

EXAMINING THE EFFECTIVENESS OF A SENTENCE-COMBINING
INTERVENTION ON THE WRITING QUALITY OF COLLEGE FRESHMEN

by

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ABSTRACT

Tennessee's public community college system implemented corequisite remediation for underprepared students during the Fall 2015 semester. As a result of the Tennessee Board of Regents corequisite remediation initiative, students with academic placement scores determined to be below college level on an instrument such as the ACT often work in the same college classroom as students who are better prepared to complete college-level work (Tennessee Board of Regents, 2016). Thus, underprepared students need effective academic assistance in order to perform well in not only the corequisite classes but also in other classes later in their college careers.

English teachers, writing texts, and past research point to sentence combining as a writing strategy beneficial to students across all ages for the production of sentence variety and the development of syntactic complexity. This study sought to determine the effects of a semester-length sentence-combining intervention on the production of sentence variety, syntactic complexity, and teacher-evaluation of writing quality with students enrolled in corequisite Learning Support Writing and English Composition I classes. Following the intervention, student essays were analyzed based on sentence variety, syntactic complexity, and writing quality. Additionally, student self-efficacy was captured to determine whether students perceived the intervention as beneficial when compared to their peers who did not receive the intervention.

No significant differences were found between intervention and comparison groups for sentence variety on two separate measures. There was no statistically significant main effect between the intervention and comparison groups for the syntactic

complexity measure. There was a significant group main effect for quality for final essays with the comparison group scoring higher than the intervention group. There was also a significant difference in the self-efficacy measure between groups with overall higher totals for the intervention group than the control group.

Moderator analyses indicated there was a significant interaction effect on syntactic complexity between group and reading placement as was established by the ACT/SAT/ACCUPLACER Reading score. Simple main effects indicated that the comparison group outperformed the intervention group at a statistically significant level in struggling readers. Simple main effects for adequate readers indicated no statistically significant differences between intervention or comparison groups; however, adequate readers in the intervention group did outperform struggling readers. There were no other statistically significant interaction effects.

Overall, the sentence combining intervention did not significantly improve student writing as measured by sentence variety, complexity, or quality. Indeed, the comparison condition tended to outperform the treatment. Results do not support the use of exclusive, explicit sentence-combining instruction as a means of fast-tracking the writing progress of a corequisite English population; however, future research is needed regarding the possible unique attributes of the intervention that could improve writing performance. Also, the improvement of self-efficacy may lead to further improvements in later coursework as students' motivation to succeed may be buttressed by their perceived ability to do so.

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LIST OF ABBREVIATIONS

ACCUPLACER: placement test named for the combined words of “accurate” and “placer”

ACT: American College Testing

COMPASS: Computer-adaptive Placement Assessment and Support System

DESSL: Coh-Metrix measure for descriptive sentence length

ESL: English as a Second Language

LS: Learning Support

SAT: Scholastic Aptitude Test

SEM: Structural Equation Modeling

SYNSTRUTa: Coh-Metrix measure for syntactic similarity between adjacent sentence pairs

SYNSTRUTt: Coh-Metrix measure for syntactic similarity between pairs of sentences throughout the text

CHAPTER I

INTRODUCTION

Background of the study

Although it was not identified as such, the first remedial college writing class offered in the United States was introduced at Harvard University in 1874 with the goal of refining spelling, grammar, and punctuation in the writings of freshman males in order to prepare them for academic writing demands of future courses at the institution (Rose, 1985). Formalized remedial college writing instruction did not appear until 1932, when the University of Minnesota opened its doors to students previously deemed underprepared for college (Lundell & Higbee, 2002); however, the remedial/developmental program did not become widespread until the 1940s, with the passing of the Servicemen's Readjustment Act of 1944 and the height of college enrollment in 1947, when World War II veterans returned to the states and took advantage of the opportunity to finish their educations (Berlin, 1987), a trend adopted by record numbers of American females at that time, as well (Arendale, 2000).

Advances in the field of cognitive psychology resulted in a redevelopment of remedial writing programs in the 1970s, when researchers determined that student writing aptitudes do not all develop along the same timeline, producing a greater urgency to assess student writing deficiencies and to implement writing programs that attempted to address those assessed needs (Behizadeh & Engelhard, 2011). Assessment of student writing problems was challenging due to the multiple choice editing format of most standardized writing assessments first developed by College Board in 1901 (Valentine,

1987) and later revised in the 1930s (Behizadeh & Engelhard, 2011). The trend for objective assessment persisted roughly from the 1950s until 1970 (Yancey, 1999) and was replaced briefly by the holistically-scored writing sample, which was widely used until 1986. Accurate, cost and labor effective writing assessment is essential to academic writing placement at most American colleges and universities in order to distinguish between those students prepared for academic writing and those who are less prepared but share the need to succeed.

Historically, those students identified as underprepared have been placed in a prepare-for-credit course referred to by most college systems as remedial or developmental education. Perhaps, the most formalized and widespread approach to remediation in college writing instruction occurred as a result of the Comprehensive Education Reform Act of 1984 (Lundell & Higbee, 2002). Lundell and Higbee (2002) noted that remedial and developmental education in the United States had not one but, rather, several distinct histories, among the most prominent being the comprehensive developmental education program implemented in Tennessee in 1984 within the Tennessee Board of Regents system, which included 13 public community colleges and six universities. This program required academic placement via nationally-recognized standardized instruments for all incoming students in the areas of reading, writing, and mathematics. Tennessee's program rolled out during the summer and fall terms of 1985, and an alarming 47.4 percent of all first-time freshman students were required to take at least one course in the multi-tiered program.

Statement of the Problem and Purpose

The developmental education program in Tennessee has since experienced several iterations in response to student needs and public outcries, resulting in reduction in number of credit hours required for remediation, as well as greater leniency in placement testing. In recent history, the Tennessee Board of Regents system unveiled its corequisite remediation learning support (LS) program, allowing students to enroll in college-level courses while concurrently enrolled in courses designed to remediate academic deficiencies via supplemental instruction (Belfield, Jenkins, & Lahr, 2016). Individual institutions were allowed some autonomy in the creation of mandatory corequisite LS programs (Belfield et al, 2016). The corequisite remediation mandate has produced increased rates of student retention, as students pass the college-level English class within their first semester and alleviate the barrier that early developmental education programs created in their attempts to align the abilities of students with deficiencies with the abilities of their college-ready counterparts. An additional benefit, especially noteworthy to politicians and their voters, is the reduced cost, as the corequisite program often requires fewer credit hours to be funded through financial aid or scholarships and places students on track to graduation much faster than did previous programs.

Community college students in Tennessee are typically placed into LS by American College Test (ACT) scores (Tennessee Board of Regents, 2016), which range from 1-36. Denley's (2016) research pointed to a trend in college English success rates based on academic placement by ACT score or other instrument, revealing that lower ACT English scores predicted lower college-level English completion rates for students requiring remediation. Although colleges were given some autonomy for establishing

their own models for corequisite remediation, one corequisite remediation requirement is that students placed into LS take the same credit-bearing college-level English class as those students who require no remediation (Tennessee Board of Regents, 2016); thus, in some instances students required to participate in corequisite English are placed in the same classroom with peers who scored considerably higher on the ACT or other college placement instrument. Other schools followed a model that allowed the same instructor to work with students in both the LS and college-level classes (Belfield et al, 2016).

Former Tennessee Governor Bill Haslam's "Drive to Fifty-five" initiative challenged higher education to increase the number of Tennesseans possessing a post-secondary degree or certificate to 55% by the year 2025 (Tennessee Higher Education Commission [THEC], 2013). Currently only 38.7 % have earned such a credential (THEC, 2017), leading colleges and universities to explore possible options in order to meet the state's educational goals. The delivery of corequisite LS directly reinforces former Governor Haslam's "Drive to 55" initiative (Complete College America, 2011).

According to data provided by the Tennessee Higher Education Commission (THEC, 2017), in Fall 2016, 24.2% of the 86,172 students attending Tennessee's community colleges were non-white; 58.8% were female; 51.8% were eligible for the federal Pell Grant, indicating lower socioeconomic circumstances, and 33% required LS writing. Just over 65% of those students who were enrolled in corequisite English during the Fall 2016 term passed their college-level English class. Thus, there is a viable need to find ways to improve the success of those enrolled in an LS writing and corequisite college-level English class. Furthermore, graduation rates are lower for non-white

populations than they are for Caucasians (THEC, 2017). They are also lower for female students and PELL Grant-eligible students than they are for students overall, further indicating the need to determine instructional strategies that address the needs of special populations of students.

Although the corequisite instructional model has experienced noteworthy success by accomplishing in a single semester what previously required two or more semesters (Denley, 2015), not all students enrolled in corequisite LS have been successful, and not all are likely to be successful without departmental-level and classroom-level efforts to address some of the academic inequities that occur when students with low college placement scores on standardized instruments such as ACT find themselves competing in the same classes with students who produced exceptional scores on those same instruments (TBR, 2017, *Corequisite Remediation*).

A unique disparity occurs for LS writing students with the necessity for skill sets outlined in the TBR *A-100 Guidelines* (2017), including language skills that require sentence variety. Although numerous other skills such as proficiency with punctuation and correct micro-level grammar skills are also listed among skills required to meet TBR writing competencies, few skills can compete with sentence variety in the production of academic writing, which is required in many general education and academic core classes.

Significance of the Study

College English teachers typically agree that sentence or syntactic variety contributes to what is perceived to be superior student writing. Reviews of college prerequisite English composition textbooks for sections dealing with either sentence combining or sentence variety found that instruction in simple, compound, and complex sentences is standard practice in developmental English courses containing a grammar component. Unfortunately, where writing texts and the subsequent instruction sometimes fall short is in taking solely the skill and drill approach to teaching sentence combining and sentence variety rather than a more meaningful paragraph or essay production approach that will allow students to incorporate their study of sentence combining that occurs in the writing class within a current writing assignment in the college-level class. Lunsford (1979) spoke out against the use of skill and drill grammar techniques to improve the writing skills of basic writers, concluding that problem-solving exercises that culminate in a writing assignment are more effective at bridging the cognitive gaps experienced by basic writers inside the college classroom than are grammar exercises that are not reiterated in writing assignments.

The skill and drill approach to instruction may be among the most appropriate methods for instruction with elementary and middle-school-aged students (Mellon, 1967; McGuinness & Heiner, 1972; O'Hare, 1973; Saddler & Graham, 2005) who are learning coordination and subordination to form compound and complex sentences; however, college students who have only a single term of approximately 15 weeks to master multiple writing skills need an alternative that will accommodate the limited resource of time and prepare them for their future college-level writing demands. Students enrolled

in corequisite models, for example, developmental writing plus English composition, are under even more pressure than their better prepared peers: They do not have time to master the content they were likely unable to master in K-12. Instead, they need instruction that will arm them with the skills they need to succeed in college.

In addition to inspections of writing texts, reviews of automated essay scoring criteria have indicated that syntactic variety and complexity are important components of quality writing (Burstein, Kukich, Wolff, Lu, & Chodorow, 1998; Dikli, 2006). Although reliance upon automated essay scoring should be prefaced with caution, the fact that programs dependent upon artificial intelligence consistently seek out evidence of syntactic complexity should serve as a cue to educators. With factors such as state guidelines, textbook publisher research, and essay scoring rubrics dictating practice, sentence combining inarguably belongs within the LS writing curriculum and may be the best option for addressing the writing instruction needs of underprepared college freshmen. The following review of the literature provides a summary of the research in sentence-combining instruction with one goal being production of sentence variety, identified as a trademark of quality student writing, and culminates in the current issues regarding sentence combining in the corequisite English college classroom.

Current writing textbooks, English teacher perceptions, and past research point to explicit sentence-combining instruction as beneficial in the production of sentence variety and the development of syntactic complexity in college and adolescent writing (Gay & Oslund, 2018; Graham & Perin, 2007; Hillocks, 2005; Hunt, 1965; Jones, 1979; Maimon & Nodine, 1978; Morenberg, Daiker, & Kerek, 1978; Roos, 1981). At the community

college, diverse student groups are required to take corequisite writing courses, and the impact of instruction may vary depending upon the student. To examine instructional strategies that may identify potentially effective practices in the corequisite writing classroom, based on earlier research that addressed sentence combining among similar populations, the following research questions have been proposed:

1. Will a sentence-combining intervention in a corequisite writing course affect sentence variety in student writings in a freshman composition course compared to those in a comparison condition?
2. Will a sentence-combining intervention in a corequisite writing course affect syntactic complexity in student writings in a freshman composition course compared to those in a comparison condition?
3. Will a sentence-combining intervention in a corequisite writing course affect writing quality in student writings in a freshman composition course compared to those in a comparison condition?
4. Will the impact of a sentence-combining intervention on sentence variety be moderated based on student reading level as determined by academic placement?
5. Will the impact of a sentence-combining intervention on syntactic complexity be moderated based on student reading level as determined by academic placement?
6. Will the impact of a sentence-combining intervention on writing quality be moderated based on student reading level as determined by academic placement?

7. Are there differences between treatment and comparison on student self-efficacy in academic writing following a sentence-combining intervention?

The null hypothesis for each of the questions above is that there will be no differences between the two groups. The alternative hypothesis is two-tailed, specifically that there are differences between the groups.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Hunt (1965) christened the T-unit as an abbreviated term for the “minimal terminable unit” or what is essentially an independent clause, including all its respective parts (Hunt, 1965, p. 37). With the T-unit length serving as an appropriate quantitative measure, Hunt (1965) determined that syntactic complexity could then be determined by T-unit length. The landmark work of Hunt (1965) to quantify English sentence structures and to measure gains due to sentence combining and acquisition of syntactic complexity laid the groundwork for important follow-up research to determine whether explicit sentence-combining instruction is a viable means of improving the quality of student writing across populations, and much of that subsequent research has indicated overall gains in syntactic complexity, often measured by number of T-units, number of clauses, words per T-unit, and words per clause, as well as perceived gains in writing quality. In order to compete with peers who have arrived at college bearing greater academic capital, the LS writing student needs effective writing instruction that includes sentence combining. Although there is no current published research available to direct instruction in sentence combining within the corequisite curriculum, previous studies directed at specific populations of learners offer the necessary data to inform studies to benefit the corequisite student.

Scant research for college-aged students in the production of sentence combining with the goal of producing sentence variety has occurred within the past two or three decades. Possibly because the corequisite model for providing college English instruction

is a relatively new approach to an old problem, and likely because many composition instructors rely on textbook publishers to supply them with the tools, especially software, needed for structured learning, community college instructors have extended the suspended research trend. Furthermore, research involving college students poses unique challenges. For example, semester-length terms are limited to approximately 45 contact hours per three-credit course. Not bound by the requirement of No Child Left Behind (NCLB, 2002) to employ evidence-based practices in the classroom, college instructors within English departments are less likely to have studied andragogy and are more likely to have developed their own preferred methods of instruction to achieve required student outcomes than are their K-12 counterparts, resulting in lack of instructional consistency within the department. Instead, college English instructors, especially those with no training in andragogy, may recycle the methods they encountered in their own educational circumstances, thereby, perpetuating both good and bad teaching strategies and habits. While university faculty may be required to pursue research, community college teachers may teach more sections of composition per term than their university counterparts, which, due to grading requirements, results in less discretionary time to plan and conduct research, a factor that could be partially responsible for the lack of recent extant research in sentence combining at the community college level. Despite the limitations specific to the college-corequisite English classroom, research in practices to close the gaps in syntactic complexity in academic writing needs to occur.

Results in research using sentence-combining instruction with diverse populations are inconsistent, and in some instances a question of construct measured or practice

implemented in lieu of outcomes of the sentence-combining instruction itself. As a writing, revision, or even reading strategy, it should be approached with careful attention to insure participants experience syntactic growth rather than loss. As with some other writing strategies, sentence combining may produce increased student writing errors initially before teachers witness any significant improvement (Lide, 1980). Instruction in sentence combining may also feed students the false notion that only complete sentences rather than sentence parts may be combined to produce tighter writing with accurate emphasis on coordination and subordination (Smith, 1981). When pitted against traditional grammar instruction, sentence combining has frequently produced significant student growth; however, sufficient failures with sentence combining have occurred that experts (Ney, 1980) hold fast to beliefs that sentence combining should only be used with specific, and in Ney's case younger, populations.

Research with Younger Students

Sentence-combining activities are typically introduced early in the elementary curriculum as evidence-based practices for grades K-2 and 3-5 (Troia & Olinghouse, 2013); thus, expectations of more sophisticated student writing is not unreasonable for teachers in later grades. In their adolescent writing meta-analysis, Graham and Perin (2007) reviewed the effects of five sentence-combining studies of students in grades ranging from fourth to ninth and found an average effect of .50, indicating a moderate influence of sentence combining on the overall quality of student writing. Hence, sentence combining as an instructional strategy has frequently produced positive results with younger students. For example, Mellon (1967) reinforced Hunt's (1965) research, achieving statistically significant results for twelve syntactic variables including nominal

phrases and clauses and relative phrases and clauses, as well as number of words and length of T-units with seventh graders who studied sentence combining via transformational grammar for five months by combining multiple kernel sentences to form a single longer sentence to demonstrate syntactic fluency. Additionally, Mellon's (1967) seventh grade Experimental Group significantly outperformed the Control Group with all twelve syntactic variables in post-test comparisons.

