

# Where Are We and Where Are We Going? Mapping L2 German Writing Development

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## INTRODUCTION

- Attempts to evaluate and strengthen a language program need to take stock of students' current levels and measure their development as they proceed through the language sequence. The research done by Georgetown University German faculty has explored the development of students writing in response to the curricular developments and noted the influence of genre on production (Byrnes et. al., 2010).
- Complexity, accuracy, and fluency are often used as indicators for L2 proficiency, but L2 complexity has not been clearly defined (Bulté & Housen, 2012).
- Norris and Ortega (2009) note the need for an "organic approach" to investigating complexity, accuracy and fluency that would show the multidimensional factors that it involves.
- In a study exploring linguistic development of a group and focusing on selected individuals Vyatkina (2012) contributed to the methods for tracking the development of complexity in L2 writing.
- Ruf and Steinhagen (2016) found that students made gains in fluency, complexity (overall, coordination, subordination and fronting), but not in accuracy as measured by verb placement.

## RESEARCH QUESTIONS

This exploratory study ask the following research questions:

- Do gains in fluency over time correspond to gains in other areas such as complexity, accuracy in verb use, and lexical development?
- Is there a relationship between the different facets of L2-writing development?
- Do motivation and attitude play a role in students' fluency gains?

## METHODS

### Participants

- This study is part of a larger cross-sectional study (conducted fall 2014 through fall 2016) of 374 second- and fourth-semester students who completed writing and speaking tasks at the beginning and end of the semester, as well as initial, demographic, motivational orientations, and final surveys.
- 33 of these students completed these tasks in both second and in fourth semester. This presentation focuses on 12 of these longitudinal students:
  - 6 participants with the **least** increase in Mean Length of Sentence (MLS) from beginning of second semester to the end of fourth semester.
  - 6 participants with the **greatest** increase in Mean Length of Sentence (MLS) from beginning of second semester to the end of fourth semester.
- All 12 participants were of similar age (18-21), started German in their teenage years; 11 had native language of English, 1 native language Chinese; 4 females, 12 males

### Materials for the present study

Informal first-person written narratives taken at the beginning and at the end of second and fourth semester

Each writing sample was coded for the following:

- Fluency:
  - Mean length of sentence and mean length of clause; Score reported is average of the two
- Complexity:
  - Mean number of clauses per sentence
- Fronting:
  - Number of main clauses starting with something other than the subject
- Accuracy:
  - Verb second placement in fronted main clauses
  - Verb agreement in present tense
  - Modal verb agreement, plus word order of modal verb and infinitive verb
- Lexical Development:
  - Lexical diversity: Type-Token Ratio (TTR)
  - Lexical density: Ratio of number of content words to total number of tokens
  - No differences found between groups and results are not reported here

