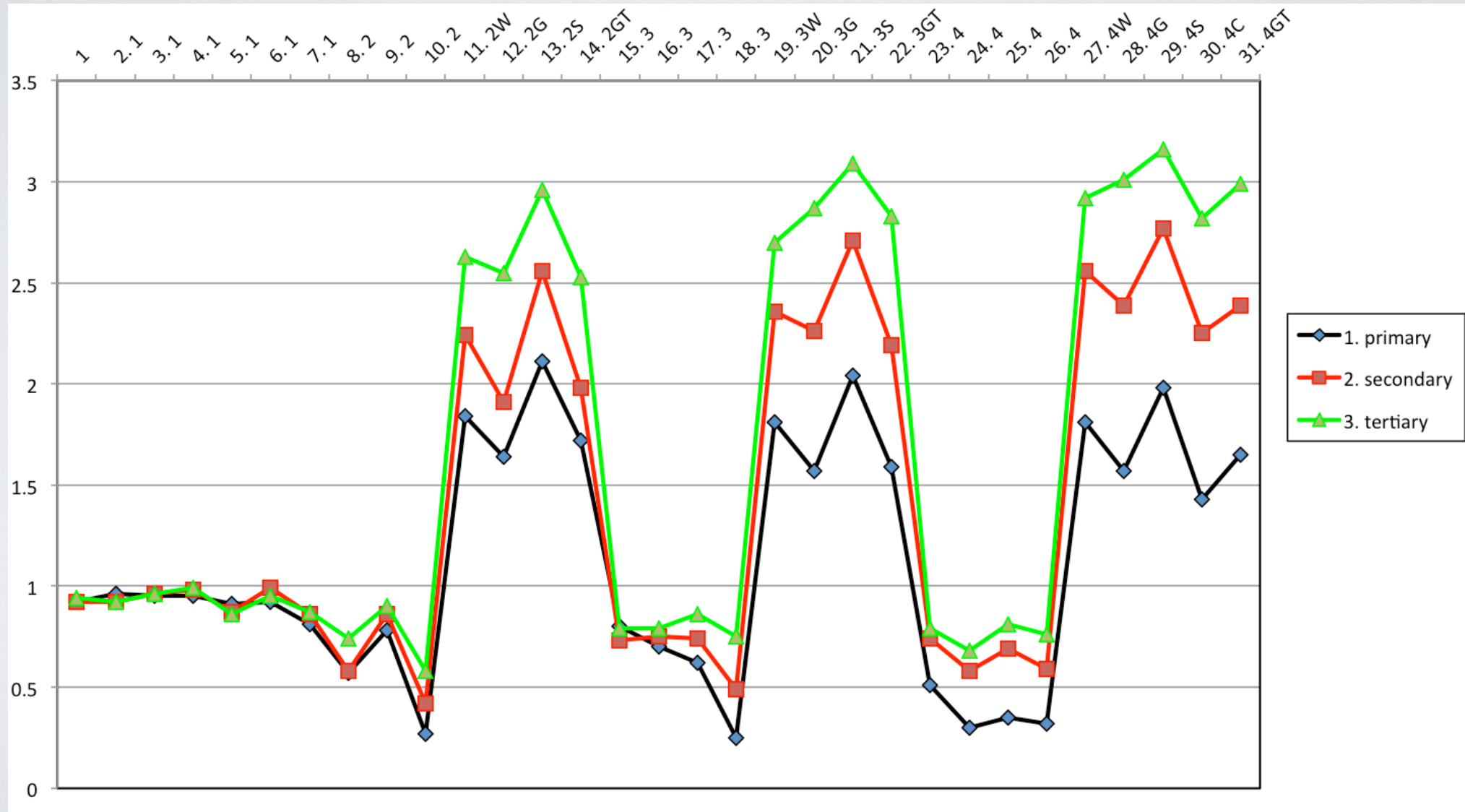
Writing measures follow track, not level