The experimental methods employed by McGuiness and Heiner (1972), who found that sentence-combining instruction does not necessarily lead to improved student writing of seventh graders, however, did not necessarily test the appropriate construct, i.e. the development of correct complex sentences. McGuiness and Heiner (1972) asked some participants to provide oral output while others were asked to produce written output following sentence combining or grammar instruction, delivered via audio or non-audio format. Their results indicated that conventional grammar was superior to sentence-combining instruction, and participants in the sentence-combining group receiving audio-instruction actually produced fewer of the sentence-combining measures from pre-test to post-test, leaving the researchers to question the design of their study. The researchers observed that those placed in the Experimental Group were actually learning sentence types in reverse order of how they should have learned them, and as a result, the Experimental Group produced fewer complex sentences and demonstrated less syntactic fluency in the post-test than in the pre-test.

On the other hand, O'Hare (1973) measured six variables of syntactic fluency in an 8-month sentence-combining experiment with seventh graders whose results were

reported as significant for all six of the assessed factors including the number of words and clauses within T-units (Hunt, 1965), number of words within clauses, and number of noun, adjective, and adverb clauses. O'Hare's (1973) work differed from that of Mellon (1967) in that students were not engaged in formal grammar study, nor were they strongly encouraged to transfer skills gained through sentence-combining practice to their personal writing. Despite the informal writing approach characterized within the study, teacher graders judged the essays produced by the treatment group to be superior to those of their peers in the control situation as well.

In work with seventh graders, Combs (1977), who matched pairs of seventh graders into Experimental and Control groups using the Lorge-Thorndike test of intelligence, reported results that teacher perception of student writing quality is influenced by student sentence-combining skills. Comparable results persisted when students were again asked to write following an eight-week interim between initial and delayed post-tests. Combs' (1977) matched-pairs study was ground-breaking in that it relied upon the assessment of teacher raters and not on the student production of T-units.

However, McGuiness and Heiner (1972) found distinctly different results in their work with seventh graders provided with sentence-combining instruction and determined that these younger writers benefited more from traditional grammar instruction, and their confidence hinged more on encouragement from teachers. It should be noted that much of McGuiness and Heiner's (1972) study relied upon audio instruction via dictation, and their results may have pointed to a listening construct rather than a writing construct. Furthermore, in their discussion, they advocated increased exposure, perhaps as long as a

full school year, to instructional materials, claiming that students involved in sentence-combining instruction actually mastered the curriculum but would only employ what was learned when specifically required to do so. Thus, it seems likely that any sentence-combining-centered curriculum should be extended for as long as a term allows, possibly despite Jones' (1979) findings to the contrary, in order for students to not only reap the full benefit from the program but also to impress upon students the need to consistently incorporate sentence variety into their writing.

A noticeable gap in time occurred between early sentence-combining research and that of the twenty-first century. Saddler and Graham (2005) found in their paired participant study that sentence combining used in conjunction with revision was an effective strategy for skilled and less-skilled writers enrolled in fourth grade using Strong's (1986) *Creative Approaches to Sentence Combining*. Sentence combining versus traditional grammar produced a significant main effect ($d = 1.31$) in the use of sentence-combining skills, as well as a significant main effect for treatment measured by the Test of Written Language, 3rd edition (TOWL-3; Hammill & Larsen, 1996). The treatment group also indicated growth in revising and improved their stories ($d = .64$). Their work indicated that sentence combining as an instructional strategy could be used to not only aid in the development of syntactic complexity, but it was also a useful tool in writing revision.

Research in Sentence Combining with Adults

Following Hunt's (1965) seminal work in identifying sentence quality by way of the T-unit, sentence combining received much attention from researchers during the late

1960s, the 1970s, and early 1980s. In the context of the college classroom, it is important to note that Hunt's (1965) work resulted in the conclusion that writing gains for adult writers were defined not by number of T-units but, rather, by clause length. Hunt (1965) also found that adults use fewer coordinating conjunctions and fewer T-units in their writing. Instead, according to Hunt (1965), they use more subordinate clauses, particularly adjective or relative clauses. However, not all writing instructors agree with Hunt's (1965) findings and, instead, have found that writers who lack syntactic complexity are actually likely to produce longer T-units than their better prepared counterparts (Argall, 1982; Hake & Williams, 1979). The following examples provide approximately the same degree of information to readers; however, the longer of the two combined sentences is less succinct than its shorter revision:

Original: College athletes should be paid for playing their sport. They work hard and have to keep up with classes and homework and practice. They do not have any extra time to have a job.

Combined: College athletes should be paid for playing their sport because they work hard and have to keep up with classes and homework and practice and do not have extra time to have a job.

Revised: Due to their many college-related obligations such as classes, homework, and practice, as well as their lack of flexibility for a job, college athletes should be paid.

One benefit to well-structured sentence-combining activities is a decreased reliance on repeated pronouns, as is the case with *they* in the original group of sentences

above. When students lack syntactic complexity, their inclination is toward excessive coordination, as is evidenced in the combined sentence above. Well-crafted exercises teach students the production of concise sentences, exemplified in the revised sentence above. Another improvement is the variety of sentence patterns, as is illustrated in the revised sentence, resulting in the potential for greater reader interest with only marginally increased sentence complexity. Often, a more important benefit is that sentence combining requires students to decide which ideas are most vital and which ones are subordinate.

Sentence-combining instruction has not always produced the targeted outcomes on a longitudinal basis with adult populations. Ross (1971) reported mixed results regarding sentence-combining instruction with college freshmen, producing significant results in the length of clauses by combining kernel sentences to produce absolute and verbal phrases with the experimental group. Although changes were made during winter term, those changes did not persist in the following fall term. Despite the fact that results for decreased errors were not statistically significant either term, the experimental groups who received sentence-combining instruction did produce fewer errors in their writing than did the control groups. Because results were inconsistent, her cautioned conclusion was that instruction in sentence combining by way of transformational grammar, or the structure of sentence types, could possibly offer hope in the sentence-combining approach to teaching composition.

Unlike Hunt (1965) who used writing samples from *Harper's* and *Atlantic* to measure T-unit length among experienced writers, Maimon and Nodine (1978) used

expository writing samples to test whether sentence combining taught across two academic terms resulted in more words per T-unit among a small group ($n = 14$) of college freshmen and achieved significant results from pre-test to post-test writing sample. However, confirmation that instruction and practice with sentence combining would result in fewer embedded writing errors did not occur. Similarly, Ney and Fillerup (1980) tested sentence-combining instruction using in-class and take-home exercises over the course of eight weeks with adult English as a Second Language (ESL) students attending a university, with significantly positive results in syntactic growth demonstrated as number of clauses within the T-unit among the experimental group; however, their results did not indicate that explicit instruction in sentence variety produced overall better writing for adult ESL students, and adjustments in calculating results had to be made due to frequent errors in student writing samples.

Responding to the need for long-term exposure to work with sentence combining, Morenberg, Daiker, and Kerek (1978) took advantage of the full fifteen-week college term to test the effects of sentence-combining instruction on 151 college freshman and determined that previous research supporting sentence-combining instruction could be extended to the college classroom, as their results included not only increased words per clause and increased words per T-unit but also higher averages on holistically scored writing. Furthermore, although post-test results were not significant, students in the Experimental Group scored higher than their counterparts in the Control Group on reading ability measured by the STEP Series II, Form A. To fuel the debate, however, Waterfall (1978), reported non-statistically significant results in a measure of

syntactic fluency in college-aged students who produced essays following instruction in the combining of sentences.

Working with an exclusively African-American college freshman population, Jones (1979) found that sentence-combining exercises improved the quality of student writing, and students exposed to the treatment produced significantly longer T-units and clauses from pre-test to post-test. Jones (1979) offered multiple important contributions to the body of research in sentence combining due to slightly greater gains among female versus male writers, as well as a ceiling effect on student improvement at the ten-week mark.

In work with students enrolled in a college developmental writing class, Argall (1982) noted that intense sentence-combining instruction resulted in fewer ill-constructed sentences. Additionally, student writing from a pre-test to post-test writing sample included fewer major errors such as fragments, comma splices, and fused sentences. Student proofreading skills improved, and student writing contained fewer spelling, word form, verb form, and comma errors. Because of the improvements across multiple writing domains, Argall's research indicated that explicit instruction in sentence combining could potentially replace the need for instruction in some of the other grammatical and mechanical elements typically associated with a developmental writing curriculum.

In a correlational study, Roos (1981) substantiated Morenberg, Daiker, and Kerek's (1978) results by examining the relationship between experienced-teacher-graded essays and Hunt's (1965) analysis of factors contributing to syntactic complexity.

Finding significant correlations for words per clause, clauses per T-unit, and T-units per sentence, Roos (1981) concluded that the teachers showed a preference for student writing that included compound sentences. ANOVA, however, indicated that these traditional measures of syntactic complexity accounted for only 30 percent of the variance in student essay grades and reopened the sentence-combining argument for college-aged students. Roos (1981) suggested that the remaining 70 percent variance could be due to content, organization, and other essay components. Differences between words per T-unit, T-units per sentence and words per sentence were all significant in explaining the difference in grade between papers receiving an A and papers receiving a B. Significant differences were found for all factors including words per clause, words per T-unit, T-units per sentence, words per sentence, except clauses per T-unit between essays receiving an A and essays receiving a C, thus, indicating sentence-combining ability could be the distinction between a C paper and an A paper for a college student.

In addition to length of instructional period called to question in earlier studies (Jones, 1979; Morenberg, Daiker, & Kerek, 1978), instructional method is likely to have an impact on the results of sentence-combining curricula (Izumi & Izumi, 2004). Assuming that output demands would improve student acquisition of proficiency in creating relative or adjective clauses, Izumi and Izumi (2004) experimented with adult learners of English to test their abilities to generate orally-delivered relative clauses in order to describe events occurring within pictures. Their results indicated that the students who were not required to produce oral output performed significantly better than the experimental group required to produce oral output; however, time may have been a

factor since the study only lasted two weeks. They (Izumi & Izumi, 2004) also considered the possibility that due to the increased cognitive load required for oral output, written output may have provided a better measure of growth in relative clause production among adult learners of English.

Research with At-Risk Populations

Research with older and younger populations indicates that delivery, as well as goals, of sentence-combining instruction should be diverse depending on such factors as age, gender, and pre-established ability. Additional endorsements of sentence-combining instruction have occurred through experimentation with special populations of students. Although Ney and Fillerup (1980) did not witness improved overall writing quality in the work of a small group of university freshmen who were learning English as a second language, as previously noted, they did report significant results for the number of clauses within the T-unit in the posttest for the experimental group.

Students with diagnosed learning disabilities attend community colleges at a rate twice that of the general population (Cortiella & Horowitz, 2014); however, scant research, despite need, has been completed on the academic success of students with learning disabilities and their success in college coursework. When Nutter and Safran (1983) tested the effects of sentence-combining instruction using writing exercises with elementary-aged students diagnosed with learning disabilities, they identified significant gains in numbers of words written, as well as in number of words within T-units. Instruction occurred in a multisensory format incorporating visual, audio, and tactile practices with small tasks. The experimental group temporarily reduced errors in

sentence production and did not create additional errors when producing new sentence patterns as a result of instruction; conversely, once the experimental condition ceased, results were no longer sustained, indicating that sentence-combining instruction should possibly be ongoing with populations who do not learn with the facility of their peers without learning disabilities.

Sentence-combining instruction has also been reported as improving student learning in other language arts skills besides writing measures (Evans, Venetozzi, Bundrick, & McWilliams, 2001). Evans et al (2001) found that students who were less prepared for standardized assessments such as the *California Test of Basic Skills* showed greater gains when taught sentence combining, even on measures of reading comprehension, as well as on those measuring writing skill. The transferal of sentence-combining instruction to other academic areas such as reading is consistent with the findings of Stedman (1971), who noted gains in comprehension among African-American students based on their understanding of individual syntactic structures, and with Hughes (1975), who, like Evans et al (2001) reported heightened improvement in comprehension among lower-skilled readers. Despite some evidence sentence combining works with at-risk students, the limited amount of research with these students indicates a strong need for further research in these populations. This is especially critical for students entering college, where writing becomes more important to, and a larger component of, their academic performance and success.

Student Self-efficacy

Moriarty (2014) noted that student self-efficacy matters because students who feel a greater sense of self-efficacy are more willing to expend the necessary effort to achieve. The seminal work of Bandura (1986), who was dedicated to understanding student levels of self-efficacy, identified encouragement and positive feedback as critical ingredients of students' positive academic perceptions. Although research results vary in terms of positive effects of sentence-combining instruction with college-age students, achieving improved syntactic complexity may have a liberating effect on adult writers by equipping them with the skills and motivation necessary to complete complex writing assignments. In a college writing student survey, 69% of students appreciated their opportunity to work with sentence combining, and 67% stated that they would make the curriculum recommendation to a friend (Daiker, Kerek, & Morenberg, 1978). Furthermore, 72% believed instruction in sentence combining had improved their writing. Work in sentence combining provided in the context of a coping model has produced improved writer self-efficacy, as well as self-satisfaction (Zimmerman & Kitsantas, 2002). However, not all work with sentence combining has produced positive effects on student learning and motivation: Ney (1976) observed that freshmen with whom he had experimented in sentence-combining instruction expressed negative reactions toward the practice.

Research with a Corequisite Population

In an exploratory study, English teachers worked with students ($n = 40$) enrolled in two sections of English composition paired with two sections of LS Writing (Gay & Oslund, 2018). Based on teacher perceptions provided from a Likert-scale survey on

sentence combining and sentence variety, 86% ($n = 28$) of surveyed college writing faculty agreed that explicit instruction in sentence combining increased sentence variety in student writing. In addition, 93 % agreed that sentence variety improves the quality of student writing.

In the study, one class, the Control Group, followed a traditional curriculum in the LS Writing course, studying multiple components of grammar and mechanics, while the Experimental Group completed weekly sentence-combining exercises in their LS Writing course for twelve weeks during the fifteen-week semester. At the end of the study, student first essays and final essays from the English composition course were compared based on seven different sentence types, which were taught explicitly to the Experimental Group: simple, simple with an introductory prepositional phrase, simple with an appositive phrase, compound, complex with a relative clause, complex with an adverb clause, and compound-complex. T-tests indicated statistically significant differences in sentence types for final essays between groups for Simple Sentences with Prepositional Phrases, with the Experimental Group producing higher means, and for Compound Sentences and Compound-Complex Sentences, with the Control Group producing higher means for these two sentence types. These results indicated that this population of students, when explicitly trained in sentence combining, does not necessarily produce sentences containing more clauses or an increase in sentence variety.

In addition to the measure of sentence types generated by each group, two independent graders scored each student's final essay using a six category rubric: topic complexity, documentation, grammar and punctuation, sentence variety, quality, and

total. Essays could receive up to five points for each category. There were no significant differences in essay scores between the two groups for final essays; however, based on scoring comparisons of first and final essays, Hedge's g calculations indicated a positive effect for the sentence-combining treatment in all categories: Complexity ($g = .56$); Documentation ($g = .61$); Grammar/Punctuation ($g = .15$); Sentence Variety ($g = .53$); Quality ($g = .61$); Total ($g = .56$), indicating that student instruction in sentence combining may have positive effects on multiple components of student composition.

This classroom investigation was problematic in several ways, however. As is typical for a Learning Support class, some student attrition occurred, leaving the Control Group ($n = 7$) smaller than the Experimental Group ($n = 16$). In addition, the initial essays were produced during week five for both groups, when, ideally, they would have been produced during week one, prior to any instruction on sentence combining or other grammatical and mechanical conventions. Furthermore, although the English composition course was a rhetoric and argument course and each essay required document support from external sources, topics and paper lengths were not the same for both groups. Although the comparison instructor had over thirty years of experience and the intervention instructor had over twenty-five years of experience with underprepared English students, the sections were not randomly assigned, and there may have been other group differences that impacted outcomes, as well.

Replication of the exploratory study over a full college semester was recommended for a larger sample, using a common schedule of assignments, with the exception of sentence-combining exercises, for both groups, as well as common paper

topics written on a common timeline, with predetermined sentence types counted from initial and final essays. The essay quality rubric has been refined to provide more detail and was provided to students to improve their understanding of teacher expectations. In addition, a standardized measure of syntactic complexity was recommended to assess student initial and final essays. Such a measure would be a departure from Hunt's (1965) well-established research on sentence combining and T-units; however, it could potentially offer teachers of corequisite English students some guidance for instruction that will support underprepared students in college classes, as well as provide English faculty with a reliable essay-scoring shortcut.

As research in sentence combining has demonstrated, explicit instruction may not have the same effects for all groups. A larger, more diverse sample could possibly help distinguish which populations of students among academically underprepared adults best respond to explicit sentence-combining instruction, as well as whether sentence-combining instruction has an effect on student writing self-efficacy. Replication of Gay and Oslund's (2018) study using a larger, potentially, more diverse sample size may produce distinctions in the effects of sentence-combining instruction among a college corequisite sample. Furthermore, incorporating both a sentence-counting instrument, as well as a standardized measure of syntactic complexity, may identify effects not observed in the exploratory study.

The purpose of this study was to examine the effectiveness of explicit sentence-combining instruction to students enrolled in both a LS writing class, as well as a college-level English composition class. An additional purpose was to examine whether there are

differential effects depending on the learners' reading proficiency. A final purpose was to examine the effects of the intervention not only on academic performance but on students' self-efficacy.

In order to further understand the impact of a writing intervention in adult community college students, the following research questions were addressed:

1. Will a sentence-combining intervention in a corequisite writing course affect sentence variety in student writings in a freshman composition course compared to those in a comparison condition?
2. Will a sentence-combining intervention in a corequisite writing course affect syntactic complexity in student writings in a freshman composition course compared to those in a comparison condition?
3. Will a sentence-combining intervention in a corequisite writing course affect sentence quality in student writings in a freshman composition course compared to those in a comparison condition?
4. Will the impact of a sentence-combining intervention on sentence variety be moderated based on student reading level as determined by academic placement?
5. Will the impact of a sentence-combining intervention on syntactic complexity be moderated based on student reading level as determined by academic placement?
6. Will the impact of a sentence-combining intervention on writing quality be moderated based on student reading level as determined by academic placement?