### Procedures

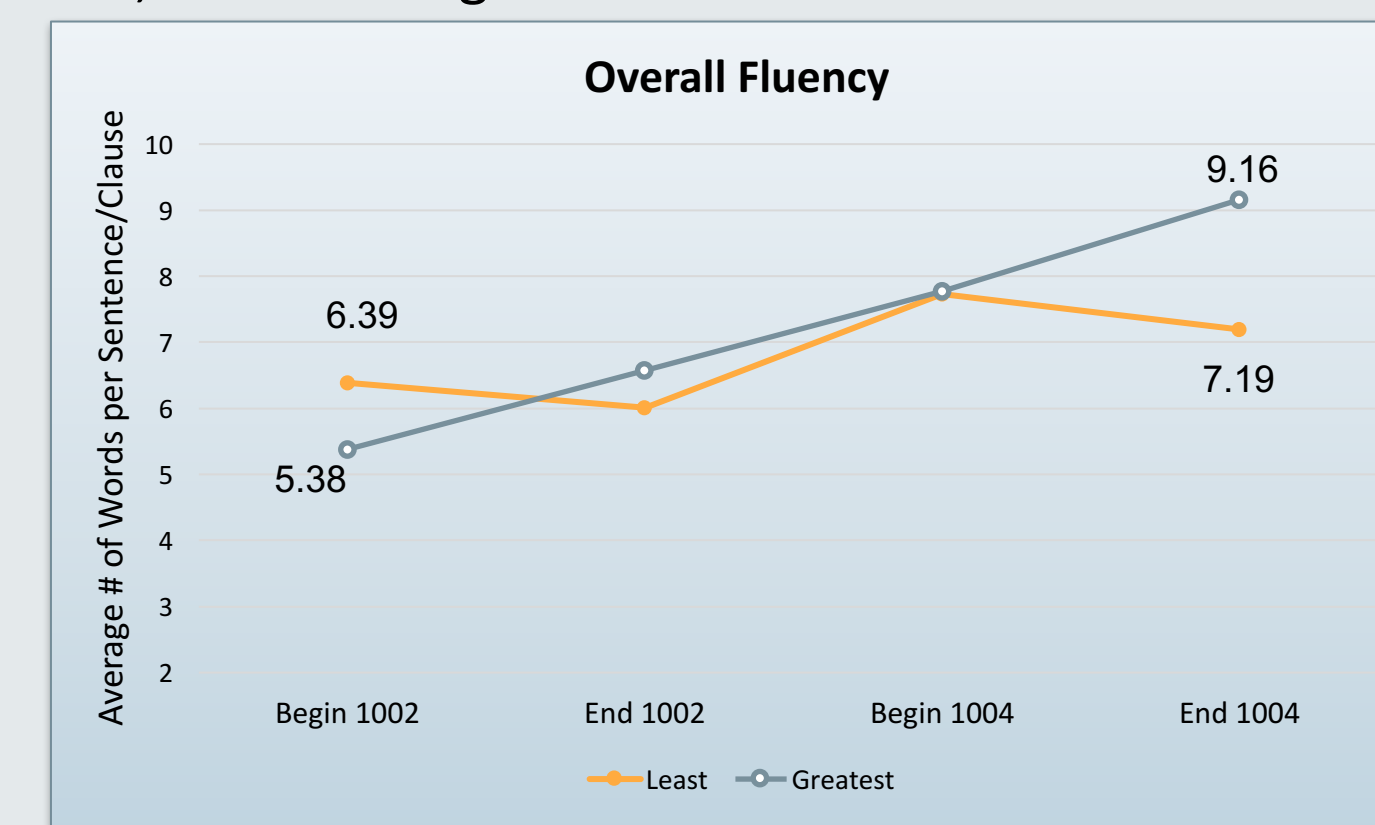
- Written in the computer lab
- Given 12 (second semester) or 14 (fourth semester) minutes to write; no dictionary or grammar help allowed
- Prompts varied slightly between second and fourth semesters