Fast A1 > Standard A2
Standard A1 > Slow A2

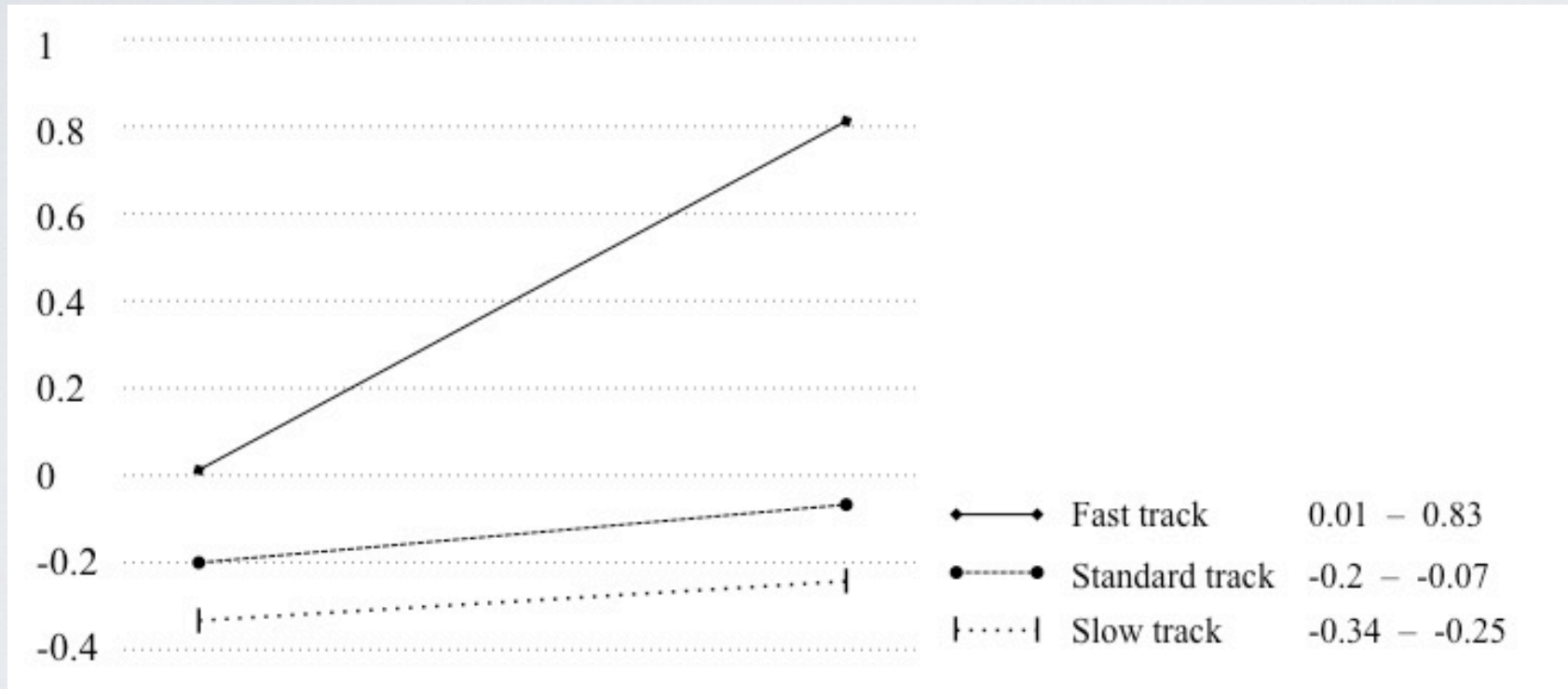
| Measure | (se) | Infit | |
|---------|------|-------|---------------|
| 1.83 | 0.04 | 1.23 | FAST(120) A2 |
| 0.99 | 0.04 | 1.05 | FAST (120) A1 |
| 0.51 | 0.06 | 0.92 | FAST(160) A2 |
| 0.38 | 0.05 | 1.06 | FAST(160) A1 |
| 0.23 | 0.3 | 0.95 | STANDARD A2 |
| 0.10 | 0.3 | 0.88 | STANDARD A1 |
| 0.07 | .04 | .93 | SLOW(360) A2 |
| -0.24 | .06 | .82 | SLOW(360) A1 |
| -0.55 | .04 | .80 | SLOW(480) A2 |
| -0.64 | .02 | .83 | SLOW(480) A1 |
| -2.17 | 0.23 | .92 | ALFA |