7. Are there differences between treatment and comparison on student self-efficacy in academic writing following a sentence-combining intervention?

The null hypothesis for each of the questions above was that there would be no differences between the two groups. The alternative hypothesis was two-tailed, specifically that there would be differences between the groups.

CHAPTER III

METHODOLOGY

Context of the Study

College faculty assigned to teach students enrolled in corequisite English classes may be overwhelmed by the expectation to remediate underprepared students sufficiently to write with the same level of proficiency as their better-prepared peers. Past research in sentence combining has contributed greatly to the potential of this single writing strategy. Thus, sentence-combining research targeting a corequisite population was the natural next step toward effective corequisite writing practice. The following study examined the effects of an intervention in sentence combining on college corequisite writing students.

Participants and Sampling

Participants in the study ($n = 119$) were recruited from among the corequisite Learning Support Writing students co-enrolled in sections of English Composition I taught by seven full-time faculty at a small, predominantly rural, southeastern community college. The faculty experience as teachers ranged from three years to over thirty, with both long-term and short-term faculty instructing both groups. All three male instructors were randomly assigned to comparison sections. Two instructors, one male assigned to comparison and one female assigned to treatment, possess a Doctor of Philosophy in English. All others possess a Master of Arts in English. All faculty were popular among students and received excellent student evaluations each year.

Participants were randomly assigned by section, with five sections randomly assigned to the sentence-combining intervention group and four sections assigned to the comparison group. These assignment decisions were made because the sample, though a diverse cross-section of students enrolled at the college, was a convenience sample instructed by full-time faculty who volunteered to participate. As there was an odd number of sections, the larger number of participants was assigned to intervention rather than comparison. In order to participate, students had to be 18 years of age or older and co-enrolled in one of the nine sections of LS Writing and English Composition I identified for participation in this study. Participants were required to sign an informed consent form but were not notified whether they were among the intervention group or comparison group. In addition to demographic traits such as gender, age, and ethnicity, students were also identified as either adequate or struggling readers due to their ACT, etc., placement into Learning Support Reading, a course that is also corequisite with English Composition I.

Procedures

Teachers were trained for two hours the week before classes began on the delivery of the intervention or traditional grammar instruction practices. The intervention instructors were provided direction on how to deliver the twelve, semi-scripted practice lessons on various sentence types. They were trained on required length of the sessions and shown how to record their lessons on hand-held recorders. The comparison group was provided instruction on required grammatical concepts including pronoun agreement, common sentence errors such as fragments and comma splices, and sentence combining. Their schedule of weekly grammar assignments corresponded with the twenty-five

minute, weekly sentence combining activities of the intervention group. These assignments were pulled from the department-selected Learning Support Writing text, which, along with software, was also used for the Learning Support Reading class. Instructors were provided syllabi for the Learning Support Writing classes and the English Composition class, as well as the first day diagnostic instructions and a 10-dimension scoring rubric to be used with all writing assignments throughout the term. Throughout the term, teachers were provided all writing assignments, recruitment fliers, pre- and post- self-efficacy surveys, student consent forms, an online drop box for essays, flash drives, file folders, and other supplies to facilitate organization of student work.

On the first day of the LS Writing class, which met all semester in a computer lab with individual student work stations loaded with Microsoft Word for their essay composition, students in both groups were provided a recruitment flyer. At the second class meeting for sections meeting twice per week and during the second half of the class meeting for sections meeting once per week, students were provided a diagnostic essay prompt that was used throughout the department. All students were provided the same essay prompt and instructions. They were required to complete and save an electronic copy of the essay prior to the end of the second class meeting or second half of the first meeting for sections meeting only once per week. Appendix I provides a copy of the Diagnostic Essay prompt. The following week, students were provided the Informed Consent Form to sign. Because initial recruitment efforts produced low numbers of volunteers, as many as three recruitment attempts were made throughout the term. Weekly, throughout the semester, students in the sentence-combining intervention group

were provided a 25-minute practice in a specific type of sentence combining, with all students completing an identical assignment each week. Practice worksheets included instruction in forming compound sentences using coordinating conjunctions, compound sentences with semi-colons and conjunctive adverbs, complex sentences with adverb clauses, complex sentences with adjective clauses, compound-complex sentences, simple sentences with introductory prepositional phrases, and simple sentences with appositive phrases. Appendix J includes each practice worksheet. Each worksheet was created in a format that can be read by an electronic reader in order to accommodate any student who may have needed a prescribed accommodation according to documentation provided by the college's Office of Counseling and Disability Services.

Each sentence-combining practice included a semi-scripted set of instructions, a sample to follow, and five sets of sentences for students to combine following the designated model. Teacher instruction required five minutes with students then spending up to fifteen minutes to complete the practice sentences on their own. Once the fifteen minutes passed, teachers collected student papers and then spent five minutes discussing possible correct responses. To assess fidelity, the faculty instructing sentence combining used portable recorders to record these sessions throughout the term. At the end of the term, a Classroom Fidelity Checklist (Appendix A) was completed for a randomly selected twenty percent of the lesson recordings. The classroom fidelity rating was 92%, calculated by assessing deviances from prescribed treatment based on Likert Scale values. The assigned instructors met their sections on time 100% of the class meetings that were reviewed for fidelity. The score for appropriate lesson delivery was 95%

because one instructor was absent and got behind on the delivery of scheduled lessons. As the checklist indicates, among critical factors that could impact fidelity was instructor adherence to time spent on instruction, especially in terms of maximizing use of allotted instruction time. This time was to be spent explaining the nuances of the sentence type such as punctuation or use of the appropriate conjunction. Additionally, instructions indicated that students were to write a new sentence comprised of the provided sentences, following the prescribed pattern of the lesson. Because instructors did not take full advantage of instruction time, the score for time spent on preliminary instruction was 75%, and the score for review of correct sentences was 85%. The score for time spent on student completion of the new sentences was 83%. This score was due in some cases because the instructor did not require the students to write new sentences and in some cases because the students completed the practices early but according to instructions.

On the final LS Writing class meeting of the semester, each student, regardless of group assignment, completed the final essay for the Composition I class and provided the instructor with an electronic version of the essay to give to the researcher. Appendix K provides a copy of the final essay prompt. Additionally, the students completed the post-Writing Self-Efficacy Survey, included in Appendix B, and submitted it to the instructor, who provided the researcher with a copy

All students in the identified sections wrote the same number of essays on the same topics and were scored using the same scoring rubric throughout the term to ensure treatment fidelity. Appendix H includes the rubric used. Additionally, a common English Composition I schedule of assignments, available in Appendix C, was used in all

participating sections, and common schedules of assignments were used for all Comparison, Appendix F, and Sentence-Combining Intervention, Appendix G, sections of LS Writing.

Instruments

Two essays, a diagnostic sample essay written during the first week of class prior to sentence-combining instruction and the final exam essay, written during the last week of class after instruction was complete, were scored to determine the effect of a sentence-combining intervention that emphasized construction of these combined sentence types: compound with comma and coordinating conjunction, compound with semi-colon or semi-colon and conjunctive adverb or transitional expression, complex with adverb clause, complex with adjective clause, simple with introductory prepositional phrase, simple with appositive phrase, and compound-complex. Along with simple sentences, these sentence types were counted and compared for initial writing sample, the diagnostic essay, and final writing sample, the final essay. The diagnostic essay was used to determine equality of groups, and the final essays for the sentence-combining intervention and the comparison groups were used to determine differences in sentence variety, syntactic complexity, and overall writing quality between students participating in explicit sentence-combining practice and students exposed to a variety of lessons in grammar and mechanics. Appendix F provides a copy of the sentence counting instrument, including examples of each sentence type.

Sentence Variety

In addition to the sentence variety measure from the scoring sheet for the essays, Coh-Metrix 3.0 was used to provide additional measures of sentence variety. Coh-Metrix, so named due to its propensity to determine cohesion, as well as coherence within text using latent semantic analysis (Landauer & Dumais, 1997), assesses multiple components of text including sentence variety, syntactic complexity, narrative traits, word frequencies, and reading level, and has been validated by researchers and educators, alike, to identify and distinguish between those factors contributing to high- and low-proficiency essays, factors that could potentially facilitate educators in evaluation of student writing. Because Coh-Metrix measures sentence variety, it is a useful instrument to measure student growth in this area. Whether explicit instruction in sentence combining produces recognizable growth in syntactic complexity has been determined to be within the scope of Coh-Metrix capability.

SYNSTRUT_a, a syntactic structure measure within Coh-Metrix, weighs the likeness of syntactic trees occurring adjacently in text (McNamara et al, 2014). SYNSTRUT_t, an additional syntactic sentence structure measure within Coh-Metrix, determines the average similarity of parse trees using sentence pairs throughout the text. Sentence variety would be demonstrated by lower means in both SYNSTRUT_a and SYNSTRUT_t, indicating that the student has produced a variety of sentence structures within a piece of writing (McNamara et al, 2014). It is critical to note that lower values for SYNSTRUT_a and SYNSTRUT_t indicate sentence structure dissimilarity while higher values indicate structure similarity. The sentence variety indicator from the essay and the two Coh-Metrix indicators of sentence variety were initially planned to form a composite

sentence variety latent variable using SEM; however, it was determined following the intervention that the sentence variety scoring sheet and Coh-Metrix were not measuring the same factors. While Coh-Metrix examines the similarity or dissimilarity between sentences in a writing sample, the researcher tool is devised to count different sentence types, not necessarily considering the syntactic structures of clauses within those types. Thus, the two instruments were used independently of one another. A sample Coh-Metrix 3.0 writing assessment is provided in Appendix G.

Syntactic Complexity

DESSL, the Coh-Metrix descriptive measure of sentence word length, provides the mean number of words per sentence within the work, corresponding to Hunt's (1965) T-unit length. Growth in this area would result in higher mean number of words per sentence between compared student writing samples (McNamara, Graesser, McCarthy, & Cai, 2014). This measure provides a value for syntactic complexity comparable to the T-Unit.

Quality

A quality measure using the writing rubric found in Appendix H was used to compare writing quality between the two groups. The same rubric was used throughout the term; however, only the diagnostic and final essays along with scored rubrics for each were collected for comparison. The rubric was scored on 10 dimensions with a total score of 100 for overall quality. Among the included dimensions of the rubric were audience, purpose, diction, research, documentation, grammar and punctuation, college-level appropriateness, and sentence variety. Because previous research (Combs, 1977)

pointed to sentence combining skills as an indicator of quality, SEM was used to create a latent quality variable composed of the 10 measured indicators.

Self-Efficacy

In addition, results of an end-of-term student writing self-efficacy survey were compared between the sentence-combining intervention and comparison groups using the Writing Self-Efficacy Survey included in Appendix B (Shell, Murphy, & Bruning, 1989). Participants were asked to rate their level of self-confidence regarding such items as “I can combine simple sentences to form complex sentences” and “I can use introductory prepositional phrases.”

Research Design

This study followed a quasi-experimental design, comparing pre-and post- essays produced by the sentence-combining intervention group and comparison group to determine whether there were any differences in the effects on sentence variety, syntactic complexity, and quality between essays produced among students engaged in weekly, explicit sentence-combining instruction and those produced by students engaged in a business as usual variety of grammatical and mechanical lessons. Essays were all required during the same weeks of the term, and topics and guidelines were identical for all students, regardless of group assignment.

All students followed a common schedule of assignments in the English composition class. The schedule for the writing class differed only in the inclusion of the 25-minute, weekly sentence-combining instruction for the sentence-combining intervention group instead of the business as usual instruction in the comparison group

sections. Sentence-combining activities provided to students in the sentence-combining intervention group are found in Appendix J.

Data Collection Procedures

Sentence variety comparisons were determined based on the findings of scorers using the sentence-combining score sheet found in Appendix F. To ensure interrater reliability, 15 percent of the 215 collected initial and final essays were coded by an interrater for accuracy. Any discrepancies were resolved between the researcher and interrater. Both the researcher and the interrater hold Master of Arts degrees in English. The interrater has fifteen years of experience in explicit grammar instruction in the college classroom with a Learning Support Writing population, and the researcher has twenty-five years of experience in this field. The interrater was provided two hours of training to use the scoring sheet. Initial agreement was 86.45%, and after results were compared 100% agreement was achieved. In order to assess syntactic complexity, all teachers, unaware of which students had agreed to participate, provided to the researcher electronic versions of both the initial diagnostic essay and the final essay for all students in the designated class sections. Upon receipt of the essays, the researcher copied and pasted individually all participants' electronic essays into the Web Tool at the Coh-Metrix 3.0 website, where they were analyzed free of cost. SYNSTRUTa and SYNSTRUTt, sentence variety values, were captured from Coh-Metrix for each essay as well.

Values for DESSL, which provides a mean number of words per sentence and which corresponds to past research using the T-Unit, for each essay for each participant

were entered by the researcher into SPSS. Additionally, the researcher collected individual student demographic data including age, gender, and ethnicity using the college's information system to use potentially as covariates.

The second and final weeks of the term, participants completed the self-efficacy survey, which was used to determine whether there were any differences between the sentence-combining intervention group and the comparison group in writing self-efficacy following participation in the corequisite writing program. The writing self-efficacy survey measured student self-reported perceptions.

Reliability

To ensure test-retest reliability on the researcher created measure, participants wrote on the same type of prompt (i.e., persuasive prompts) for the pre-and post- essays, rather than, for example, writing a narrative for the initial prompt and a causal analysis for the final prompt. As was previously mentioned, the process of securing an independent sentence-type scorer for 15 percent of the essays established interrater-reliability for the sentence variety measure.

Coh-Metrix 3.0 is an automated tool using algorithms within an artificial intelligence platform to assess syntactic complexity and has established high reliability (.92-.98) for multiple measures of text complexity including sentence length and phrase length when compared to hand-scoring of essays (Polio & Yoon, 2018); however, the researchers in the aforementioned study were unable to compare the syntactic variety measures within Coh-Metrix.

Cronbach's alpha was calculated to determine a reliability rating on the eleven standardized items for the Self-Efficacy Survey, and a rating of .881 was achieved, indicating good internal consistency.

Validity

Due to the nature of the study the potential for multiple risks to internal validity were present. Internal validity risks were due to inability to control all extraneous variables. For example, tutoring in writing was available free of cost to all students at the college. Denying any student the opportunity to meet for tutoring sessions would not have been an ethical practice; thus, any student improvements may have been due to instruction supplemental to that provided through explicit classroom instruction. Instructors, therefore, adhered to the instruction schedule but also encouraged students to incorporate their sentence-combining awareness into all work within both the composition and LS classes, as this additional reinforcement would potentially assure that sentence-combining learning occurred within the classroom. Additionally, there may have been student gains just due to the maturity a student experiences over the course of a semester.

Although care was taken to develop comparable diagnostic and final essay prompts, instrumentation validity was a potential threat because the writing prompt for the final essay may have been more academically challenging to students than that provided for the initial essay. The team of faculty designing common syllabi and assignments considered this possibility in their creation of the two instruments. Finally, some attrition or experimental mortality was likely due to the fact that LS Writing

students are often among those most underprepared academically and maturationally, and they may have been more inclined than their better-prepared peers to withdraw from college. For example, ACT English scores ranged from 9 to 17, with a score of 18 establishing college-level; however, the cap score for ACT English is 36. Denley (2016) observed that the lower the ACT English score, the less likely the student is to successfully complete the college-level English class.

In this study, diagnostic (Intervention $n = 68$; Comparison $n = 47$) and final (Intervention $n = 59$; Comparison $n = 36$) writing samples were collected from both groups, indicating equal attrition from each group. Furthermore, the full-time faculty is expected to strive to meet a 75 percent passing rate goal in all classes. Currently, the college's passing rate in Learning Support Writing is below that; however, the benchmark forces the faculty to remain cognizant of student persistence throughout the term.

Because the students participating in the study were those who registered for the corequisite sections of instructors who volunteered to participate, and likewise, the students opted to participate or to abstain, there was a population concern posing an external validity risk. The sample was one of convenience; thus, the results may not be generalizable to the corequisite English population at large. Any significant results to the experiment are discussed with caution.

Data Analysis Strategies

Univariate ANCOVAs were used to examine the differences in sentence variety, incorporating scores for each sentence type from the sentence type scoring form, as well

as SYNSTRUT_a and SYNSTRUT_t from Coh-Metrix. With the exception of the researcher developed variety measure, pretest scores (e.g., pretest SYNSTRUT_a) were used as covariates. Treatment was a dummy-coded exogenous variable with 0 for the comparison group and 1 for the intervention condition. In addition, ANCOVAs were used to compare syntactic complexity based on DESSL values from Coh-Metrix controlling for pretest. SEM was used to determine differences in writing quality based on results from the 10-category writing rubric for final essays.

Because as many as two-thirds of the students required to take corequisite writing-composition classes are also required to take reading-composition corequisite classes, moderator analyses were used to determine whether student reading placement determined by ACT (19 or above), SAT (460 or above), or ACCUPLACER (85 or above), cut scores informed by ACT and CollegeBoard and established across the Tennessee Board of Regents System, moderated the impact of treatment on sentence variety, syntactic complexity, and writing quality. For example, in this study, ACT Reading scores among struggling readers ranged from 10 to 18. The moderator was dichotomous, with a student being either an adequate, with scores equal to or greater than those mentioned above, or struggling reader, with scores below those listed above.