## RESULTS

### Research Question #1:

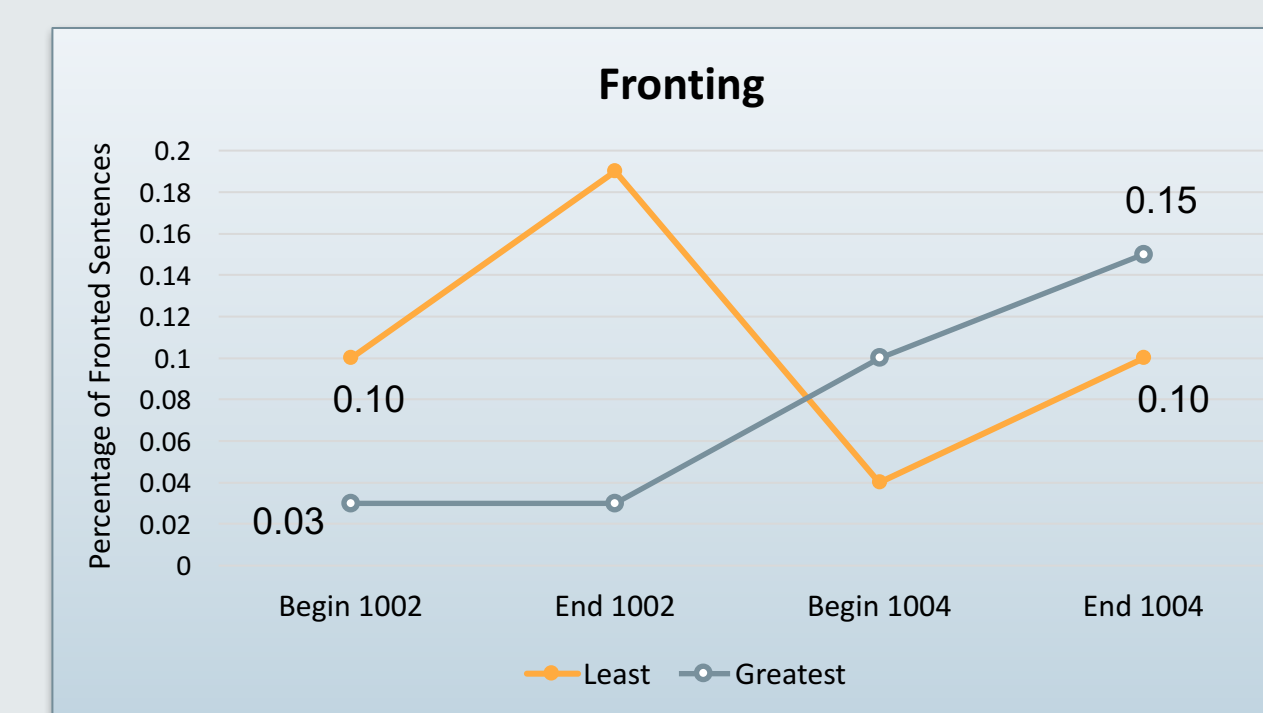
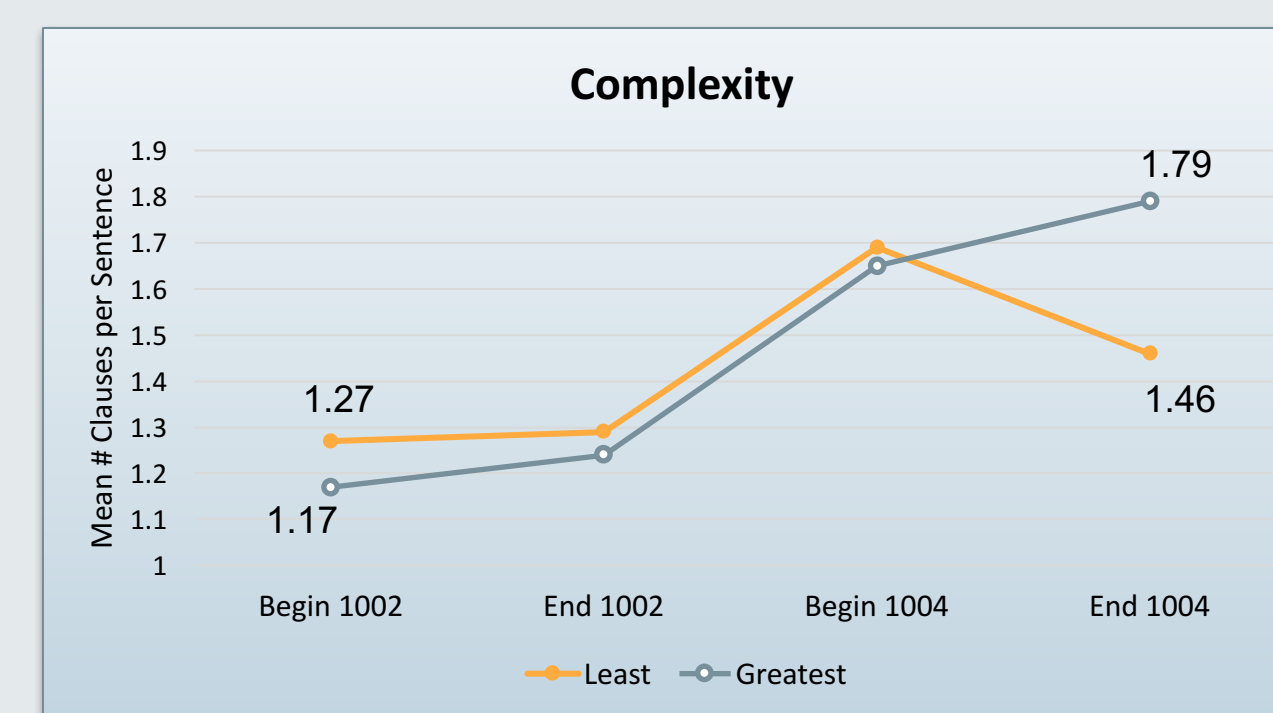
#### Fluency

- Group averages show that the group with the greatest overall gains in fluency consistently improved from the beginning of second semester to the end of fourth semester.
- The group with the least overall gains in fluency improved from the end of second semester to the beginning of fourth semester, but then regressed in fourth semester.