Strata 15.77 Reliability .99
 $X^2(9) = 3918.7, p < .000$

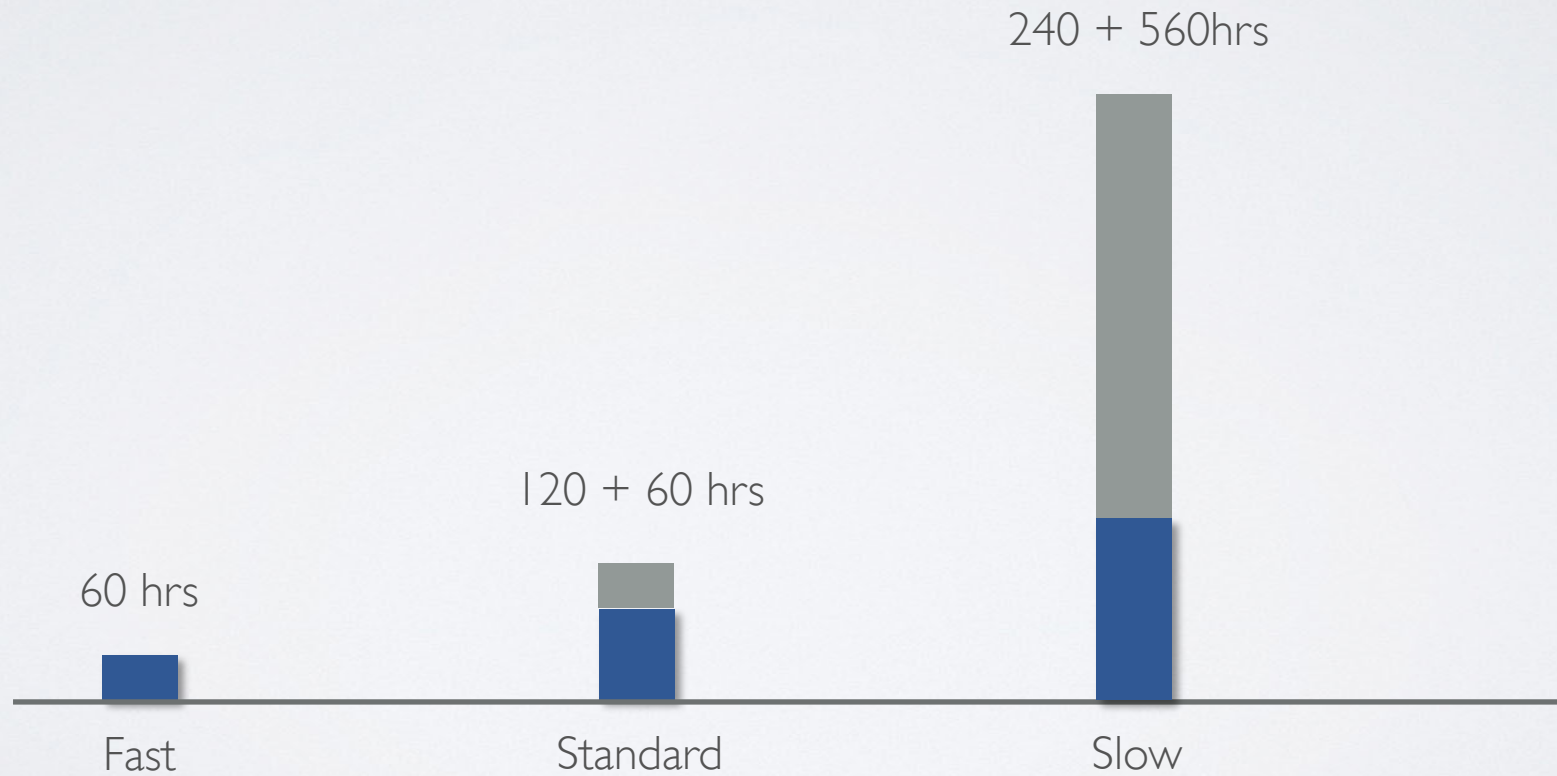
Educational bias



Writing gains (measure)



To catch up with Fast AI



To catch up with Fast A2

240 + 2640hrs

120 + 720hrs

60 hrs



Fast

Standard

Slow

Writing gains: CAF

$N = 385$

16 CAF indicators

20% double coded (ICC .81 - .98)

Slow: no gains

| | |
|----------------------|----------------------------------|
| Syntactic complexity | Clauses/TU |
| | Mean sentence length |
| | Simple sentence ratio |
| | Compound sentence ratio |
| | Complex sentence ratio |
| | Compound complex ratio |
| | Coordinated clause ratio |
| | Subordinated clause ratio |
| Lexical complexity | Average word length |
| | Guiraud's index |
| Accuracy | Incomplete sentence ratio |
| | Proportion of error-free T-Units |
| | Errors / T-Unit |
| | Errors / words |
| Fluency | Words / TU |
| | Total word count |

Standard: accuracy gains

| | |
|----------------------|----------------------------------|
| Syntactic complexity | Clauses/TU |
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Standard: accuracy gains

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| | Complex sentence ratio | |
| | Compound complex ratio | |
| | Coordinated clause ratio | |
| | Subordinated clause ratio | |
| | Lexical complexity | Average word length |
| | Guiraud's index | |
| Accuracy | Incomplete sentence ratio | ($W = 877.5^{**}$ $d = .5$) |
| | Proportion of error-free T-Units | |
| | Errors / T-Unit | ($W = 450^{***}$ $d = -.57$) |
| | Errors / words | |