Students enrolled in LS Writing often have inaccurate perceptions of their writing skills and frequently have not experienced enjoyment when writing (Ney, 1976). Often by the end of the semester, their attitudes about writing have changed dramatically because they have witnessed success and growth. For these reasons, an ANCOVA was

used to determine whether students' self-efficacy differed by condition while controlling for pretest self-efficacy scores.

CHAPTER IV

RESULTS

The purpose of this study was to determine whether explicit instruction in sentence combining in corequisite Learning Support Writing classes produced differences in sentence variety, syntactic complexity, and teacher assessment of quality in student essays in the college level English composition class when compared with essays written by a comparison group who studied multiple elements of grammar and mechanics. Additionally, since approximately two thirds of all students placed in Learning Support Writing based on ACT, ACCUPLACER, or other standardized placement assessment are also placed into Learning Support Reading, the potential for moderator effects due to reading level were examined. Finally, student levels of self-efficacy following each approach were surveyed. Results of all measures are reported within this chapter. Table 1 provides descriptive statistics for the sample.

Table 1.

Descriptive Statistics for Sentence-Combining Intervention (n = 119)

	Frequency
Group	
Intervention	71
Comparison	48
Gender	
Male	47
Female	72
Age	Range (18-66)
18	70
19	30
20-29	11
30-38	7
>39	1
Ethnicity	
White	79
Black	34
Hispanic or Latino	4
Asian	2
Language	
Native Speaker of English	113
Learning Support Reading	
Yes	73 (struggling)
No	46 (adequate)

Sentence Variety

Three measures were identified to arrive at values for sentence variety. The first of these measures was a sentence counting score sheet developed by the researcher to identify the numbers of sentence types represented in participant diagnostic and final essays. A measurement model analyzed in an SEM framework showed that the measure did not represent a universal construct with factor loadings ranging from -.39 to .78 and model fit was inadequate ($\chi^2(35) = 86.49, p < .001$; CFI=.80, RMSEA= .112).

Therefore, ANOVAs were conducted between groups for each of these sentence type variables: simple, simple with introductory prepositional phrase, simple with appositive

phrase, compound with comma and coordinating conjunction, compound with semicolon, complex with adverb clause, complex with adjective clause, compound-complex, total number of sentences, number of fragments and run-on (error) sentences. Although the comparison group produced overall more sentences and, therefore, higher means for most sentence types, as well as more errors, there were no statistically significant differences between groups for this measure. Table 2 provides the means and standard deviations for each sentence type for the diagnostic and final essays, as well as effect sizes for each group. Hedge's g effect sizes were calculated for each sentence type to determine any differences in the final essays between the two groups. Most effect sizes were negative but small, indicating a small negative effect for the intervention when compared to the final sentence variety results from the comparison group; however, there were small positive effects for the intervention group for compound sentences with semicolons, complex sentences with adverb clauses, compound-complex sentences, and sentence errors (sentence fragments and run-on sentences).

Table 2.

Sentence Types in Final Essays Scored By Type

Sentence Type	INT Pre Mean (n = 68)	INT Pre SD	COM Pre Mean (n = 47)	COM Pre SD	INT Post MEAN (n = 60)	INT Post SD	COM Post Mean (n = 36)	COM Post SD	ES
Simple	5.35	4.23	6.40	3.90	11.37	6.49	12.53	5.34	$g = -.19$
Simple with Introductory Prepositional Phrase	.72	.94	.70	.95	2.33	1.98	2.53	1.98	$g = -.10$
Simple with Appositive Phrase	.029	.17	.021	.15	.22	.45	.22	.54	$g = 0.0$
Compound with Comma and Coordinating Conjunction	1.35	1.57	2.42	2.38	2.73	2.07	3.28	2.15	$g = -.26$
Compound with Semi-Colon or Conjunctive Adverb	.09	.29	.28	1.14	.30	.65	.11	.32	$g = .34$
Complex with Adverb Clause	2.51	1.81	2.17	2.06	3.90	2.45	3.64	2.07	$g = .11$
Complex with Adjective (Relative) Clause	1.44	1.52	1.55	1.85	3.90	2.56	4.53	2.87	$g = -.24$
Compound-Complex	1.47	1.61	1.55	1.82	2.67	2.28	2.33	1.77	$g = .16$
Total Number of Sentences	12.94	6.55	14.81	6.78	26.90	8.72	28.69	6.65	$g = -.22$
Number of Error Sentences	2.09	1.75	2.66	2.02	2.97	2.67	3.64	2.79	$g = .25$

Note: INT = Intervention; COM = Comparison; Pre = Diagnostic; Post = Final; SD = Standard Deviation; ES = Effect Size comparing intervention and comparison on posttests.

Measures SYNSTRUT_a and SYNSTRUT_t were also collected to examine sentence variety. ANCOVAs indicated no significant difference between intervention ($M = .081, SD = .01$) and comparison ($M = .075, SD = .02$) groups for SYNSTRUT_a, which compares each sentence to the one adjacent to it, $F(1, 92) = 1.85, p = .18$ after controlling for pretest. There was a negative effect size ($g = -.41$), indicating a negative effect for the intervention group. Likewise, there were no significant differences between groups (Intervention $M = .076, SD = .02$, Comparison $M = .072, SD = .01$) for SYNSTRUT_t, which compares each sentence to all other sentences in the writing sample, $F(1, 92) = 1.73, p = .19$ after controlling for pretest. However, there was a negative effect ($g = -.25$), indicating a negative effect for treatment on the intervention group.

Syntactic Complexity

The Coh-Metrix measure DESSL, which calculates average number of words per sentence, was used to determine syntactic complexity based upon Hunt's (1965) findings that adult writers produced longer T-Units than did their less mature counterparts and that explicit instruction in sentence combining resulted in longer T-Unit production among adult writers. The number of words per sentence in the diagnostic essay ranged from 9.15 to 41 ($M = 18.89, SD = 5.15$); these same statistics decreased in the final essay with words per sentence ranging from 8.67 to 26.45 ($M = 16.97, SD = 3.61$). Levene's test indicated groups were not significantly different for the diagnostic essay. For the final essay, no statistically significant main effect was found between the intervention ($M = 16.60, SD = 3.43$) and comparison ($M = 17.47, SD = 3.76$) groups for DESSL with $F(1, 92) = 1.4, p = .24$. However, there was a negative effect for treatment ($g = -.24$).

Quality

Although automated essay scoring programs use both sentence variety or syntactic variety, as well as syntactic complexity to calculate a quality level for a piece of writing (Burstein, Kukich, Wolff, Lu, & Chodorow, 1998; Dikli, 2006), teachers of writing seek out additional text features for comparison of student essays (Roos, 1981). SEM was used to compare ten factors contributing to the Overall Quality score for the final essays submitted by the intervention and comparison groups. First, a measurement model confirmed a single quality factor ($\chi^2 (24) = 36.8, p = .05; CFI = .99, RMSEA = .07$). Second, a structural model including treatment as a predictor was conducted. Although the chi square was significant, $\chi^2 (33) = 67.754, p = .000$, other indices showed the model to be a good fit. The Comparative Fit Index (CFI) was .98, and the Root Mean Square Error of Approximation (RMSEA) was .09. There was a significant group main effect for quality for final essays ($\beta = -.272, p = .003$). The negative coefficient indicates the comparison condition outperformed the intervention group. Figure 1, provides the measurement model findings for Quality. It should be noted that each measured variable loads on the latent quality variable.

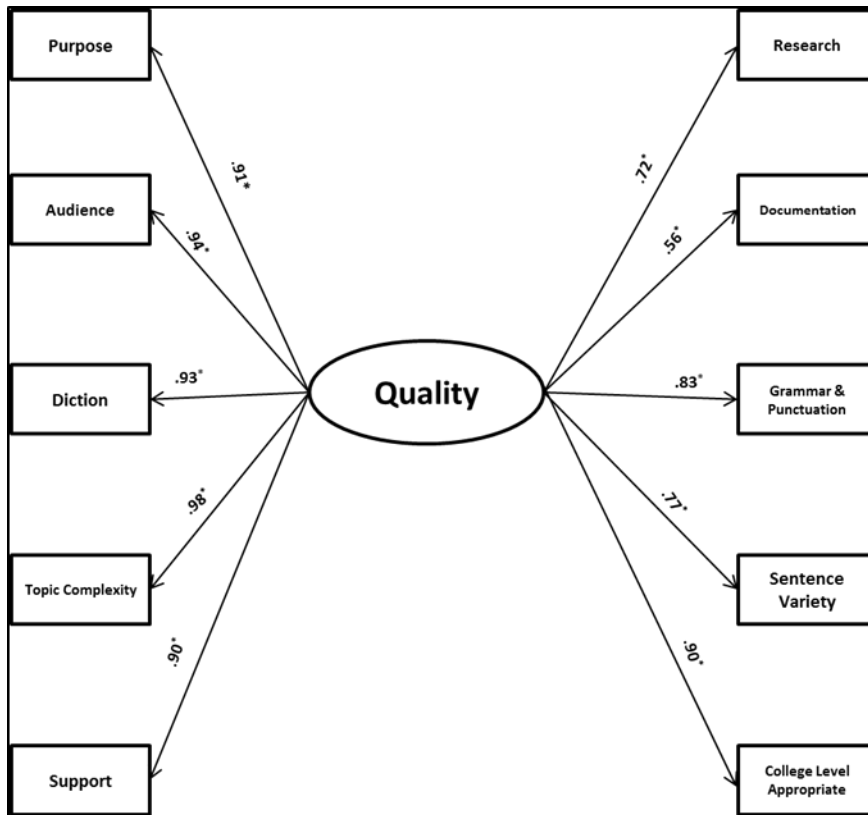


Figure 1. Measurement model including factor loadings contributing to Final Essay Quality, * $p \leq .01$.

Self-Efficacy

Participants were asked to rate their level of self-efficacy on a series of skills identified as outcomes for a freshman composition class. The results of the self-efficacy measure indicated significant differences between groups with overall higher totals for the intervention group ($M = 33.11$, $SD = 4.00$) than the control group ($M = 29.84$, $SD = 4.03$) after controlling for pretest self-efficacy scores with $F(1, 66) = 9.28$, $p < .001$. In addition, there was a large effect for treatment ($g = .82$), indicating the treatment group

felt greater confidence regarding the constructs covered within the treatment than the comparison group.

Moderator Analyses

In order to examine whether reading ability moderated treatment effects, a series of moderator analyses were run for the sentence variety, complexity, and quality outcomes. Students were coded as either struggling or adequate readers based on their scores on either the ACT, SAT, or ACCUPLACER as indicated above.

For SYNSTRUT_a, the first sentence variety measure, there was no significant interaction between condition and reading placement $F(1, 90) = .00, p = .98$, indicating students' reading ability did not moderate the effect of the intervention, and there were no differences in sentence variety regardless of whether participants were adequate or struggling readers. Likewise, for SYNSTRUT_t, there was no interaction effect based on reading proficiency $F(1, 90) = .027, p = .87$. These results indicate that sentence variety outcomes were not moderated by reading proficiency. Thus, reading proficiency had no significant and differential impact on participant response to sentence-combining treatment.

There was, however, a significant interaction effect on DESSL between group and reading placement. Simple main effects indicated that the comparison group ($M = 18.42, SD = 4.06$) outperformed the intervention group ($M = 15.97, SD = 2.80$) at a statistically significant level ($p = .01$) in the struggling readers. Simple main effects for the adequate readers indicated no statistically significant differences ($p = .20$) between intervention ($M = 17.56, SD = 4.12$) or comparison ($M = 16.11, SD = 3.04$); however, it should be noted

that the adequate readers in the treatment condition did outperform struggling readers. Additionally, the main effects of reading proficiency and intervention group were not significant. A moderator analysis was also added to the model to determine interaction effect for reading level and treatment on the Quality outcome. Despite the overall significant chi-square of the model, $\chi^2(51) = 85.437, p = .002$, fit indices showed an acceptable model fit with CFI = .98 and RMSEA = .08. Results indicate there was a significant negative main effect for Group on Quality of final essays ($\beta = -.351, p = .017$), which indicates that, on average, the comparison group outperformed the treatment group. There was not a significant main effect for LS Reading on Quality ($\beta = -.160, p = .265$), nor was there a significant interaction effect ($\beta = .115, p = .523$), indicating there were no significant differences between groups regardless of whether participants were labeled as adequate or struggling readers.

CHAPTER V

DISCUSSION

Corequisite college English programs are not yet widespread, and, as a result, little research has been conducted on effective practices to inform instruction. Although sentence combining as a grammar and writing strategy has received considerable attention in the past, scant research has occurred in the past few decades, particularly with adult populations. Past research in sentence combining has produced mixed results, leaving the question of its overall effectiveness open. Because college writing and composition instructors typically include elements of sentence combining in their curricula and because college writing texts dedicate considerable attention to sentence combining, the strategy merits and perhaps warrants active research in its effectiveness with college freshmen co-enrolled in their English composition and supplemental instruction classes. The purpose of this study was to initiate steps to alleviate the research gap.

Sentence Variety

The researcher scoring measure did not indicate a universal factor was being measured and thus, did not align with the other measures for sentence variety. Although none of the outcomes were statistically significant between groups, it is noteworthy, however, that the intervention group produced lower means for compound sentences with coordinating conjunctions and higher means for complex sentences with adverb clauses, as well as higher means for compound-complex sentences, outcomes consistent with Hunt's (1965) findings for mature adult writers. These findings indicate that adult students explicitly instructed in sentence combining may actually produce more of what

Hunt (1965) identified as mature writing in terms of generation of subordinate or dependent clauses rather than simply multiple independent clauses within a single T-Unit.

The results for SYNSTRUT_a and SYNSTRUT_t as measures of sentence variety, though inconsistent with teacher perceptions identified by Gay and Oslund (2018), do offer initial findings in the use of sentence-combining instruction with college freshman corequisite English students. In terms of sentence variety produced in an experimental study, the current study found results comparable to those of McGuiness and Heiner (1972), whose seventh graders in the comparison group produced greater sentence variety, in this case more complex sentences, than their treatment group peers. Although consistent with prior findings noted above, the results contradict the findings of Mellon (1967), whose seventh graders produced significantly more sentences containing phrases and clauses following five months of explicit sentence-combining instruction than their comparison group peers. Perhaps the contrasts are explained by the progressing nature of reading and writing skills, and the 7th grade students had a higher ceiling and room for improvement. The length of Mellon's (1967) study may have also had an important impact on the final sentence-combing results.

Syntactic Complexity

Based on the measure provided by Coh-Metrix (DESSL) there were no differences in syntactic complexity regardless of instructional approach although the comparison group outperformed the intervention group. It was unfortunate that the comparison group did better than the intervention condition (regardless of statistical significance); however, these findings are not unprecedented. Specifically, Waterfall

(1978) found that sentence-combining instruction produced non-statistically significant results in syntactic maturity among English students enrolled in a remedial writing program. On the other hand, these results are inconsistent with past results in the relationship between sentence-combining instruction and student gains in T-Unit length among adult populations (Hunt, 1965, Jones, 1979; Morenberg, Daiker, & Kerek, 1978; Ney & Fillerup, 1980; Roos, 1981; Ross, 1971), which have shown that instruction can improve syntactic complexity. It is important to note, however, that most previous research with sentence-combining is considerably older than the current study, and school curricula may differ, along with student populations, which may have changed over time in terms of level of preparedness.

Quality

The SEM results indicate that Topic Complexity, Audience, Diction, and Purpose were among the best indicators of Quality while Documentation, Research, Sentence Variety, and Grammar and Punctuation were among the lowest. These results are consistent with Roos' (1981) findings in that grammatical and syntactical elements within student writing do not necessarily weigh as heavily as other components despite teacher perception. They are also consistent with those of Combs (1977), who determined that sentence-combining skills in student writing predicted teacher perception of quality. The results indicate that comparison students performed statistically significantly higher than the treatment condition. Unfortunately, prior studies have demonstrated that similar interventions can differentially improve writing quality in terms of increased T-Unit length, reduction in errors, better holistic writing scores and, better grades (Maimon & Nodine, 1978; Morenberg, Daiker, & Kerek, 1978; Roos, 1981; Ross, 1971). For

example, Jones (1979) found that sentence-combining instruction improved the writing quality of African-America college freshmen.

Self-Efficacy

Overall, self-efficacy results would imply that participants in the intervention group exited the study with greater confidence in their abilities to complete the objectives of the freshman composition course than participants in the comparison group despite the success of the comparison group on most of the other measures. The self-efficacy findings, however, are consistent with previous research in the relationship between sentence-combining instruction and student level of writing self-efficacy in that students who participated in the study found it to be beneficial to their writing (Daiker, Kerek, & Morenberg, 1978). Furthermore, Zimmerman and Kitsantas (2002) measured significant differences in writing self-efficacy among college students who were assigned to watch a coping model for sentence-combining improvement and found that students benefitted more from observing a peer work through sentence-combining processes than from watching a peer master that same process.

Moderator Analyses

Previous research has indicated that explicit instruction in sentence combining has resulted in improved reading comprehension skills (Evans et al, 2001; Hughes, 1975; Morenberg, Daiker, & Kerek, 1978; Stedman, 1971); however, prior research has not addressed whether the effects of sentence-combining instruction are moderated by adult reading level. Overall, moderator analyses indicated that there were no significant effects between groups due to reading level on sentence variety or quality regardless of

instructional approach. However, the significant interaction between group and reading level on syntactic complexity indicate that struggling readers may experience even greater difficulty with explicit sentence-combining instruction than do adequate readers. Furthermore, these findings suggest that a traditional grammar approach, including pronoun instruction, common sentence errors, and uses of commas, to instruction rather than one that emphasizes sentence-combining exclusively may better suit the needs of struggling readers. Similarly, the intervention group outperformed the comparison condition among adequate readers. This could indicate that explicit instruction is more beneficial for adequate readers and may suggest that a minimum level of proficiency is required to fully benefit from the instruction.