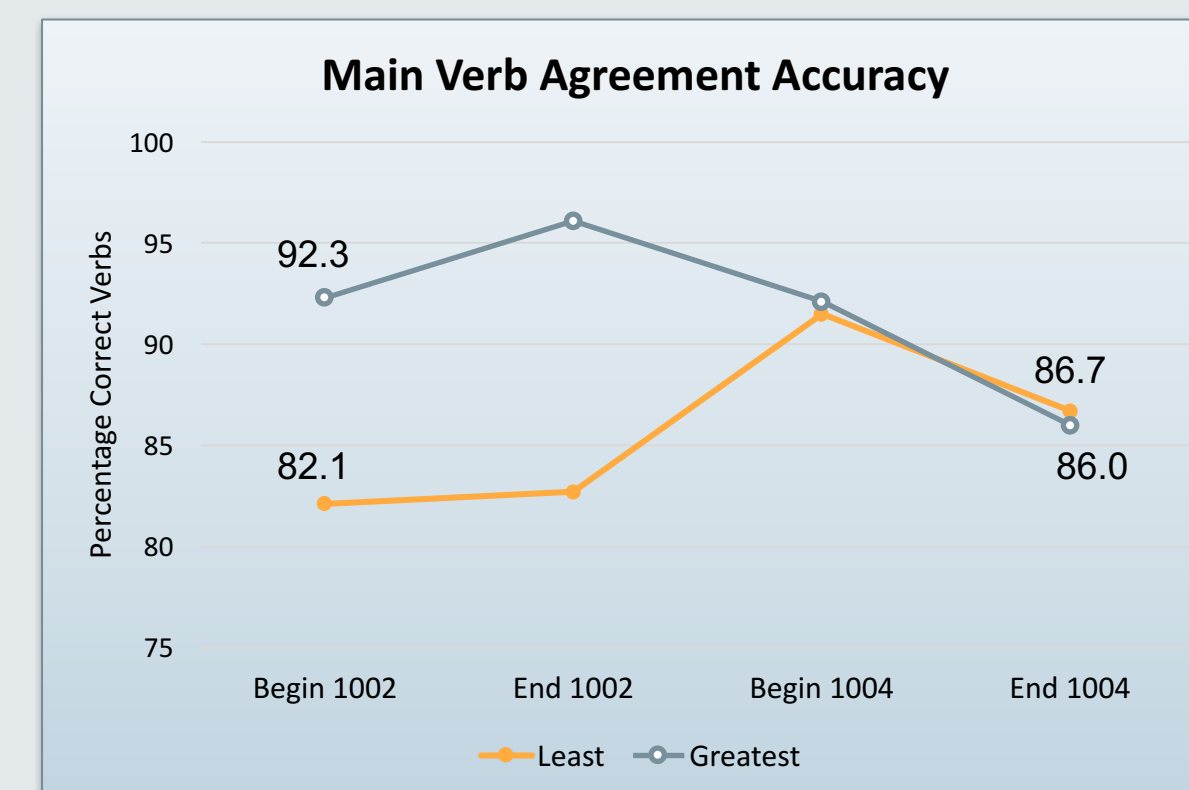
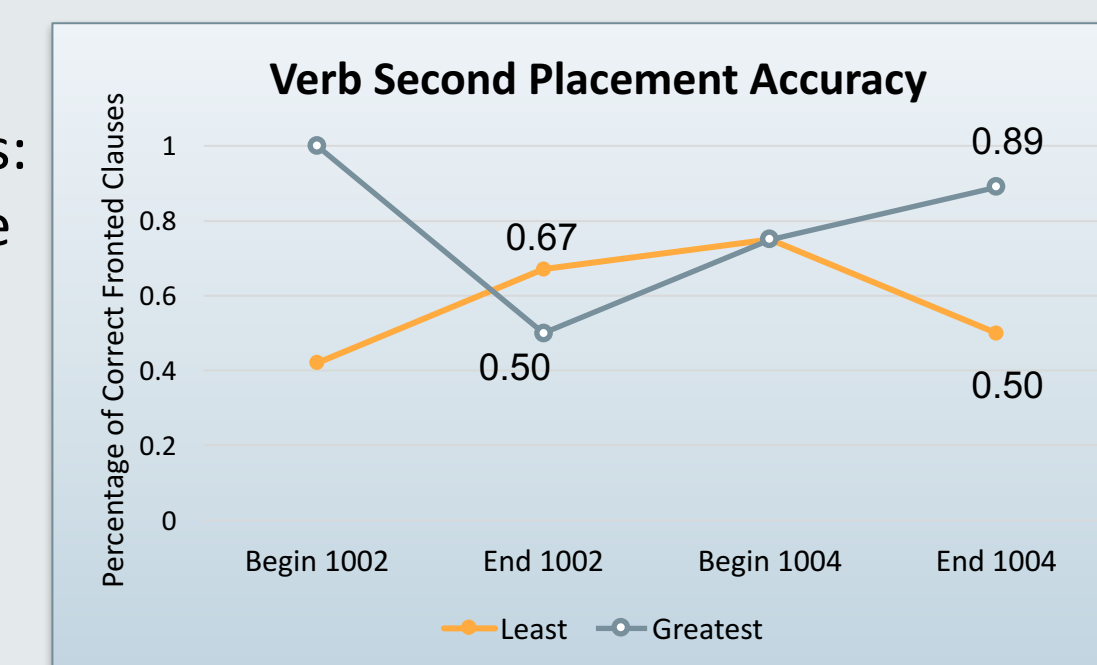
#### Complexity and Fronting

