

Collaborative Writing in Wikis: Insights from Culture Projects in Intermediate German Classes

Nike Arnold, *Portland State University*
Lara Ducate, *University of South Carolina*
Claudia Kost, *University of Alberta*



Review of Literature - Collaboration & Learning

- social constructivist view of learning (Vygotsky, 1987)
 - collaboration especially beneficial for L2 learning
 - scaffolding can also appear among peers when engaged in group work (Donato, 1994)
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Review of Literature - Writing Instruction

- emphasis on cognitive processes
 - raise awareness of the writing process
 - develop ability to successfully reexamine and modify one's work (Hyland, 2003)
 - process approach guides learners through the stages of planning, writing and reviewing (Flower & Hayes, 1981)
 - a dynamic, recursive process with overlapping phases (Williams, 2005)
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Review of Literature - Collaborative Writing

- L1 writing: collaboration on writing tasks fosters students' reflective thinking (Higgins, Flower, & Petraglia, 1992)
 - L2 writing: peer review
 - individual vs. collaborative writing: collaborative texts are shorter, but better in terms of task fulfillment, grammatical accuracy, and complexity (Storch, 2005)
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Review of Literature - Wikis (1)

- wiki: "a page or a collection of web pages designed to enable anyone who accesses it to contribute or modify content" (<http://www.wikipedia.org>)
 - "naturally suited for collaborative on-line projects" (Godwin-Jones, 2003)
 - research on wikis is still in its beginnings
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Review of Literature - Wikis (2)

- resource in graduate methods course: Arnold, Ducate, Lomicka, & Lord, 2007
 - project-based learning: Evans, n.d.; Mak & Coniam, 2008
 - cultural reflection: Lund, 2008
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Review of Literature - Revisions (1)

- Frequency of revisions: L2 writers make a higher number of revisions than L1 writers (Hall, 1990; New, 1999)
 - Functions of revisions: what kind of revisions?
- contradictory findings: proficiency level, writing mode, explicit training/instructional focus might account for this variation
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Review of Literature - Revisions (2)

- Quality of revisions: do revisions improve the final product?
- we need a greater understanding of the process as well as the final product of the wiki environment
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Research Questions

1. How many revisions do learners make during the composition process?
 2. What kinds of revisions do they make?
 3. Are students able to successfully correct for linguistic accuracy?
 4. Are there any differences between an unstructured and a teacher-guided approach with respect to research questions 1-3?
 5. What are learners' perceptions of the project and are there differences between the two groups?
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Methodology (1)

- Participants:
 - 54 undergraduates in three German classes at three different universities (26+10+18)
 - Procedure:
 - create resource with sociohistorical background information for novel *Am kürzeren Ende der Sonnenallee* by Thomas Brussig (2003)
 - small groups worked on one wiki page
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Methodology (2)

- **Class 1:** unstructured approach: groups of 3 students; minimum of 400 words; completed after reading of novel; include references to the novel and the movies; presentation of wiki in class
 - **Classes 2 & 3:** teacher-guided approach; groups of 2-4 students; completed before reading of novel; assignment in steps (annotated bibliography, outline, two drafts, teacher and peer feedback); graded webquest before reading
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Data Collection and Analysis

Existenzialismus ~~während~~ ~~während~~ ~~der~~ ~~1940s und 1950s~~ ~~1940er und 1950er Jahren~~

~~Wovor die Frage~~ "Wie wurde ein Kind während 1940s und 1950s Existenzialismus betrachten, als es sehr einflussreich war?" Diese Frage ist relativ. Für ein Kind von ~~einem~~ ~~einer~~ religiösen Familie ist Existenzialismus eine Drohung, weil der Existenzialismusfortgang während ~~1940s und 1950s~~ ~~der 1940er und 1950er Jahren~~ atheistisch war. Existenzialismus beseitigt die transzendente Gewalt, dass Gott ist. Ein einflussreicher Fortgang mit atheistischen Ideen wird Existenzialismus ~~werden~~ ~~wird~~ gefährlich für allen Theismus. Aber für andere Leute während ~~1940s und 1950s~~ ~~der 1940er und 1950er Jahren~~ war Existenzialismus libertarianisch und erfreulich. Existenzialismus behauptet, dass die Welt absurd ist, und Verhalten hat keine ~~Begrenzung~~ ~~Begrenzungen~~. Also Leute müssen Absicht und Bedeutung ~~ihre Leben~~ zu ~~ihren Leben~~ schaffen. Es ist nicht erkoren. Während ~~1940s und 1950s~~ ~~der 1940er und 1950er Jahren~~ haben viele religiöse Gruppen Existenzialismus angegriffen. Zum Beispiel hat ein katholischer Kritiker gesagt, dass Existenzialismus das Lächeln von einem Kind ignoriert, und die Christen ~~hat~~ ~~haben~~ auch gesagt, dass Existenzialismus die zehn Gebote ~~entlassen~~ ~~missbilligen~~. Existenzialismus hat Gedanken und Ideen organisiert, dass viele Leute immer gefürchtet ~~hätten~~ ~~haben~~.