Implications

Hunt's (1965) conclusion that syntactically complex writing among adults is characterized by fewer and longer T-Units has not held up consistently throughout research (Argall, 1982; Hake & Williams, 1979). Furthermore, despite the fact that research has pointed to sentence combining as a potential means to reduce common errors in student writing (Argall, 1982), some of the early research has not followed an experimental or quasi-experimental approach but has instead followed a pre-test to post-test model (Argall, 1982; Jones, 1979; Ney & Fillerup, 1980) or matched-pairs model (Combs, 1977; Saddler and Graham, 2005), which do not necessarily consider other factors that may have produced some of the outcomes.

Although sentence-combining instruction with adults has resulted in higher student grades (Morenberg, Daiker, and Kerek's, 1978; Roos, 1981), those grades were

not necessarily compared to those of peers who were provided separate, different instruction, as was the case with this particular study. While it could be argued that teacher scores are subjective, the higher ratings received by the comparison group were consistent with all other measures except student self-efficacy. At the same time, participants' assigned instructors and not external reviewers (Gay & Oslund, 2018) scored their students on quality, and intervention instructors may have held their students' work under a higher level of scrutiny.

Despite the fact that struggling readers in the comparison group and adequate readers in the intervention group produced longer sentences for the syntactic complexity measure, DESSL, section registration and curricula tend to dictate a less customized approach to instruction. Thus, either all students would be provided exclusive, explicit sentence-combining instruction or none would. Due to present limited ability to differentiate instruction, based on the bulk of evidence from the current study, a traditional grammar approach to instruction, but one that includes sentence combining, may be the best fit for all students enrolled in the corequisite English program.

Limitations

Several limitations potentially impacted the outcomes of this study. The faculty participating in the study volunteered. As was noted previously, their number of years instructing in a college classroom ranged from three to thirty; furthermore, they were unaccustomed to following standardized syllabi, schedules of assignments, and semi-scripted lesson plans. In other words, they were unfamiliar with loss of autonomy, as well as the requirement to teach a curriculum ordained by someone else. One faculty

overseeing a comparison group section left with six weeks remaining in the term. Responsibility for that section was assumed by a faculty teaching an intervention group section. Although the new faculty did not cover explicit sentence combining with the comparison section, due to frequent prior instructor absence, the students had not been provided opportunities for peer review or revision. Thus, the new instructor allowed students multiple opportunities for both practices and even met with several students outside of class to provide them with the guidance necessary to improve their grades. One faculty was assigned to both a comparison and an intervention section, and it is possible that this faculty, as well as the faculty who took over a comparison section, attempted to compensate the comparison sections and found other ways to equalize the educational experience.

Although the overall treatment fidelity rating was acceptable, treatment fidelity could be a concern, particularly with time spent on instruction. Five minutes of instruction time were allowed for each semi-scripted weekly lesson; however, instructors in almost all randomly-selected sections spent less than the allotted five minutes covering the scripted instruction. Additionally, when surplus time was available, two instructors opted not to use that time to provide students with additional examples, nor did they attempt to engage the students during the instruction by soliciting participation. Students were allowed fifteen minutes to complete the exercises, but again, this activity typically required fewer than fifteen minutes. Although instructions indicated that students were required to write a new sentence, one instructor did not adhere to this requirement. This deviation possibly affected the cognitive load demand for completing the exercises.

Fortunately, however, only eight participants were not required to write the new sentences, which likely did not have a significant impact on study results. Review time results also revealed a deviation from protocol in that one instructor did not attempt to engage the students during review by soliciting their feedback and responses. Finally, due to absenteeism, one instructor deviated from the lesson schedule. Although all lessons were completed eventually, in some instances multiple lessons were completed during the same class meeting. Although these deviations from the prescribed instructions are a concern, when this instructor's results were compared to those of other instructors involved in the study, no significant differences in overall results emerged.

An additional concern is that the participants volunteered to be involved in the research, and this occurred on behalf of both groups; however, in spite of three recruitment attempts made by the researcher and faculty, a smaller percentage of students in the comparison sections volunteered to share their data. Because the sentence-combining lessons conducted within the intervention sections were recorded weekly, which is highly uncharacteristic of the college classroom, participants in these sections may have sensed they were part of a special group, and their self-efficacy results may have produced the Hawthorne effect. At the same time, the item scores that were statistically significant simply indicate that these students, perhaps more than their comparison group counterparts, grew to possess greater metacognitive awareness of their instructors' foci during the term.

Another concern is with the sentence-combining practices provided to students. They were purposefully created to impart cultural, historical, medical, mathematical, etc.

facts that students might value more than they would simple sentences that possess no transferable academic significance. These examples provide a basis of comparison:

Typical sentence combining example: Combine the following sentences using a comma and coordinating conjunction. 1) I would like to go to the basketball game. 2) I have homework in all my classes. **Combined:** I would like to go to the basketball game, but I have homework in all my classes.

Academic content example: Combine the following sentences using a comma and a coordinating conjunction. 1) The mean is the most widely used measure of central tendency. 2) The median and the mode are occasionally more accurate alternatives. **Combined:** The mean is the most widely used measure of central tendency, but the median and the mode are occasionally more accurate alternatives.

Because the exercises contained academic content, they may have been more difficult for the intervention group than traditional exercises, and, as a result, they may have had an unfavorable impact on student performance due to increased cognitive load. However, some of the exercises were reproduced from the earlier feasibility study (Gay & Oslund, 2018), which resulted in moderate effect sizes in multiple quality measures.

A final concern may be with the text analyses produced by Coh-Metrix in terms of the fit for this study. For example, it should be noted that the DESSL measure does not measure succinctness of writing, correctness of writing, or level of maturity in

treatment of a topic. For example, a participant who averaged 21.538 words per sentence in the comparison group submitted the following:

Sherlock Holmes as [sic] many admirable traits that surpasses [sic] him from any other detective. The reason for why Sherlock is such a wonderful detective is because he knows how to observe, he has a great companion, and he knows everything about someone within seconds of looking at him or her.

This short sample includes several grammatical and mechanical errors including a comma splice, which affects the average number of words per sentence calculated by the DESSL measure. A similar sample submitted by a participant in the intervention group also contains multiple errors but reflects a comparable degree of sentence variety:

He, as a character, is well-rounded because not only does he have his unique powers of deduction he is also human-like with his mood swings and signs of addiction [sic]. With Sherlock's deduction and reasoning, his knowledge and dedication make him a great detective.

This participant produced an average of 17.805 words per sentence; however, it could be argued that the writing is more concise, as well as more mature than the longer sample, an observation consistent with the findings of those who disagreed with Hunt's findings (Argall, 1982; Hake & Williams, 1979).

Future Research

This study opens the door to potential future research in sentence combining. Although the intervention group experienced a significantly higher level of self-efficacy,

their sentence variety, syntactic complexity, and quality results did not substantiate their confidence. The traditional grammar and punctuation topics covered in the comparison sections included use of pronouns, commas, semi-colons, phrases and clauses, as well as sentence combining; however, instructors may not have followed standardized and systematic approaches to explicit instruction in these areas. Since the majority of the time spent in the Learning Support classroom is devoted to writing, rather than active instruction, teachers could still benefit from research that isolates the best order of skills instruction for establishing a foundation conducive to producing the sentence variety teachers advocate.

Conclusion

Despite that the impetus of this study was to examine whether sentence-combining instruction would provide the necessary link to better writing for a corequisite English population, the final results for the intervention were not sufficiently favorable to recommend the use of exclusive, explicit sentence-combining instruction as a means of fast-tracking the writing progress of a corequisite English composition population. However, the outcomes did provide a positive outlook in that they advocated for the use of a more inclusive and more traditional approach to grammar instruction in a Learning Support Writing classroom. Additionally, that approach includes sentence-combining strategies. Furthermore, results indicated that students who participated in the intervention had a positive experience.

References

- Arendale, D. R. (2000). Effect of administrative placement and fidelity of implementation of the model on effectiveness of supplemental instruction programs. (Doctoral dissertation, University of Missouri-Kansas City). Retrieved from <https://conservancy.umn.edu/bitstream/handle/11299/200396/Effect%20of%20Admin%20Placement%20and%20Fidelity%20of%20Implementation%20on%20SI.pdf?sequence=1&isAllowed=y>
- Argall, R.S. (1982). *Sentence combining: An incisive tool for proofreading*. Paper presented at the Annual Meeting of the Conference on College Composition and Communication. San Francisco, CA
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373.
doi:10.1521/jscp.1986.4.3.359
- Behizadeh, N., & Engelhard, G. (2011). Historical view of the influences of measurement and writing theories on the practice of writing assessment in the United States. *Assessing Writing*, 16(3), 189-211.
doi:10.1016/j.asw.2011.03.001
- Belfield, C., Jenkins, P. D., & Lahr, H. E. (2016). Is corequisite remediation cost-effective? Early findings from Tennessee. Retrieved from <https://ccrc.tc.columbia.edu/media/k2/attachments/corequisite-remediation-cost-effective-tennessee.pdf>

- Berlin, J. A. (1987). Rhetoric and reality: Writing instruction in American colleges, 1900 - 1985. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=960304&site=eds-live&scope=site>
- Burstein, J., Kukich, K., Wolff, S., Lu, C., & Chodorow, M. (1998, April). Computer analysis of essays. In *NCME Symposium on Automated Scoring*. Retrieved from https://www.ets.org/Media/Research/pdf/erater_ncmefinal.pdf
- Combs, W. E. (1977). Sentence-combining practice: Do gains in judgments of writing “quality” persist? *The Journal of Educational Research*, 70(6), 318-321.
- Complete College America. (2011). Transform remediation: The co-requisite course model. Retrieved from [http://www.completecollege.org/docs/CCA%20Co-Req%20Model%20-%20Transform%20Remediation%20for%20Chicago%20final\(1\).pdf](http://www.completecollege.org/docs/CCA%20Co-Req%20Model%20-%20Transform%20Remediation%20for%20Chicago%20final(1).pdf)
- Cortiella, C., & Horowitz, S. H. (2014). The state of learning disabilities: Facts, trends and emerging issues. *New York: National Center for Learning Disabilities*, 2-45. Retrieved from https://www.researchgate.net/profile/Candace_Cortiella/publication/238792755_The_state_of_learning_disabilities/links/580e0cf508aebfb68a50953b.pdf
- Daiker, D. A., Kerek, A., & Morenberg, M. (1978). Sentence-combining and syntactic maturity in freshman English. *College Composition and Communication*, 29(1), 36-41. doi: 10.2307/356252

- Denley, T. (2015). Co-requisite remediation pilot study — Fall 2014 and spring 2015 and full implementation fall 2015. *Inside Higher Ed*. Retrieved from https://www.tbr.edu/sites/tbr.edu/files/media/2016/04/TBR%20CoRequisite%20Study%20-%20Update%20Spring%202016%5B1%5D_1.pdf.
- Denley, T. (2016). Corequisite remediation full implementation 2015-2016. Retrieved from <https://www.tbr.edu/sites/tbr.edu/files/media/2016/12/TBR%20CoRequisite%20Study%20-%20Full%20Implementation%202015-2016.pdf>.
- Dikli, S. (2006). An overview of automated scoring of essays. *The Journal of Technology, Learning and Assessment*, 5(1), 5-35.
- Evans, R., Venetozzi, R., Bundrick, M., & McWilliams, E. (1988). The effects of sentence-combining instructions on writing and on standardized test scores. *The Journal of Educational Research*, 82(1), 53-57. doi: 10.1080/00220671.1988.10885865
- Gay, V. & Oslund, E. (2018, February). *The effects of sentence combining as a writing strategy in co-requisite college English: Do student outcomes align with teacher perceptions?* Poster session presented at the Annual Middle Tennessee State University College of Education Literacy Research Conference. Murfreesboro, TN.

- Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology, 99*(3), 445-476.
doi:10.1037/0022-0663.99.3.445
- Hake, R., & Williams, J. M. (1979). Sentence expanding: Not can, or how, but when. *Sentence Combining and the Teaching of Writing, 134-146*. doi:
10.2307/356594
- Hammill, D. D. & Larsen, S. C. (1996). *Test of Written Language* (3rd ed.; TOWL-3). Austin, TX: PRO-ED.
- Hillocks, G. (2005). At last: The focus on form vs. content in teaching writing. *Research in the Teaching of English, 40*(2), 238-248.
- Hughes, T. O. (1975). Sentence combining: A means of increasing reading comprehension. Retrieved from
<https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED112421>
- Hunt, K. W. (1965). Grammatical structures written at three grade levels. *NCTE Research Report No. 3*. Retrieved from
<https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED113735>
- Izumi, Y., & Izumi, S. (2004, June). Investigating the effects of oral output on the learning of relative clauses in English: Issues in the psycholinguistic requirements for effective output tasks. *The Canadian Modern Language Review, 60*(5), 587-609.

- Jones, M. A. (1979). Sentence-combining: Measuring the rate of syntactic growth in freshman composition. Retrieved from <https://files.eric.ed.gov/fulltext/ED208391.pdf>
- Landauer, T. K., & Dumais, S. T. (1997). A solution to Plato's problem: The latent semantic analysis theory of acquisition, induction, and representation of knowledge. *Psychological Review*, *104*(2), 211-240. doi: 10.1037/0033-295X.104.2.211
- Lide, F. (November, 1980). *Sentence combining and error reduction*. Paper presented at the Annual Meeting of the National Council of Teachers of English. Cincinnati, OH.
- Lundell, D. B., & Higbee, J. L. (2002). *Histories of developmental education* [Monograph]. Retrieved from <https://files.eric.ed.gov/fulltext/ED112421.pdf>
- Lunsford, A. (1979). Cognitive development and the basic writer. *College English*, *41*(1), 38-46. doi: 10.2307/376358
- Maimon, E. P., & Nodine, B. F. (1978). Measuring syntactic growth: Errors and expectations in sentence-combining practice with college freshmen. *Research in the Teaching of English*, *12*(3), 233-244.
- McGuiness, T. P., & Heiner, W. H. (1972). *Individualization of composition instruction through the use of dictation equipment and transformational sentence-combining*. Paper presented at the Annual Meeting of the American Educational Research Association. Chicago, IL.

- McNamara, D. S., Graesser, A. C., McCarthy, P. M., & Cai, Z. (2014). *Automated Evaluation of Text and Discourse with Coh-Metrix*. Cambridge, England: Cambridge University Press.
- McNamara, D. S., Ozuru, Y., Graesser, A. C., & Louwrese, M. (2006). Validating coh-metrix. In *Proceedings of the 28th annual conference of the cognitive science society*, 573-578. Retrieved from https://s3.amazonaws.com/academia.edu.documents/30813803/fpo444-mcnamara.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1555032182&Signature=0ujZXaOEa5OcdDZqbPgjmJuCzh8%3D&response-content-disposition=inline%3B%20filename%3DValidating_Coh-Metrix.pdf
- Mellon, J. C. (1967). Transformational sentence-combining, a method for enhancing the development of syntactic fluency in English composition. (Doctoral dissertation). Harvard University, Cambridge, MA.
- Morenberg, M., Daiker, D., & Kerek, A. (1978). Sentence combining at the college level: An experimental study. *Research in the Teaching of English*, 12(3), 245-256.
- Moriarty, B. B. (2014). Research design and the predictive power of measures of self-efficacy. *Issues in Educational Research*, 24(1), 55-66.
- Ney, J. W. (1976). The hazards of the course: Sentence-combining in freshman English. *The English Record*, 27(3), 70-77.

Ney, J. W. (1980). A short history of sentence combining: its limitations and use.

English Education, 11(3), 169-177.

Ney, J. W., & Fillerup, M. (1980). The effects of sentence combining on the writing

of ESL students at the university level. Retrieved from ERIC database

(ED193961)

No Child Left Behind Act of 2001, P.L. 107-110, 20 U.S.C. § 6319 (2002).

Nutter, N., & Safran, S. P. (1983). Sentence combining and the learning disabled

student. Retrieved from

<https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED252994>

National Council of Teachers of English. (1973). *Sentence combining; improving*

student writing without formal grammar instruction (No. 15). Urbana, IL:

O'Hare, F.

National Council of Teachers of English. (1986). *Creative Approaches to Sentence*

Combining. Urbana, IL: Strong, W.

Polio, C., & Yoon, H. J. (2018). The reliability and validity of automated tools for

examining variation in syntactic complexity across genres. *International*

Journal of Applied Linguistics, 28(1), 165-188. doi: 10.1111/ijal.12200

Roos, M. E. (1981). Syntactic maturity and grading: A correlational study. Retrieved

from <https://files.eric.ed.gov/fulltext/ED207071.pdf>

Rose, M. (1985). The language of exclusion: Writing instruction at the university.

College English, 47(4), 341-359. doi: 10.2307/376957

Ross, J. (1971). A transformational approach to teaching composition. *College*

Composition and Communication, 22(2), 179-184. doi: 10.2307/356839

Saddler, B., & Graham, S. (2005). The effects of peer-assisted sentence-combining instruction on the writing performance of more and less skilled young writers.