- Complexity:** The two groups behaved very similarly: increased complexity primarily seen between second and fourth semester. The group with the greatest overall fluency gains continued to improve in fourth semester, whereas the group with the least overall fluency gains regressed in fourth semester.
- Fronting:** The group with the least overall fluency gains performed well in the beginning but regressed in second-year and shows no overall improvement. The group with the greatest overall fluency gains shows consistent improvement across the four time periods.



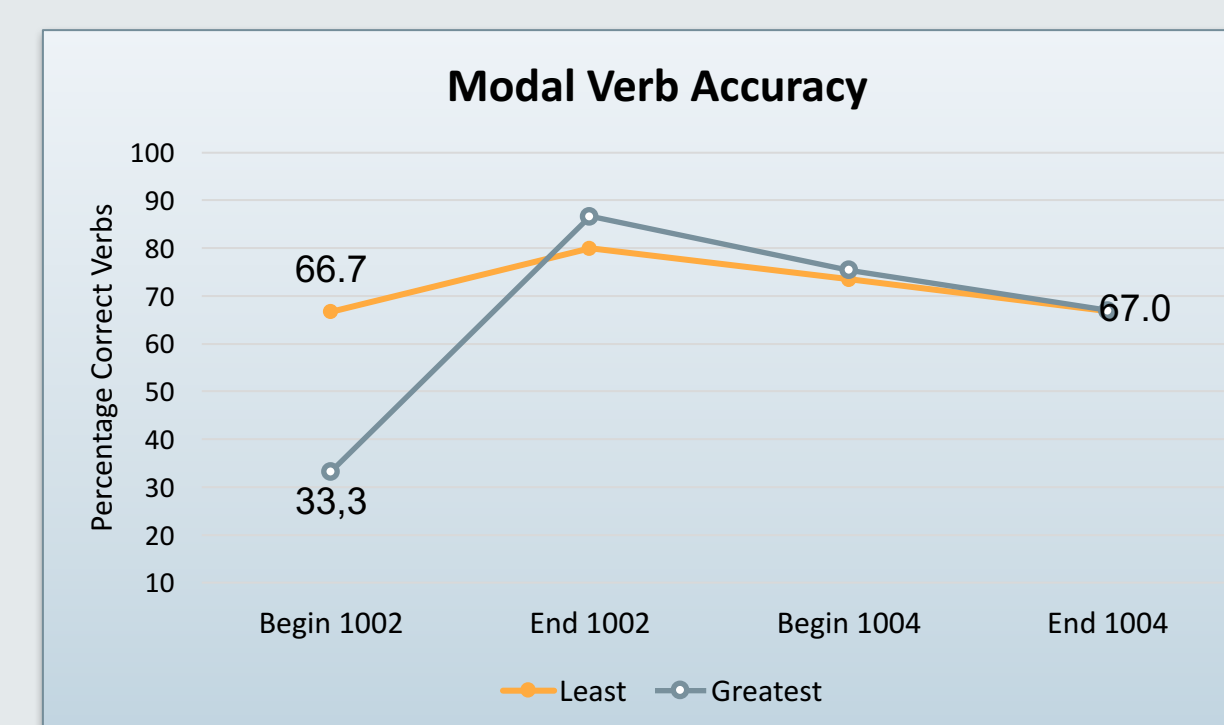
#### Accuracy in Verb Use

- We explored accuracy in verb use in three different ways:
  - Placement of verb in fronted clauses:** Leave aside the beginning 1002 sample (where both groups showed little overall fronting):
    - Greatest fluency group: consistent improvement
    - Least fluency: initial improvement, then regression



- Main verb agreement:** The group with the least overall gains in fluency improved slightly here.
- Greatest group does not make any gains.
- Note: The prompt used in fourth semester invited the use of third person. Accuracy in third-person agreement tended to be lower than accuracy in first-person agreement.