Nomen

- Absicht {f}- Purpose
- Begrenzung {f}- Limit
- Drohung {f}- Threat
- Fortgang {m}- Movement
- Gebot {n}- Commandment
- Verhalten {n}- Behavior

Adjektive

- einflussreich- influential • erfreulich- joyous • erkoren- predestined • libertarianisch- liberating Verben • angreifen- to attack
- betrachten- to view einflussreich- influential
- erfreulich- joyous
- erkoren- predestined
- libertarianisch- liberating

Verben

- entlassen- to dismiss

- archived wiki pages were analyzed for changes
- questionnaire (user friendliness of wiki, collaboration among group members, revisions)

Taxonomy of Revision Types (based on Faigley & Witte, 1981)

FORMAL CHANGES (SURFACE)	
• <i>Format</i> (<i>image, link, heading</i>)	Adding, deleting, fixing, or moving of an image, link, and heading
• <i>Spelling</i>	“Berschwerde“ → “Beschwerde“ (successful) “mude“ → “meude“ (unsuccessful)
• <i>Punctuation</i>	“Ziemlich viele Leute denken dass, der Eiserne Vorhang...“ → “Ziemlich viele Leute denken, dass der Eiserne Vorhang...“ (successful)
• <i>Verbs</i>	“weil der Krieg endetet“ → “weil der Krieg endete“ (successful) “viele Leute hat gestorben“ → “viele Leute haben gestorben“ (unsuccessful)
• <i>Nominal/ Adjectival Endings</i> (<i>cases, gender</i>)	“Der Eiserne Vorhang war ein interessant Situation...“ → “Der Eiserne Vorhang war eine interessante Situation...“ (successful) “Der Eiserne Vorhang ist eine Referenz für den Grenze...“ → “Der Eiserne Vorhang ist eine Referenz für der Grenze...“ (unsuccessful)
• <i>Word Order</i>	“Der Osten hat vorgetäuscht, dass keine Mauer gibt es .“ → „Der Osten hat vorgetäuscht, dass es keine Mauer gibt .“ (successful) “Die Briten haben nicht wieder für ihn gestimmt.“ → “Die Briten haben nicht für ihn wieder gestimmt.“ (unsuccessful)
• <i>Lexical Revisions</i>	“Churchill hatte der größten Verdacht Stalin.“ → “Churchill hatte der größten Verdacht von Stalin.“ (unsuccessful) “Hätten wir die Bomben tropfen sollen?“ → “Hätten wir die Bomben abwerfen sollen?“ (successful)
• <i>Translation</i>	“Das Geld der Kirche kam von Donation .“ → “Das Geld der Kirche kam von Spenden .“ (successful)

Taxonomy of Revision Types (based on Faigley & Witte, 1981)

MEANING-PRESERVING CHANGES (STYLISTIC)	
• <i>Additions</i>	“Am erste Dezember 1998 hob das GDR (ost Deutschland) Parlament, der Satz, in die GDR Einrichtung welches die SED Gewalt gab auf.” → “Am ersten Dezember 1998 hob das DDR Parlament den Satz, der gesagt hatte (ADD), das die SED Gewalt aufgab, in die GDR Einrichtung.”
• <i>Deletions</i>	“Jugendweihe bevor den DDR war eine populäre Feier für die Jugendlich,” → “Jugendweihe vor die DDR war eine populäre Feier für Jugendlichen,” (<i>die</i> deleted)
• <i>Substitutions</i>	“weil Religion ist weider eine wichtige Sache zu haben , aber die Jugendweihe bleibt für viel.” → “weil Religion, wieder wichtig ist , aber die Jugendweihe bleibt für viel.”
• <i>Reordering</i>	A word or phrase moved from one part of the text to another
MEANING-DEVELOPING CHANGES	
• <i>Significant Content Additions</i>	“Truman hatte auch Verdacht für Stalin, und suchte eine Weise, vor die Sowjetunion nahm dem Krieg gegen Japan teil, dem Krieg zu enden.“
• <i>Significant Content Deletions</i>	Similar to significant additions, but section is deleted from wiki
• <i>Factual Correction</i>	“Hause waren von 1971 bis 1919 gegründet.“ → “Hause waren von 1971 bis 1990 gegründet.“

Data Collection and Analysis

entstanden.
wie ~~Fruchtgummis~~ **Fruchtgummis**, **no change** Nudel, Schlüsselanhänger, Eiswürfelform,
Feuerzeug, Flaschenöffner, Tshirt, Umhängetasche, und viele mehr sachen.
Geh zum: www.ostprodukte-versand.de/index.html
Neues Deutschland **F**
1 Das Neue Deutschland (ND) war die auflagenstärkste Tageszeitung der DDR 2 und erschien
erstmalig am 23. April 1946 nach Gründung der Sozialistischen Einheitspartei Deutschlands
(SED) als deren Zentralorgan.
3 Als Pressestimme der Partei war das Blatt propagandistisch ausgerichtet und Pflichtzeitung der
Parteiangehörigen. 4 Das Neue Deutschland bot wie kein anderes Blatt Berichte, die einer
strengen Kontrolle unterlagen. 5 Der Leser erfuhr ausschließlich das, was man ihm mitteilen
wollte. 6 Ganz besonders augenscheinlich waren geschönte Berichte über wirtschaftliche
Planvorgaben und Planerfüllungsbilanzen.
7 Das ND wird heute von der "Neues Deutschland Druckerei und Verlag GmbH, Berlin",
herausgegeben 8 und erscheint als linke Tageszeitung mit einer verkauften Auflage von ca.
50.000 Stück **8x SIG ADD**
<http://home.arcor.de/madeingdr/> **F**