Journal of Educational Psychology, 97(1), 43-54. doi: 10.1037/0022-

0663.97.1.43

Shell, D. F., Murphy, C. C., & Bruning, R. H. (1989). Self-efficacy and outcome

expectancy mechanisms in reading and writing achievement. *Journal of*

Educational Psychology, 81(1), 91-100. doi: 10.1037/0022-0663.87.3.386

Smith, W. (1981). The potential and problems of sentence combining. *The English*

Journal, 70(6), 79-81. doi: 10.2307/817170

Stedman III, N. A. (1971). The effect of a curriculum teaching syntactic embedding

upon the reading comprehension of fourth-grade students. Abstract retrieved

from <https://eric.ed.gov/?id=ED072426>

Tennessee Board of Regents. (2017). Co-requisite remediation. Retrieved from

<https://www.tbr.edu/academics/co-requisite-remediation>

- Tennessee Board of Regents. (2016). Fundamental features of co-requisite remediation. Co-Requisite Remediation. Retrieved from <https://www.tbr.edu/academics/co-requisite-remediation>
- Tennessee Board of Regents. (2017). Overview and best practices: Learning Support for writing. A-100 Guidelines. Retrieved from <https://policies.tbr.edu/policies/learning-support-formerly-100>
- Tennessee Higher Education Commission. (2013). Drive to 55. Retrieved from <https://www.tn.gov/thec/learn-about/drive-to-55.html>
- Tennessee Higher Education Commission. (2017). Tennessee Higher Education Commission Fact Book. Retrieved from https://www.tn.gov/assets/entities/thec/attachments/2016-17_Fact_Book_Suppressed_Final_2.pdf
- Troia, G. A., & Olinghouse, N. G. (2013). The Common Core State Standards and evidence-based educational practices: The case of writing. *School Psychology Review, 42*(3), 343-357.
- Valentine, J. A. (1987). *The College Board and the School Curriculum. A History of the College Board's Influence on the Substance and Standards of American Education, 1900-1980*. New York, NY: College Board Publications. doi: 10.2307/368510

- Waterfall, C. M. (1978). An experimental study of sentence-combining as a means of increasing syntactic maturity and writing quality in the compositions of college-age students enrolled in remedial English classes. Dissertation Abstracts International, 38(12-A), 7131-7132
- Yancey, K. B. (1999). Looking back as we look forward: Historicizing writing assessment. *College composition and communication*, 50(3), 483-503. doi: 10.2307/358862
- Zimmerman, B. J., & Kitsantas, A. (2002). Acquiring writing revision and self-regulatory skill through observation and emulation. *Journal of Educational Psychology*, 94(4), 660-668. doi: 10.1037/0022-0663.94.4.660

Appendix A

Classroom Fidelity Checklist

The following checklist is designed for reviewing the 25 minute classroom instruction component of students participating in a sentence-combining treatment.

This scale should be used to rate instructor adherence to treatment guidelines:

5 = Followed plan without deviation

4 = Deviated slightly from plan

3 = Followed most of plan

2 = Deviated significantly from plan

1 = Did not follow plan at all

Date: _____ Instructor: _____

Section CRN: _____ Lesson Plan: _____

	1	2	3	4	5
1. Class began on time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Assigned instructor met class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Instructor distributed appropriate lesson.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Instructor provided 5 minutes of instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Students spent 15 minutes completing lesson.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Instructor collected student papers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Instructor reviewed correct responses for 5 minutes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Instructor moved on to the next class activity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To the best of my ability, I verify the assessment above is accurate:

Signature of reviewer

Appendix B

Writing Self-Efficacy Survey

From Shell, D. F., Murphy, C. C., & Bruning, R. H. (1989). Self-efficacy and outcome expectancy mechanisms in reading and writing achievement. *Journal of Educational Psychology*, 81(1), 91. Adapted with permission.

Please respond to each statement listed below. You are asked to assess your level of confidence on specific writing tasks. Your confidence level should fall somewhere between the lower level of 1 to the upper levels of 4. Please be honest in your assessment.

1	2	3	4
No confidence	Lacking in confidence	Somewhat confident	Very confident

I am able to:

1. Write effective simple sentences. _____
2. Combine simple sentences to form compound sentences. _____
3. Combine simple sentences to form complex sentences. _____
4. Use introductory prepositional phrases. _____
5. Create concise sentences using appositive phrases. _____
6. Punctuate all my sentences correctly. _____
7. Put sentences together to form effective paragraphs and essays. _____
8. Write logically and persuasively to support my ideas. _____
9. Incorporate outside research into my writing to support my ideas. _____
10. Use appropriate documentation of outside research. _____

Total score _____

Instructor _____

Age _____ **Gender** _____ **Ethnicity** _____

Are you a native speaker of English? _____

Appendix C

English 1010 Schedule of Assignments

Weekly Schedule of Assignments

Week 1: August 27-September 1

- Introduction to English 1010
- Discussion of Syllabus
- Discussion of Writing Rubric
- Discussion of Diagnostic Essay to be completed in ENGL 0802 (computer lab)
- Introduction *Practical Argument (PA)* pp. 3-21

Week 2: September 3-September 8

- Chapter 1 (*PA*) Discussion of articles related to the costs/worth of college
- Return Diagnostic Essay

Week 3: September 10-September 15

- *Rules for Writers (RW)* pp. 163-165
- (*RW*) pp. 30-47

Week 4: September 17-September 22

- *Sherlock Holmes (SH)* “From *A Study in Scarlet*”
- Chapter 3 (*PA*) pp. 83-97

Week 5: September 24-September 29

- Discuss Essay 2
 - Resolving the Minimum Wage Issue
- Chapter 11 (*PA*) pp. 369-392

Week 6: October 1-October 6

- (SH) “A Scandal in Bohemia”
- (RW) pp. 458-525

Week 7: October 8-October 13

- Submit Essay 2
- (SH) “The Red-headed League”
- (RW) pp. 294-313

Week 8: October 15-October 20

- Discuss Essay 3
 - College Is/Is Not for Everyone
- (SH) “The Speckled Band”

Week 9: October 22-October 27

- (PA) pp. 123-189

Week 10: October 29-November 2

- Submit Essay 3
- (SH) “Silver Blaze”
- (PA) pp. 191-250

Week 11: November 5-November 10

- (RW) pp. 91-119
- (SH) “The Musgrave Ritual”
- (SH) “The Final Problem”
- Assign Presentations on *Sherlock Holmes*

Week 12: November 12-November 17

- Work on Presentations
- (RW) pp. 120-122

- *YouTube* clips on Sherlock Holmes

Week 13: November 19-November 24

- Begin Presentations

Week 14: November 26-December 1

- Complete presentations

- *(RW)* pp. 188-201

Week 15: December 3-December 8

- *(PA)* A-1 through A-11
- Discussion of Final Exam Essay 4

Week 16: December 10-December 14 –Final Exams

- For Corequisite Students, Final Exam should be completed in the ENGL 0802 lab.

Appendix D

Comparison Group Schedule of AssignmentsWeek 1: August 27-September 1

- Introduction to the Class
- Discussion of Syllabus
- Distribute Recruitment Flyer
- Type Diagnostic Essay and save in electronic format
 - _____ Gives Advice on Writing to Joan

Week 2: September 3-September 8

- Distribute, discuss, and collect Informed Consent Forms
- Chapter 6 of *Foundations of English*, pp. 335-347
- Writing Self-Efficacy Survey

Week 3: September 10-September 15 Table 2

- Chapter 4 pp. 172-178 (pronouns)
- Chapter 7 pp. 393-397
- Chapter 8 pp. 417-422
- Begin revision of Diagnostic Essay

Week 4: September 17-September 22

- Chapter 4 pp. 200-206 (clauses and conjunctions)
- Work on Paragraph 1
 - The Best Social Media App

Week 5: September 24-September 29

- Revise Paragraph 1
- Chapter 4 pp. 217-224 (sentence errors)
- Work on Essay 2 for ENGL 1010 class
 - Resolving the Minimum Wage Issue

Week 6: October 1-October 6

- Grammar/Mechanics Quiz 1
- Chapter 6 pp. 347-362
- Begin Paragraph 2
 - Rebuttals or Concessions paragraph for Essay 2

Week 7: October 8-October 13

- Chapter 7 pp. 404-407
- Submit paragraph 2
- Review of Grammar/Mechanics Quiz 1

Week 8: October 15-October 20

- Work on revision of Essay 2
- Chapter 4 pp. 230-231 (pronoun agreement)

Week 9: October 22-October 27

- Work on Essay 3
 - College is/is not for everyone
- Chapter 4 pp. 239-244 (commas)

Week 10: October 29-November 2

- Grammar/Mechanics Quiz 2
- Peer Review of Essay 3 Draft
- Chapter 4 pp. 245-248 (semi-colons and colons)

Week 11: November 5-November 10

- Begin Paragraph 3
 - Causes/Effects of Climate Change
- Review of Quiz 2
- Revision of Essay 3

Week 12: November 12-November 17

- Chapter 4 pp. 252-259 (quotation marks and other forms of punctuation)
- Peer Review of Paragraph 3
- Complete Paragraph 3

Week 13: November 19-November 24

- Complete Paragraph 4
- Grammar/Mechanics Quiz 3

Week 14: November 26-December 1

- Review Quiz 3
- Tie up any loose ends

Week 15: December 3-December 8

- Writing Self-Efficacy Post-Survey

- Writing about Literature
- Discuss Final in-Class Essay
 - Why Sherlock Holmes Is the World's Best Detective

Week 16: December 10-December 14

In-class Final Exam

Appendix E

Sentence-Combining Group Schedule of AssignmentsWeek 1: August 27-September 1

- Introduction to the Class
- Discussion of Syllabus
- Distribute Recruitment Flyer
- Type Diagnostic Essay and save in electronic format
 - _____ Gives Advice on Writing to Joan

Week 2: September 3-September 8

- Distribute, discuss, and collect Informed Consent Forms
- Chapter 6 of *Foundations of English*, pp. 335-347
- Writing Self-Efficacy Survey

Week 3: September 10-September 15

- Sentence Combining Practice 1
- Chapter 7 pp. 393-397
- Chapter 8 pp. 417-422
- Begin revision of Diagnostic Essay

Week 4: September 17-September 22

- Sentence Combining Practice 2
- Work on Paragraph 1
 - The Best Social Media App

Week 5: September 24-September 29

- Revise Paragraph 1

- Sentence Combining Practice 3
- Work on Essay 2 for ENGL 1010 class
 - Resolving the Minimum Wage Issue

Week 6: October 1-October 6

- Sentence Combining Practice 4
- Chapter 6 pp. 347-362
- Begin Paragraph 2
 - Rebuttals or Concessions paragraph for Essay 2

Week 7: October 8-October 13

- Chapter 7 pp. 404-407
- Submit Paragraph 2
- Sentence Combining Practice 5

Week 8: October 15-October 20

- Work on revision of Essay 2
- Sentence Combining Practice 6

Week 9: October 22-October 27

- Work on Essay 3
 - College is/is not for everyone
- Sentence Combining Practice 7

Week 10: October 29-November 2

- Sentence Combining Practice 8
- Peer Review of Essay 3 Draft

Week 11: November 5-November 10

- Begin Paragraph 3

- Causes/Effects of Climate Change
- Sentence Combining Practice 9
- Revision of Essay 3

Week 12: November 12-November 17

- Sentence Combining Practice 10
- Peer Review of Paragraph 3
- Complete Paragraph 3

Week 13: November 19-November 24

- Complete Paragraph 4
- Sentence Combining Practice 11

Week 14: November 26-December 1

- Sentence Combining Practice 12
- Tie up any loose ends

Week 15: December 3-December 8

- Self-efficacy post-survey
- Writing about Literature
- Discuss Final in-Class Essay
 - Why Sherlock Holmes Is the World's Best Detective

Week 16: December 10-December 14

In-class Final Exam

Appendix F

Sentence Counting Score Sheet

Participant # _____

Sentence Type	Tally	Total
1. Simple	_____	_____
2. Simple with Introductory Prepositional Phrase	_____	_____
3. Simple with Appositive Phrase	_____	_____
4. Compound with Comma and Coordinating Conjunction	_____	_____
5. Compound with Semi-Colon + Conjunctive Adverb/ Transitional Expression	_____	_____
6. Complex with Adverb Clause	_____	_____
7. Complex with Adjective (Relative) Clause	_____	_____
8. Compound-Complex	_____	_____

Examples:

- Simple:** The theme of racism is ever-present in the writings of Alice Walker.
- Simple with Introductory Prepositional Phrase:** In the opening lines of the film *Gone with the Wind*, protagonist Scarlett O'Hara complains of the constant talk of war.
- Simple with Appositive Phrase:** Henry Wadsworth Longfellow, a nineteenth century American poet, actually earned his living writing poetry.
- Compound with Comma and Coordinating Conjunction:** Truman Capote was celebrated for his contributions to modern American fiction, and he was also a close friend of Harper Lee, author of *To Kill a Mockingbird*.
- Compound with Semi-Colon + Conjunctive Adverb/Transitional Expression:** The character of Scarlett O'Hara may be described as willful, pretty, and emotionally strong; however, her fictional foil, Melanie Hamilton Wilkes, possessed an unflinching kindness, revealing Scarlett's true weakness.
- Complex with Adverb Clause:** Although *Gone with the Wind* is a famous love story, it also reveals to readers and viewers some of the complicated social issues during the American Civil War era.
- Complex with Adjective (Relative) Clause:** Harper Lee, who is best known for writing *To Kill a Mockingbird*, published a sequel to the work before she died.
- Compound-Complex:** Electronic texts seem to be gradually taking the place of print materials, and people no longer seem to seek reading as a favorite pastime because of the many other activities vying for their time.

#of sentences _____

Counter Initials _____

#Incorrect _____

Date _____

Appendix G

Sample Coh-Metrix 3.0 Output

Number	Label	Label V2.x	Text	Full description
Descriptive				
1	DESPC	READNP	3	Paragraph count, number of paragraphs
2	DESSC	READNS	12	Sentence count, number of sentences
3	DESWC	READNW	302	Word count, number of words
4	DESPL	READAPL	4	Paragraph length, number of sentences in a paragraph, mean
5	DESPLd	n/a	1	Paragraph length, number of sentences in a paragraph, standard deviation
6	DESSL	READASL	25.167	Sentence length, number of words, mean
7	DESSLd	n/a	16.5	Sentence length, number of words, standard deviation
8	DESWLsy	READASW	1.483	Word length, number of syllables, mean
9	DESWLsyd	n/a	0.681	Word length, number of syllables, standard deviation
10	DESWLlt	n/a	4.917	Word length, number of letters, mean
11	DESWLltd	n/a	2.473	Word length, number of letters, standard deviation
Text Easability Principle Component Scores				
12	PCNARz	n/a	-0.362	Text Easability PC Narrativity, z score
13	PCNARp	n/a	35.940	Text Easability PC Narrativity, percentile
14	PCSYNz	n/a	-0.790	Text Easability PC Syntactic simplicity, z score
15	PCSYNp	n/a	21.480	Text Easability PC Syntactic simplicity, percentile
16	PCCNCz	n/a	0.737	Text Easability PC Word concreteness, z score
17	PCCNCp	n/a	76.730	Text Easability PC Word concreteness, percentile
18	PCREFz	n/a	0.621	Text Easability PC Referential cohesion, z score
19	PCREFp	n/a	73.240	Text Easability PC Referential cohesion, percentile
20	PCDCz	n/a	0.581	Text Easability PC Deep cohesion, z score
21	PCDCp	n/a	71.900	Text Easability PC Deep cohesion, percentile
22	PCVERBz	n/a	1.273	Text Easability PC Verb cohesion, z score
23	PCVERBp	n/a	89.800	Text Easability PC Verb cohesion, percentile
24	PCCONNz	n/a	-3.405	Text Easability PC Connectivity, z score
25	PCCONNp	n/a	0.030	Text Easability PC Connectivity, percentile

Number	Label	Label V2.x	Text	Full description
26	PCTEMPz	n/a	0.471	Text Easability PC Temporality, z score
27	PCTEMPp	n/a	68.080	Text Easability PC Temporality, percentile
Referential Cohesion				
28	CRFNO1	CRFBN1um	0.727	Noun overlap, adjacent sentences, binary, mean
29	CRFAO1	CRFBA1um	0.727	Argument overlap, adjacent sentences, binary, mean
30	CRFSO1	CRFBS1um	0.727	Stem overlap, adjacent sentences, binary, mean
31	CRFNOa	CRFBNaum	0.523	Noun overlap, all sentences, binary, mean
32	CRFAOa	CRFBAAum	0.569	Argument overlap, all sentences, binary, mean
33	CRFSOa	CRFBSaum	0.600	Stem overlap, all sentences, binary, mean
34	CRFCWO1	CRFPC1um	0.155	Content word overlap, adjacent sentences, proportional, mean
35	CRFCWO1d	n/a	0.126	Content word overlap, adjacent sentences, proportional, standard deviation
36	CRFCWOa	CRFPCaum	0.102	Content word overlap, all sentences, proportional, mean
37	CRFCWOad	n/a	0.107	Content word overlap, all sentences, proportional, standard deviation
LSA				
38	LSASS1	LSAassa	0.273	LSA overlap, adjacent sentences, mean
39	LSASS1d	LSAassd	0.213	LSA overlap, adjacent sentences, standard deviation
40	LSASSp	LSApssa	0.230	LSA overlap, all sentences in paragraph, mean
41	LSASSpd	LSApssd	0.227	LSA overlap, all sentences in paragraph, standard deviation
42	LSAPP1	LSAppa	0.633	LSA overlap, adjacent paragraphs, mean
43	LSAPP1d	LSAppd	0.185	LSA overlap, adjacent paragraphs, standard deviation
44	LSAGN	LSAGN	0.330	LSA given/new, sentences, mean
45	LSAGNd	n/a	0.185	LSA given/new, sentences, standard deviation
Lexical Diversity				
46	LDTTRc	TYPTOKc	0.599	Lexical diversity, type-token ratio, content word lemmas
47	LDTTRa	n/a	0.457	Lexical diversity, type-token ratio, all words
48	LDMTLD	LEXDIVTD	52.071	Lexical diversity, MTLT, all words
49	LDVOCD	LEXDIVVD	73.331	Lexical diversity, VOCD, all words
Connectives				
50	CNCAI	CONi	105.960	All connectives incidence