- Modal verb agreement and infinitive verb word order:** Two groups behave similarly, especially in second year.
  - Greatest overall fluency gains had lower accuracy with modal verbs at the beginning and thus has more overall improvement.
  - By the end of second semester the two groups both decrease in accuracy (though modal verb use consistently goes up in the same manner for both groups).

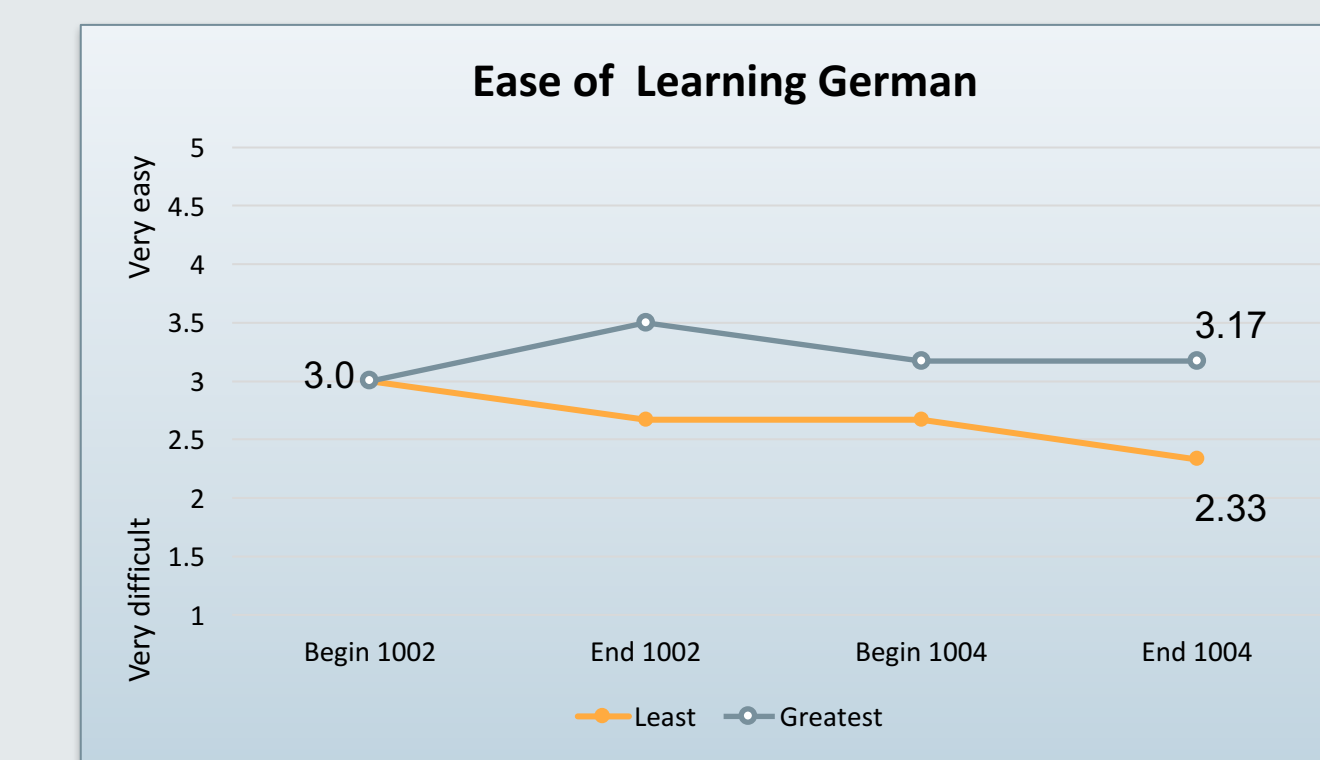
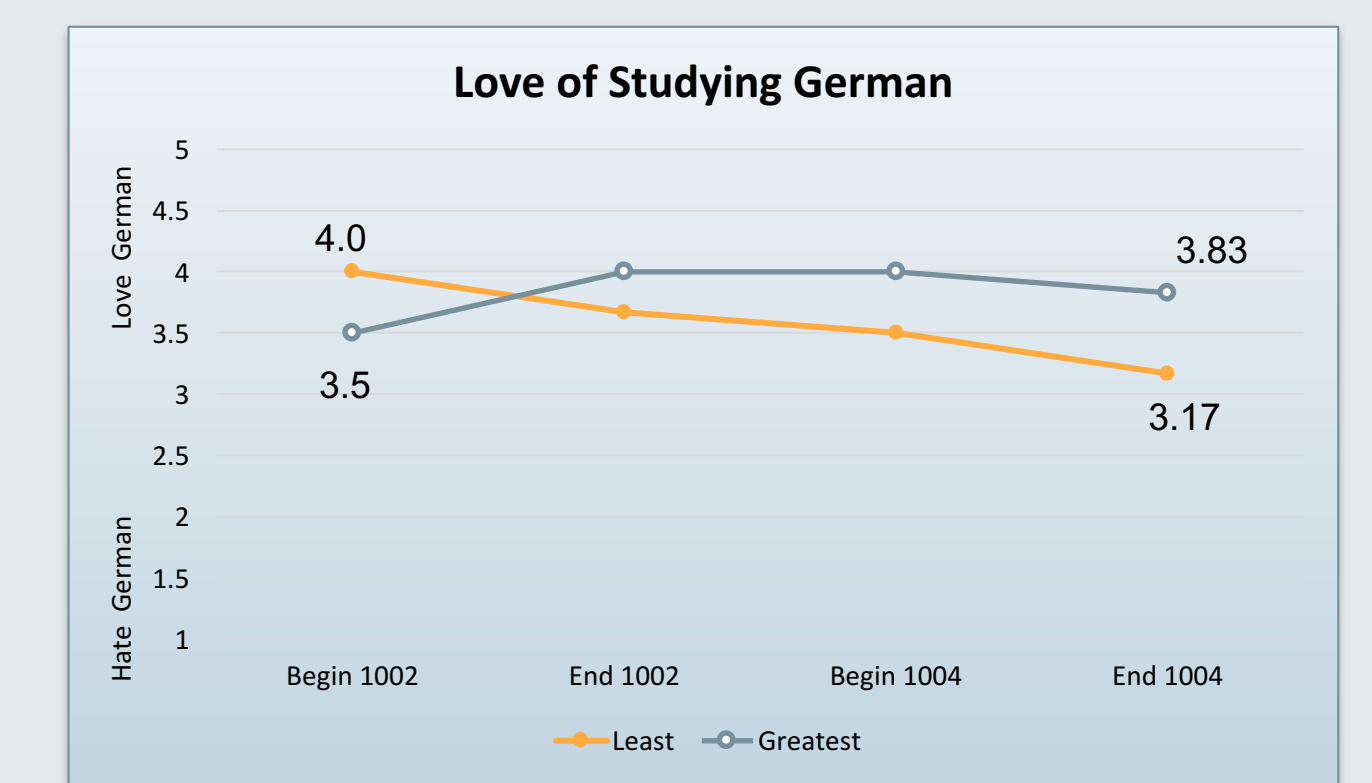
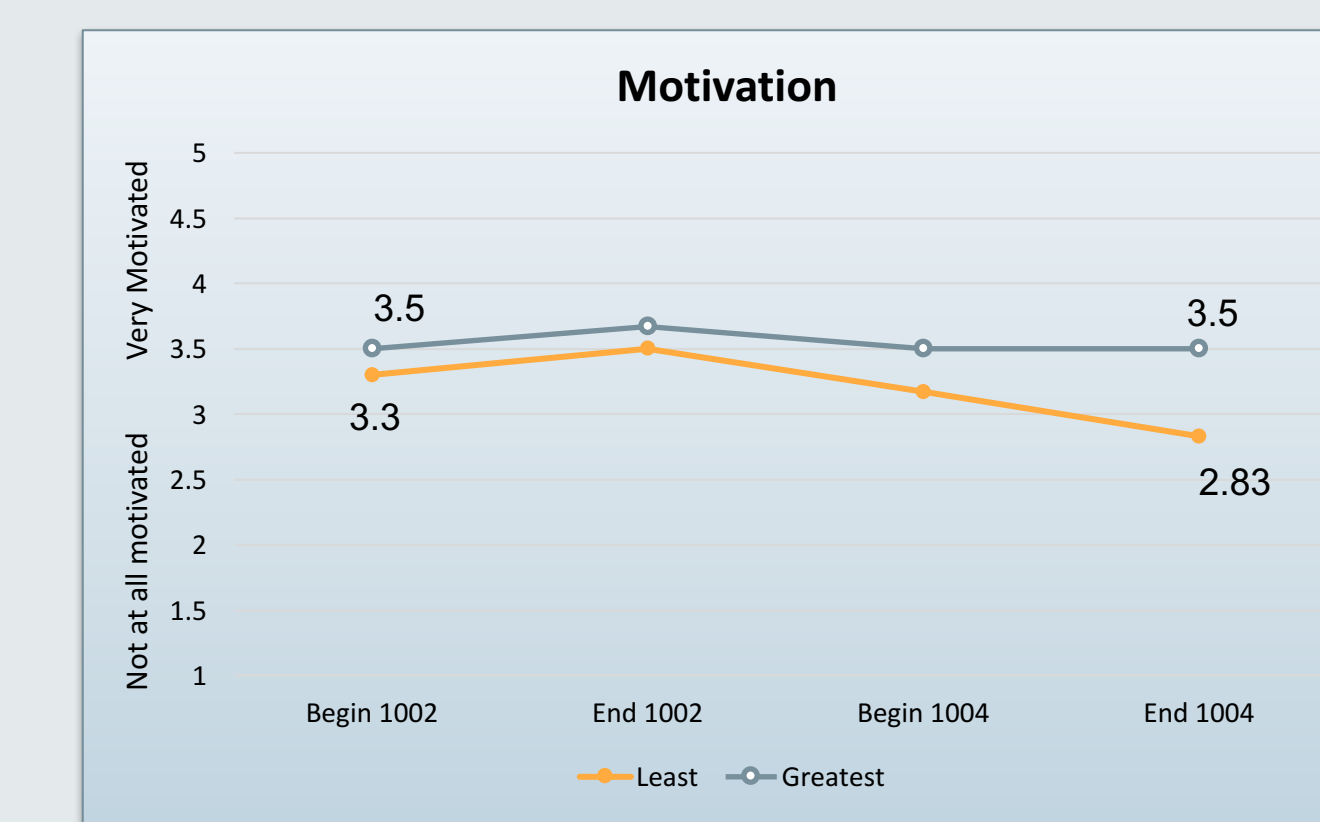