| Fluency | Words / TU | |
| | Total word count | |

Fast: gains galore

Syntactic complexity

Clauses/TU

Mean sentence length

Simple sentence ratio

Compound sentence ratio

Complex sentence ratio

Compound complex ratio

Coordinated clause ratio

Subordinated clause ratio

Lexical complexity

Average word length

Guiraud's index

Accuracy

Incomplete sentence ratio

Proportion of error-free T-Units

Errors / T-Unit

Errors / words

Fluency

Words / TU

Total word count

Fast: gains galore

| | | |
|----------------------|----------------------------------|-------------------------------|
| Syntactic complexity | Clauses/TU | ($W = 1727.5$ $d = -0.505$) |
| | Mean sentence length | |
| | Simple sentence ratio | ($W = 3354$ $d = 0.571$) |
| | Compound sentence ratio | ($W = 2965$ $d = .4$) |
| | Complex sentence ratio | ($W = 1899$ $d = -.057$) |
| | Compound complex ratio | ($W = 1899$ $d = -.51$) |
| | Coordinated clause ratio | |
| | Subordinated clause ratio | ($W = 1534$ $d = -.71$) |
| Lexical complexity | Average word length | ($W = 2005$ $d = -.26$) |
| | Guiraud's index | |
| Accuracy | Incomplete sentence ratio | |
| | Proportion of error-free T-Units | |
| | Errors / T-Unit | |
| | Errors / words | ($W = 3104$ $d = .25^{Cl}$) |
| Fluency | Words / TU | ($W = 824$ $d = -.4$) |
| | Total word count | ($W = 333$ $d = -1.26$) |

Focusing only on higher educated learners
alone can have serious consequences

All L2 classes yield gains

A2 certificates are not equivalent

So: highly different pass probabilities