Number	Label	Label V2.x	Text	Full description
51	CNCCaus	CONCAUSi	19.868	Causal connectives incidence
52	CNCLogic	CONLOGi	49.669	Logical connectives incidence
53	CNCADC	CONADVCONi	6.623	Adversative and contrastive connectives incidence
54	CNCTemp	CONTEMPi	26.490	Temporal connectives incidence
55	CNCTempx	CONTEMPEXi	43.046	Expanded temporal connectives incidence
56	CNCAdd	CONADDi	72.848	Additive connectives incidence
57	CNCPos	n/a	0	Positive connectives incidence
58	CNCNeg	n/a	0	Negative connectives incidence
Situation Model				
59	SMCAUSv	CAUSV	23.179	Causal verb incidence
60	SMCAUSvp	CAUSVP	36.424	Causal verbs and causal particles incidence
61	SMINTEp	INTEi	16.556	Intentional verbs incidence
62	SMCAUSr	CAUSC	0.5	Ratio of casual particles to causal verbs
63	SMINTEr	INTEC	0.667	Ratio of intentional particles to intentional verbs
64	SMCAUSlsa	CAUSLSA	0.109	LSA verb overlap
65	SMCAUSwn	CAUSWN	0.742	WordNet verb overlap
66	SMTEMP	TEMPta	0.909	Temporal cohesion, tense and aspect repetition, mean
Syntactic Complexity				
67	SYNLE	SYNLE	5.667	Left embeddedness, words before main verb, mean
68	SYNNP	SYNNP	1.181	Number of modifiers per noun phrase, mean
69	SYNMEDpos	MEDwtm	0.616	Minimal Edit Distance, part of speech
70	SYNMEDwrđ	MEDawm	0.876	Minimal Edit Distance, all words
71	SYNMEDlem	MEDalm	0.859	Minimal Edit Distance, lemmas
72	SYNSTRUTa	STRUTa	0.076	Sentence syntax similarity, adjacent sentences, mean
73	SYNSTRUTt	STRUTt	0.088	Sentence syntax similarity, all combinations, across paragraphs, mean
Syntactic Pattern Density				
74	DRNP	n/a	370.861	Noun phrase density, incidence
75	DRVP	n/a	165.563	Verb phrase density, incidence
76	DRAP	n/a	19.868	Adverbial phrase density, incidence
77	DRPP	n/a	105.960	Preposition phrase density, incidence
78	DRPVAL	AGLSPSVi	3.311	Agentless passive voice density, incidence
79	DRNEG	DENNEGi	13.245	Negation density, incidence
80	DRGERUND	GERUNDi	19.868	Gerund density, incidence
81	DRINF	INFi	26.490	Infinitive density, incidence
Word Information				
82	WRDNOUN	NOUNi	294.702	Noun incidence

Number	Label	Label V2.x	Text	Full description
83	WRDVERB	VERBi	109.272	Verb incidence
84	WRDADJ	ADJi	122.517	Adjective incidence
85	WRDADV	ADVi	49.669	Adverb incidence
86	WRDPRO	DENPRPi	49.669	Pronoun incidence
87	WRDPRP1s	n/a	0	First person singular pronoun incidence
88	WRDPRP1p	n/a	26.490	First person plural pronoun incidence
89	WRDPRP2	PRO2i	0	Second person pronoun incidence
90	WRDPRP3s	n/a	0	Third person singular pronoun incidence
91	WRDPRP3p	n/a	16.556	Third person plural pronoun incidence
92	WRDFRQc	FRCLacwm	2.314	CELEX word frequency for content words, mean
93	WRDFRQa	FRCLaewm	3.031	CELEX Log frequency for all words, mean
94	WRDFRQmc	FRCLmcsm	0.890	CELEX Log minimum frequency for content words, mean
95	WRDAOAc	WRDAacwm	364.085	Age of acquisition for content words, mean
96	WRDFAMc	WRDFacwm	585.492	Familiarity for content words, mean
97	WRDCNCc	WRDCacwm	374.035	Concreteness for content words, mean
98	WRDIMGc	WRDlacwm	421.433	Imagability for content words, mean
99	WRDMEAc	WRDMacwm	437.681	Meaningfulness, Colorado norms, content words, mean
100	WRDPOLc	POLm	3.917	Polysemy for content words, mean
101	WRDHYPn	HYNOUNaw	7.007	Hypernymy for nouns, mean
102	WRDHYPv	HYVERBaw	1.574	Hypernymy for verbs, mean
103	WRDHYPnv	HYPm	2.109	Hypernymy for nouns and verbs, mean
Readability				
104	RDFRE	READFRE	55.829	Flesch Reading Ease
105	RDFKGL	READFKGL	11.725	Flesch-Kincaid Grade level
106	RDL2	L2	19.099	Coh-Metrix L2 Readability

Appendix H

Writing Rubric for English Composition Essays

Writing Rubric: 100 point scale

GOAL	0-3 POINTS	4-7 POINTS	8-10 POINTS	TOTAL
PURPOSE	PAPER HAS NO CLEARLY DEFINED PURPOSE DESPITE THE FACT THAT THE TOPIC REQUIRES THE USE OF ARGUMENT/PERSUASION.	PAPER ATTEMPTS TO PERSUADE BUT DOES NOT USE EVIDENCE TO SUPPORT AN ARGUMENT.	PAPER DEMONSTRATES A CLEAR SENSE OF PURPOSE AND USES EVIDENCE TO CONVINCE THE READER TO ACCEPT A POSITION.	
AUDIENCE	PAPER DOES NOT REFLECT A SENSE OF AUDIENCE. TONE IS CASUAL AND NO ATTEMPT IS MADE TO ESTABLISH A RAPPORT THAT WILL FACILITATE PERSUASION.	PAPER REFLECTS A SENSE OF TARGETED READERSHIP BUT DOES NOT ADOPT A TONE CONSISTENTLY APPROPRIATE TO PERSUADE THIS POPULATION.	PAPER REFLECTS A STRONG SENSE OF AUDIENCE, AND ARGUMENT PRACTICES, I.E. APPEALS, ETC., CORRESPOND WELL WITH THE TARGETED AUDIENCE.	
DICTION	WORD CHOICES ARE HAPHAZARD, CASUAL, AND UNPROFESSIONAL.	PAPER EMPLOYS ADEQUATE BUT SOMEWHAT INFORMAL VOCABULARY TO CONVEY THE ARGUMENT.	PAPER REFLECTS A SUITABLE EXPRESSIVE VOCABULARY THAT INDICATES A CULTIVATED UNDERSTANDING OF THE TOPIC.	
TOPIC COMPLEXITY	IDEAS ARE OVERLY SIMPLIFIED, AND WRITING DOES NOT INDICATE EVEN AN AVERAGE ABILITY TO DEVELOP AND SUPPORT COMPLEX IDEAS.	ALTHOUGH SOME IDEAS ARE OVERLY-SIMPLIFIED, PAPER INDICATES A GRASP OF COMPLEX DEVELOPMENT OF IDEAS	DESPITE ERRORS, PAPER TREATS A COMPLEX TOPIC WITH CONSISTENTLY COMPLEX IDEAS	
SUPPORTING DETAILS	PAPER CONTAINS FEW OR NO SUPPORTING DETAILS TO VALIDATE POSITION TAKEN IN THE ARGUMENT	PAPER INCLUDES SOME SUPPORTING DETAILS TO STRENGTHEN THE POSITION TAKEN IN THE ARGUMENT	PAPER INDICATES A CLEAR UNDERSTANDING OF THE NEED FOR BOTH MAJOR AND MINOR DETAILS TO SUPPORT A POSITION IN AN ARGUMENT	
QUALITY OF RESEARCH	LITTLE TO NO RESEARCH IS USED.	STUDENT INCLUDED SOME RESEARCH BUT NOT ALL SOURCES MEET THE ESTABLISHED CRITERIA.	THE WORK INCLUDES THE REQUIRED AMOUNT OF RESEARCH FROM ACCEPTABLE SOURCES.	
DOCUMENTATION	NO DOCUMENTATION OF RESEARCH HAS BEEN INCLUDED.	PAPER INDICATES AN AWARENESS THAT DOCUMENTATION IS REQUIRED BUT IS INCOMPLETE OR INACCURATE.	PAPER INCLUDES ADEQUATE DOCUMENTATION TO INDICATE THE ESSENTIAL COMPONENTS OF INCORPORATING RESEARCH.	
GRAMMAR AND PUNCTUATION	PAPER CONTAINS AN INEXCUSABLE NUMBER OF GRAMMATICAL AND MECHANICAL ERRORS.	PAPER CONTAINS THE AVERAGE NUMBER OF EXPECTED GRAMMATICAL AND MECHANICAL ERRORS FOR A STUDENT IN CO-REQUISITE WRITING.	PAPER INDICATES STUDENT HAS A STRONG SENSE OF GRAMMATICAL AND PUNCTUATION RULES DESPITE THE PRESENCE OF SOME ERRORS.	
SENTENCE VARIETY	PAPER RELIES HEAVILY ON A SINGLE SENTENCE FORMAT SUCH AS SIMPLE OR COMPOUND SENTENCES.	STUDENT HAS ATTEMPTED TO INCORPORATE SOME VARIETY OF SENTENCE TYPES INTO THE PAPER.	THE PAPER INCLUDES A WIDE VARIETY OF SENTENCE STRUCTURES, PROVIDING A MORE INTERESTING EXPERIENCE.	
COLLEGE-LEVEL APPROPRIATE	PAPER DOES NOT MEET COLLEGE-LEVEL WRITING EXPECTATIONS	PAPER REFLECTS AN AWARENESS OF STANDARDS FOR COLLEGE-LEVEL ACADEMIC WRITING	PAPER INDICATES MATURE UNDERSTANDING OF COLLEGE WRITING EXPECTATIONS.	
TOTAL: OVERALL PAPER QUALITY	TOO MANY PROBLEMS EXIST WITHIN THIS PAPER TO MERIT A PASSING SCORE.	THE PAPER IS AN AVERAGE PAPER AND INDICATES THE STUDENT CAN PRODUCE PASSING WORK.	ALTHOUGH IT INCLUDES ERRORS, THE PAPER INDICATES THE STUDENT IS COGNIZANT OF INSTRUCTOR EXPECTATIONS AND IS WILLING TO STRIVE TO MEET AT LEAST SOME OF THOSE EXPECTATIONS.	

Appendix I

English 1010 Diagnostic Essay

Diagnostic Essay: C. S. Lewis is possibly most famous for having written *The Chronicles of Narnia*. Because he wrote this famous children's literature series, he received many letters from children and typically responded to those letters. Read the letter below from renowned author C. S. Lewis to a girl named Joan. Within the letter, Lewis offers several pieces of advice on writing. Create a 5-paragraph essay with an introduction, 3 body paragraphs, and a conclusion, approximately 500-750 words. Use your introduction to create two hook sentences and state a thesis. In each body paragraph, agree or disagree with one piece of advice offered by Lewis, and explain why you agree or disagree with Lewis' advice. Be sure to use quotation marks around any of Lewis' exact words. If you incorporate any outside sources, be sure to document those correctly. Write a concluding paragraph to summarize your point of view on Lewis' recommendations about writing to Joan. Save your essay by the title Your Name Gives Advice on Writing to Joan. Example: Jane Doe Gives Advice on Writing to Joan.

(Source: Lewis, C. S. (1996). *CS Lewis' Letters to Children*. Simon and Schuster.)

The Kilns,
Headington Quarry,
Oxford

26 June 1956

Dear Joan—

Thanks for your letter of the 3rd. You describe your Wonderful Night v. well. That is, you describe the place and the people and the night and the feeling of it all, very well — but not the thing itself — the setting but not the jewel. And no wonder! Wordsworth often does just the same. His Prelude (you're bound to read it about 10 years hence. Don't try it now, or you'll only spoil it for later reading) is full of moments in which everything except the thing itself is described. If you become a writer you'll be trying to describe the thing all your life: and lucky if, out of dozens of books, one or two sentences, just for a moment, come near to getting it across.

About amn't I, aren't I and am I not, of course there are no right or wrong answers about language in the sense in which there are right and wrong answers in Arithmetic. "Good English" is whatever educated people talk; so that what is good in one place or time would not be so in another. Amn't I was good 50 years ago in the North of Ireland where I was brought up, but bad in Southern England. Aren't I would have been hideously bad in Ireland but very good in England. And of course I just don't know which (if either) is good in modern Florida. Don't take any notice of teachers and textbooks in such matters. Nor of logic. It is good to say "more than one passenger was hurt," although more than one equals at least two and therefore logically the verb ought to be plural were not singular was!

What really matters is:–

1. Always try to use the language so as to make quite clear what you mean and make sure your sentence couldn't mean anything else.
2. Always prefer the plain direct word to the long, vague one. Don't implement promises, but keep them.
3. Never use abstract nouns when concrete ones will do. If you mean "More people died" don't say "Mortality rose."
4. In writing. Don't use adjectives which merely tell us how you want us to feel about the thing you are describing. I mean, instead of telling us a thing was "terrible," describe it so that we'll be terrified. Don't say it was "delightful"; make us say "delightful" when we've read the description. You see, all those words (horrifying, wonderful, hideous, exquisite) are only like saying to your readers, "Please will you do my job for me."
5. Don't use words too big for the subject. Don't say "infinitely" when you mean "very"; otherwise you'll have no word left when you want to talk about something really infinite.

Thanks for the photos. You and Aslan both look v. well. I hope you'll like your new home.

With love
yours

C.S. Lewis

Appendix J

Sentence Combining**Sentence Combining Practice 1**

Name:

Instructor: Learning to combine sentences may be compared to finding the right pair of shoes to complete an outfit or adding a great app to a phone in that learning to combine sentences well can enhance writing skills perhaps more effectively than can any other writing strategy.

This module on combining sentences was created with a long-term goal of teaching students to produce a variety of different sentence patterns in order to improve the overall readability of student writing in terms interest and technique.

We will spend 25 minutes once a week on this project throughout the semester. You will be encouraged to transfer the skills you practice to your assignments for this class, for your co-requisite English 1010 class, and, ultimately, for the writing you do in your other classes.

Practice I: The simple sentence + the simple sentence = the compound sentence.

Tools: Coordinating conjunctions (for, and, nor, but, or, yet, so)

Example:

1. King Arthur is a famous, legendary British King.
2. Many authors wrote stories about King Arthur.

Combined: King Arthur is a famous, legendary British king, and many authors wrote stories about King Arthur.

Exercise I: Combine the two sentences using the recommended coordinating conjunction.

1. Use the coordinating conjunction but.
 - A. Approximately 200 bones comprise the human skeleton
 - B. Over 600 muscles help to complete the musculoskeletal system.

New sentence:

2. Use the coordinating conjunction or.

A. The American Civil War was fought over the issue of slavery.

B. The American Civil War was fought over the issue of states' rights.

New sentence:

3. Use the coordinating conjunction so.

A. I have celiac disease.

B. I cannot consume foods containing gluten.

New sentence:

4. Use the coordinating conjunction and.

A. London is the capital of England.

B. Paris is the capital of France.

New sentence:

5. Use the coordinating conjunction yet.

A. A biography is not a work of fiction.

B. It may not provide all the facts.

New sentence:

Sentence Combining: Practice 2

Name:

Instructor: This is Sentence Combining Practice 2. We will be working with Compound Sentences again but in a different way from Practice 1.

Remember: The simple sentence + the simple sentence = the compound sentence.

To complete these exercises successfully, you need some tools. You need a semi-colon, a comma, and a conjunctive adverb.

Tools: Conjunctive adverbs (additionally, however, therefore, conversely, consequently, instead, otherwise, nevertheless, similarly, moreover)

Example:

1. Dark hair and brown eyes are dominant genes.
2. Blonde hair and blue eyes are recessive genes.

Combined: Dark hair and brown eyes are dominant genes; however, blonde hair and blue eyes are recessive genes.

Practice 2: Combine the two sentences using the recommended conjunctive adverb.

1. Use the conjunctive adverb consequently.
 - A. The definition of planet changed in 2006.
 - B. Pluto is no longer considered to be a planet.

New sentence:

2. Use the conjunctive adverb similarly.
 - A. Many colorful snakes are poisonous.
 - B. Many colorful frogs are poisonous, as well.

New sentence:

3. Use the conjunctive adverb therefore.

A. William Shakespeare used over 31,000 different words in his writing.

B. He is considered to have had an excellent vocabulary.

New sentence:

4. Use the conjunctive adverb instead.

A. Peanuts are not really nuts.

B. Peanuts are legumes.

New sentence:

5. Use the conjunctive adverb furthermore.

A. Ounce per ounce, bananas are the most economical fruits.

B. They provide many health benefits.

New sentence:

Sentence Combining: Practice 3

Name:

Instructor: This is Sentence Combining Practice 3. This week, we will be making Complex Sentences.

There are two basic types of Complex Sentences: Sentences with adverb clauses and sentences with adjective clauses. This week, we will make Complex Sentences with adverb clauses.