### Research Question #2:

- We calculated Pearson's correlations based on participants' average score for each type. We also focused on overall change in L2 developments (beginning of second semester to end of fourth semester) in order to simplify results.
- Given the small sample size (N = 12), only ONE significant correlation was found:
  - Fluency and complexity positively correlated with each other ( $r = .64, p = .02$ ). If a participant made gains in fluency, they also made gains in complexity.
- Although not significant, it is interesting to note that fluency and main verb agreement accuracy show a moderate negative relationship ( $r = -.44, p = .15$ ). As fluency increases, accuracy tends to decrease.

### Research Question #3:

- Group averages show that the group with the greatest fluency gains consistently rates itself higher on the following:



## CONCLUSION

- Students with the greatest overall gains in fluency also improved consistently across the two semesters in their sentence complexity and accuracy in main verb placement in fronted clauses. However, these same students did not show improvement in verb agreement accuracy.
- In contrast, students with the least overall gains in fluency improved initially, but tended to regress during fourth semester. This pattern of fourth-semester regression was noted for sentence complexity and accuracy in main verb placement as well. Accuracy in verb agreement did not improve for this group either.
- The significant positive correlation between development in fluency and complexity lends further support to the simultaneous development (or lack thereof) of fluency and complexity.
- Motivation and attitude towards learning German may help explain the lack of overall fluency gains and fourth-semester regression in other aspects of L2-writing displayed by some students.

## REFERENCES

- Bulté, Bram, & Housen, Alex. (2012) Defining and operationalising L2 complexity. In Alex Housen, et al., (Eds.) *Dimensions of L2 Performance and Proficiency* (21-46). Amsterdam: John Benjamins
- Byrnes, H., Maxim, H.H., & Norris, J.M. (2010). Realizing advanced foreign language writing development in Collegiate Education: Curricular Design, Pedagogy, Assessment. [Monograph] *Modern Language Journal*, 94.s1: 1-202.
- Norris, J.M., & Ortega, L. (2009). Towards an organic approach to investigating CAF in Instructed SLA: the case of complexity. *Applied Linguistics*, 30(4), 555-578.
- Ruf, H. & Steinhagen, V. (2016). *Using Self-Assessment to Strengthen Students' Writing Skills in German*. ACTFL Presentation, Boston.
- Vyatkina, N. (2012). The development of second language writing complexity in groups and individuals: a longitudinal learner corpus study. *Modern Language Journal*, 96(4), 576-598.

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