- interrater reliability: 86% for revision categories; 98% for segmentation of text into t-units
- two-sided Mann Whitney U to test for significant differences between groups (RQ 4)
- Likert-scale answers on questionnaire were averaged; other responses grouped according to patterns/trends

Results - Wiki Revisions

	Overall Average	Average Class 1	Average Classes 2+3
Total words per wiki page	713.1	698.22	732.22
Total number of revisions	246.68	224.78	273.89
Number of total revisions per 100 words	35.25	32.07	39.10
Percent of successful revisions (formal revisions only)	76.37%	72.28%*	80.64% *
Percent of formal revisions (rank ^[1])	41.33% (2)	35.91% (2)*	45.48% (1)*
Percent of stylistic revisions (rank)	13.76% (3)	15.32% (3)	12.23% (3)
Percent of meaning-changing revisions (rank)	42.21% (1)	48.78% (1)	36.02% (2)

[1] Rank refers to where the category falls in relation to the other categories.

* denotes significant difference between Class 1 and Classes 2 and 3 at the .05 level

Results - Student Questionnaires (1)

- positive experiences:
 - user-friendly (M=2.3)
 - want to participate in collaborative project again (65%)
 - main benefits:
 - dividing the workload (28%)
 - wiki allows to work independently (21%)
 - correcting each other's mistakes (19%)
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Results - Student Questionnaires (2)

- problematic issues:
 - poor communication (23%)
 - difficult to depend on group members to complete their part (25%)
- these complaints are similar to issues voiced in other collaborative projects
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Results - Student Questionnaires (3)

- Students felt that most of their revisions focused on grammar (89%), format (23%), content (23%), and spelling (13%)
 - this does not correspond to quantitative findings (meaning-changing revisions had highest percentage)
 - differences in meaning-changing revisions between Class 1 (49%) and Classes 2+3 (36%) supported
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Results - Student Questionnaires (4)

- Class 1:
 - 65% would have preferred feedback from instructor
 - 77% would NOT have preferred multiple drafts
 - Classes 2+3:
 - 59% appreciated the feedback, especially from the instructor
 - 63% appreciated multiple drafts
- instructor feedback did not significantly impact the rate of revisions (only 7 more revisions per 100 words), but it resulted in significantly more successful revisions
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Discussion: RQ 1: How Many Revisions Did Learners Make During the Composition Process?

- similar number of revisions (247/wiki page) of Class 1 and Classes 2+3
 - 35.25 revisions per 100 words: higher than in paper-and-pencil writing (Hall, 1990) and in word processing (New, 1999)
 - collaborative writing and electronic writing might encourage more frequent revisions
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Discussion: RQ 2: What Kinds of Revisions Did Students Make?

- meaning-changing additions most frequent
 - few meaning-changing deletions
 - students did not take co-ownership of the whole text; wrote and revised their own parts
 - formal revisions (grammar, spelling, lexical changes)
second highest category
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Discussion: RQ 3: Were Students Able to Successfully Correct for Linguistic Accuracy?

- average success rate of 76.37%
 - similar findings in Leki, Cumming, & Silva's (2008) extensive review of research on L2 writing
 - Ferris (2006) reports 82% success rate for self-edits of errors that were brought to learners' attention
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Discussion: RQ 4: Differences Between Unstructured and Teacher-Guided Approach?

- no significant difference in amount of stylistic and meaning-changing revisions
 - Classes 2+3 made significantly more formal revisions
 - Classes 2+3 made significantly more accurate revisions
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Discussion: RQ 5: Learners' Perceptions of the Project? Differences Between the Two Groups?

- similar overall positive experience with wiki project and issues concerning division of work
 - wiki allowed for shared, yet independent, work
 - wiki allowed for pooling of knowledge and ideas
 - some poor communication and lack of participation
→ ensuring equal contributions remains a challenge
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Limitations, Future Research and Pedagogical Implications

- replicate study with larger number of participants
 - use more similar design in both groups
 - explore different roles of group members
 - compare amount and type of revisions in different environments
 - train students for peer review (Min, 2006): better student feedback and less apprehension
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Conclusion

- mostly positive experience
 - issues concerning equal contribution of work
 - large amount of revisions
 - teacher feedback led to more formal revisions and higher linguistic accuracy
- gained insight into collaborative writing process as well as the final product
- wikis: effective educational tool to foster collaborative writing skills and revision behavior
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