Subordinating conjunction + Independent clause = Dependent clause

Dependent clause + Independent clause = Complex Sentence

Tools: subordinating conjunctions (because, although, if, whenever, while, when, where, after, before, unless, since)

When the dependent clause comes at the beginning of the new sentence, place a comma between the dependent clause and the independent clause.

No comma is necessary when the dependent clause is added to the end of the independent clause.

Remember the relationship is an important consideration when you are creating a Complex Sentence. Sometimes one event precedes another. Sometimes one factor is an exception to a rule.

Example:

1. Hurricane season in the Atlantic Ocean lasts from June 1 through November 30.
2. Land masses along the Atlantic Ocean are vulnerable to hurricanes during this timeframe.

Combined: Because hurricane season in the Atlantic Ocean lasts from June 1 through November 30, land masses along the Atlantic Ocean are vulnerable to hurricanes during this timeframe.

Or: Land masses along the Atlantic Ocean are vulnerable to hurricanes from June 1 through November 30 because hurricane season in the Atlantic Ocean lasts during this timeframe.

Practice 3: Combine the two sentences using the recommended subordinating conjunction.

1. Use the subordinating conjunction where.

A. Most penguin species live near water in the Southern Hemisphere.

B. They are able to spend about half of their time on land and the other half in the water.

New sentence:

2. Use the subordinating conjunction before.

A. The Japanese bombed Pearl Harbor in December, 1941.

B. World War II began in Europe in September, 1939.

New sentence:

3. Use the subordinating conjunction unless.

A. There are outliers in the data set.

B. The best average to use in statistics is the mean.

New sentence:

4. Use the subordinating conjunction after.

A. The American and National League Baseball playoffs determine the best team from each league.

B. The World Series is a playoff between the American and National League champions.

New sentence:

5. Use the subordinating conjunction although.

A. Elvis Presley died in 1977.

B. Elvis' music is still played worldwide today.

New sentence:

Sentence Combining: Practice 4

Name:

Instructor: This week, we will complete Sentence Combining Practice 4. Last week, we completed Complex sentences with adverb clauses. This week, we will complete complex sentences with adjective (relative pronouns). Relative clauses modify a noun within a sentence and usually immediately follow the nouns they modify.

Independent clause + Relative pronoun + Independent clause = Complex Sentence

Tools: These are the most common relative pronouns (who, whom, whose, which, that)

Example:

1. September 22, 2018 is the autumnal equinox.
2. September 22, 2018 marks the first day of fall.

Combined: September 22, 2018, which is the autumnal equinox, marks the first day of fall.

Or: September 22, 2018, which marks the first day of fall, is the autumnal equinox.

Practice 4: Combine the two sentences using the recommended relative pronoun.

1. Use the relative pronoun who.
 - A. Edgar Allan Poe suffered from alcohol and drug addictions.
 - B. Edgar Allan Poe wrote many short stories of the Gothic genre.

New sentence:

2. Use the relative pronoun whom.
 - A. Meriwether Lewis and William Clark traveled across North America seeking a water route.
 - B. Sacagawea traveled with Lewis and Clark and served as guide and interpreter.

New sentence:

3. Use the relative pronoun that.

A. Marsupials are a type of mammal.

B. Marsupials carry their young in a pouch.

New sentence:

4. Use the relative pronoun whose.

A. Jackie Robinson was the first African American to play on a major league sports team.

B. His story is told in the movie *42*.

New sentence:

5. Use the relative pronoun which.

A. The most common type of color blindness is red-green.

B. Color blindness affects more males than females.

New sentence:

Sentence Combining: Practice 5

Name:

Instructor: Today we will complete Sentence Combining Practice 5: Appositives and appositive phrases.

Two independent clauses may be combined to form a single independent clause containing an appositive or appositive phrase. An appositive phrase renames a noun right beside it.

Example:

1. Peafowl are related to pheasants.
2. Peafowl are more commonly referred to as peacocks.

Combined: Peafowl, more commonly referred to as peacocks, are related to pheasants.

Or: Commonly referred to as peacocks, peafowl are related to pheasants.

Practice 5: Combine the two sentences, creating a single sentence containing an appositive or appositive phrase.

1.

A. The Nobel Prize is awarded annually for achievements in literature, medicine, and science.

B. The Nobel Prize was established in 1895.

New sentence:

2.

A. Vincent Van Gogh was a Dutch painter of the Post-impressionist movement.

B. Vincent Van Gogh is famous for cutting off his ear.

New sentence:

3.

A. Johann Sebastian Bach was a German Baroque-era composer.

B. Bach wrote music for Protestant churches.

New sentence:

4.

A. Cyber security protects computer networks, hardware, and software from harmful attacks.

B. The need for cyber security is a growing field due to hundreds of annual breaches in computer network security.

New sentence:

5.

A. Persons with type AB negative blood are called universal plasma donors.

B. AB negative is the least common blood type.

New sentence:

Sentence Combining: Practice 6

Name:

Instructor: This week, we will complete Sentence Combining Practice 6. Two related independent clauses may be combined to form a single independent clause containing a prepositional phrase.

Prepositional phrase + Simple Sentence = Simple Sentence

It is important to remember that you will need to change the wording but not the ideas to combine two simple sentences by making one a prepositional phrase.

Tools (common prepositions): in, above, within, beyond, over, under, beneath, inside, outside, below, by

Example:

1. A béchamel is a white sauce.
2. Flour, then milk, is added to melted butter

Combined: By adding flour, then milk, to melted butter, one can make a béchamel.

Practice 6: Combine the two sentences, creating a single sentence containing an introductory prepositional phrase.

1.
 - A. The year 2004 marks the birth of Facebook.
 - B. Mark Zuckerberg and some of his classmates created Facebook.

New sentence:

2.
 - A. Celiac disease damages intestinal villi.
 - B. Villi are very small hair-like protrusions.

New sentence:

3.

A. The aurora borealis is a Northern Hemisphere phenomenon.

B. Visitors seek this beautiful display.

New sentence:

4.

A. Intel is a corporation that makes semiconductor chips.

B. Semiconductor chips are computer parts.

New sentence:

5.

A. An aria is typically a voiced musical solo.

B. Operas often feature arias.

New sentence:

Sentence Combining: Practice 7

Name:

Instructor: This week, we will complete Sentence Combining Practice 7. We will create compound-complex sentences.

Simple sentence + Simple Sentence + Dependent Clause = Compound-Complex Sentence

Compound-complex sentences contain two independent clauses often but not always joined by a coordinating conjunction and a dependent clause, which can be an adverb or adjective clause.

Tools (coordinating conjunctions): for, and, nor, but, or, yet, so; (conjunctive adverbs): however, therefore, consequently, unfortunately, indeed; (pronouns): he, she, it, him, her; (subordinating conjunctions): although, because, where, when

Example:

1. At age four, Wilma Rudolph suffered paralysis resulting from the polio virus.
2. Wilma Rudolph was an Olympic gold medalist in 1960.
3. Wilma Rudolph worked hard to overcome hardship.

Combined: Although Wilma Rudolph suffered paralysis at age four as a result of the polio virus, she worked hard to overcome hardship, and she was an Olympic gold medalist in 1960.

Practice 7: Combine the three sentences to create compound-complex sentences.

1.
 - A. The Soviet Union sent the first satellite into Earth's orbit in 1957.
 - B. The first moon landing occurred in 1969.
 - C. There have been many failed space attempts.

New sentence:

2.
 - A. Author Harper Lee is best known for her novel To Kill a Mockingbird.

B. She wrote another novel, *Go Set a Watchman*.

C. It was published just before her death.

New sentence:

3.

A. Many widely-consumed foods are associated with specific regions of the world.

B. Fried chicken is associated with the southern United States.

C. Numerous regions create their own variants of this southern classic.

B.

New sentence:

4.

A. The dovetail joint is an ancient means of joining two boards together.

B. It endures for centuries.

C. The dovetail joint was used by ancient Egyptians and ancient Romans.

New sentence:

5.

A. The family of drugs known as narcotics is touted for its painkilling properties.

B. These drugs are highly addictive.

C. Narcotics abuse can eventually lead to death.

New sentence:

Sentence Combining: Practice 8

Name:

Instructor: Today we will complete Sentence Combining Practice 8: Review of Compound Sentences with coordinating conjunctions.

Two independent clauses may be combined to form a single sentence with a comma and a coordinating conjunction.

Tools (coordinating conjunctions): for, and, nor, but, or, yet, so

Remember that coordinating conjunctions vary in meaning and are not interchangeable. Sometimes nouns are repeated when compound sentences are formed, so it is permissible to replace the noun in the second independent clause with a pronoun such as he, she, or it.

Example:

1. Some felines are domesticated.
2. Some felines are predators living in the wild.

Combined: Some felines are domesticated, but others are predators living in the wild.

Practice 8: Combine the two sentences, creating a single sentence using a comma and a coordinating conjunction.

1.
 - A. Battenberg is a name associated with German nobility.
 - B. Battenberg lace is American in origin.

New sentence:

2.
 - A. Bumblebees are better at collecting pollen than honeybees.
 - B. Honeybees collect pollen to make honey.

New sentence:

3.

A. Johann Sebastian Bach was a German Baroque-era composer.

B. Bach wrote music for Protestant churches.

New sentence:

4.

A. Ludwig van Beethoven is among the most famous classical composers of all time.

B. At the time of his death, he was almost completely deaf.

New sentence:

5.

A. Earth boasts over 400,000 types of plants.

B. Many of them produce blooms.

New sentence:

Sentence Combining: Practice 9

Name:

Instructor: Today we will complete Sentence Combining Practice 9: Review of Compound Sentences with semi-colons and conjunctive adverbs.

Two independent clauses may be combined to form a single sentence with a semi-colon and a conjunctive adverb.

Tools (conjunctive adverbs): however, therefore, furthermore, moreover, indeed, unfortunately, consequently

Remember that conjunctive adverbs vary in meaning and are not interchangeable. Sometimes nouns are repeated when compound sentences are formed, so it is permissible to replace the noun in the second independent clause with a pronoun such as he, she, or it.

Example:

1. Rock 'n' roll is a genre of music associated with the United States.
2. It is popular throughout the world.

Combined: Rock 'n' roll is a genre of music associated with the United States; however, it is popular throughout the world.

Practice 9: Combine the two sentences, creating a single sentence containing a semi-colon and a conjunctive adverb.

1.
 - A. Several animals including sheep and cattle have been cloned.
 - B. There is no evidence that a human has ever been cloned.

New sentence:

2.
 - A. The Leaning Tower of Pisa has been leaning since the year 1178.
 - B. It may eventually fall.

New sentence:

3.

A. The Tour de France is a treacherous bicycle race.

B. Several competitors and spectators have died during the Tour de France.

New sentence:

4.

A. Excited mercury gas creates fluorescence.

B. The glow is caused by phosphorus.

New sentence:

5.

A. Iran is one of the oldest countries in the world.

B. Kosovo is one of the youngest countries.

New sentence:

Sentence Combining: Practice 10

Name:

Instructor: Today we will complete Practice 10 with a review of Complex Sentences with adverb clauses.

Subordinating conjunction + Independent clause = Dependent clause

Dependent clause + Independent clause = Complex Sentence

Tools: subordinating conjunctions (because, although, if, whenever, while, when, where, after, before, unless, since)

When the dependent clause comes at the beginning of the new sentence, place a comma between the dependent clause and the independent clause.

No comma is necessary when the dependent clause is added to the end of the independent clause.

Example:

1. The Alps are in several countries, including France, Germany, and Switzerland.
2. The Pyrenees are only in France and Spain.

Combine using the subordinating conjunction although.

New Sentence: Although the Alps are in several countries, including France, Germany, and Switzerland, the Pyrenees are only in France and Spain.

Practice 10: Combine the two sentences, creating a complex sentence, following the assigned format.

1. Combine using although.
 - A. Microsoft Excel is a popular but costly spreadsheet program.
 - B. Kingsoft is a free spreadsheet program.

New sentence:

2. Combine using because.
 - A. France belongs to the European Union.

B. Its currency is the Euro.

New sentence:

3. Combine using although.

A. Humphry Davy invented the first electric light in 1802.

B. Thomas Edison patented his own incandescent lamp in 1878.

New sentence:

4. Combine using even though.

A. Adolf Hitler was born in Austria.

B. He was elected as Chancellor of Germany in 1933.

New sentence:

5. Combine using because.

A. The mean may not be the best central tendency measure to use when the distribution of a data set is skewed.

B. The median or mode may provide a more accurate picture of the data.

New sentence:

Sentence Combining: Practice 11

Name:

Instructor: Today we will complete Practice 11 with a review of Complex Sentences with adjective (relative) clauses.

Relative clauses modify a noun within a sentence and usually immediately follow the nouns they modify.

Independent clause + Relative pronoun + Independent clause = Complex Sentence

Tools: These are the most common relative pronouns (who, whom, whose, which, that)

Example:

1. March 20 is the vernal equinox.
2. March 20 marks the first day of spring.

Combined: March 20, which is the vernal equinox, marks the first day of spring.

Or: March 20, which marks the first day of spring, is the vernal equinox.

Practice 11: Combine the two sentences using the recommended relative pronoun.

1. Combine using who.
 - A. Andrew Carnegie was Scottish.
 - B. Andrew Carnegie was an industrialist and a philanthropist.

New sentence:

2. Combine using which.
 - A. Pluto is a dwarf planet.
 - B. Pluto was once considered to be a planet.

New sentence:

3. Combine using that.

A. Thomas Edison patented a lamp in 1878.

B. Thomas Edison patented an incandescent lamp.

New sentence:

4. Combine using which.

A. Paris was originally named Lutèce.

B. Paris is the capital of France.

New sentence:

5. Combine using who.

A. Steve Jobs founded Apple Inc.

B. Steve Jobs died in 2011.

New sentence:

Sentence Combining: Practice 12

Name:

Instructor: Today we will complete Practice 12 with a review of Compound-Complex Sentences.

Simple sentence + Simple Sentence + Dependent Clause = Compound-Complex Sentence

Compound-complex sentences contain two independent clauses often but not always joined by a coordinating conjunction and a dependent clause, which can be an adverb or adjective clause.

Tools (coordinating conjunctions): for, and, nor, but, or, yet, so; (conjunctive adverbs): however, therefore, consequently, unfortunately, indeed; (pronouns): he, she, it, him, her; (subordinating conjunctions): although, because, where, when

Example:

- A. A college education is costly.
- B. College athletes attend on scholarships.
- C. They are too busy to work.

New sentence: Because a college education is costly, college athletes attend on scholarships, for they are too busy to work.

Practice 12: Combine the three sentences to form one compound-complex sentence.

1.

- A. Pluto is a dwarf planet.
- B. Pluto was once considered to be a planet.
- C. It is smaller than Earth's moon.

New sentence:

2.

- A. Many inventors created light bulbs.

B. Thomas Edison patented a lamp in 1878.

C. Thomas Edison patented an incandescent lamp.

New sentence:

3.

A. Paris is known as the City of Light.

B. Paris was originally named Lutece.

C. Paris is the capital of France.

New sentence:

4.

A. Steve Jobs founded Apple Inc.

B. Steve Jobs died in 2011.

C. Paul Allen and Bill Gates launched Microsoft for the PC.

New sentence:

5.

A. Global warming is the result of trapped gasses in the Earth's atmosphere.

B. Global warming is now referred to as climate change.

C. Humans are responsible for global warming.

New sentence:

Appendix K

ENGL 1010 Final Exam

Although Edgar Allan Poe is often touted as the father of the modern detective story for his creation of the character C. Auguste Dupin, Arthur Conan Doyle is given credit for securing the genre's place in literature with his own creation of detective Sherlock Holmes. Since Holmes first emerged onto the printed page, dozens of fictional detectives have filed in behind him. However, few, if any, can compare to Holmes when it comes to solving mysteries and crimes. Attention to character development have allowed Doyle to bask in such singular honor, for his Holmes relies on keen observations via employment of sensory perceptions—sight, sound, smell, taste, touch—in order to solve crimes. Additionally, elements of Victorian England such as industrialism, population growth, educational opportunity, and social mobility provide an ideal backdrop for Doyle's mysteries. Finally, imaginative plots provide the optimum circumstances for showcasing Holmes' rare talents.

For your in-class essay, choose one of the following topics and construct a six-paragraph essay that includes the following elements: Introduction, three body paragraphs for support, one concessions/refutations paragraph, a conclusion, a Works Cited page, references such as quotations or brief summaries from the text supporting each paragraph, in-text citations that include page numbers indicating where you found the details you have included as support. **You must use at least one quotation or paraphrase in each support paragraph.** Shoot for 500-750 words. Follow MLA guidelines.

1. Choose three traits possessed by Sherlock Holmes that reveal why he is the greatest fictional detective of all time.

OR

2. Choose three literary elements such as character development, setting, and plot that allowed Arthur Conan Doyle to create the greatest fictional detective of all time.

Example of a Holmes trait:

Doyle's character Sherlock Holmes possesses a selective curiosity that drives him to learn only about certain subjects (Doyle 25). For example, in "The Red-headed League," he values the outlay of London: "I should like to remember the order of the houses here. It is a hobby of mine to have an exact knowledge of London" (Doyle 66).

Important Note: Two works are referenced here, and they should be listed separately on the Works Cited page.

Works Cited

Doyle, Arthur Conan. "From *A Study in Scarlet*." *Sherlock Holmes: The Major Stories with Contemporary Critical Essays*. Ed. John A Hodgson. Boston: Bedford, 1994. 17-32.

---. "The Red-headed League." *Sherlock Holmes: The Major Stories with Contemporary Critical Essays*. Ed. John A Hodgson. Boston: Bedford, 1994. 53-74.