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Epistemological and writing beliefs in a first-year college writing course: Exploring shifts across a semester and relationships with argument quality

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Abstract:

This study's purpose was to analyze 164 first-year students who had previously participated in another study. Attended a writing course on their rhetorical writing skills and epistemological viewpoints. At the start and conclusion of the semester, students had to complete epistemological and writing belief scales. The argumentative writing assignment that was due after the semester was also gathered. In a sixteen-week semester, correlational studies demonstrated a significant link between students' writing perspectives and their epistemological beliefs. The findings of the research revealed that the students' epistemic viewpoints on how quickly they may learn new information and the particular knowledge they already had experienced considerable change over the semester. In addition, during the semester, the student's perspectives on writing constantly evolved. as a final product, its role

in resolving disputes changed considerably. The calibre of the rhetorical writing students creates intimately related to their beliefs about writing. The study examines the students' writing philosophies and contrasts them with their writing abilities.

Keywords: Knowledge beliefs, task-specific beliefs, freshman comp position, rhetorical writing, persuasive writing, audience awareness

As they advance through their studies in higher education, students usually develop fresh perspectives on various subjects, including how they define the connection between education and knowledge. If everything goes as planned, college students see a significant shift in their worldview during their academic careers, according to studies of students' epistemic viewpoints (e.g. Magolda, 2001; Hofer & Pintrich, 1997; Kuhn, Cheney, & Weinstock, 2000; Perry, 1970; Schommer, 1993). There is a possibility that the students' perspectives on information and education, as well as their attitudes about academic responsibilities such as writing and research, might shift during the year (Berkenkotter, Huckin, & Ackerman, 1991; Curtis & Herrington, 2003; Haas, 1994; Haswell, 2000). This investigation looked at the connection between students' more general epistemological views and their writing beliefs to establish whether students' writing and epistemological beliefs influenced their ability to write rhetorically (Schraw, 2013).

The type of writing emphasized in many of the first-year college composition courses that students are required to complete places emphasis on the rhetorical situation, audience awareness, examination of alternate views via counterargument and rebuttal, and writing as a means of self-construction. Students are also expected to complete this style of writing. This is congruent with the shift that has taken place in first-year writing instruction over the past many years, most notably in the United States. (Lunsford, Wilson, & Eberly, 2009). (Elbow 1991; Bartholomew 1986). Because they call on the writer to examine diverse points of view, a crucial aspect of so-called "epistemological sophistication," activities in rhetorical writing resonate with the idea of epistemological beliefs. By emphasizing a process model of writing and texts as active components within larger discourses, these composition seminars for first-year undergraduates hope to change students' attitudes away from writing as a product and texts as static things. These courses alter students' viewpoints (McMillen & Hill, 2004). Yancey (2002)

This study initially examined that to have a complete understanding of the link between knowledge and writing beliefs. Therefore, it is necessary first to establish the connection between the two. After that, it tracked how students' writing styles and epistemological viewpoints evolved over a single academic semester. This was done in order to have a better understanding of the connection that exists between knowledge and the act of writing beliefs. Next, the students' past knowledge and their viewpoints on their writing were evaluated compared to the final course assignment, which required argumentative writing. This comparison served as the basis for the student's grades. Last, a study of the students' qualitative writing characteristics about their writing beliefs was carried out.

1. Theoretical Framework

People's attitudes on education and knowledge, as well as their epistemological concepts and beliefs about certain activities, such as reading and writing, have all been the subject of previous research. This body of research implies that certain epistemological and task assumptions may be related to how well students do academic tasks like writing and that students' epistemological development might happen throughout their stay in college.

1.1 General Thoughts and Ideas

Educational psychologists have seen a movement in the knowledge perspectives of college students from an absolute (right vs. incorrect) perspective to an openness to other people's points of view ever since Perry (1970) made this observation. This pattern has been seen by educational psychologists that specialize in the field. Even though college is not likely to have a monopoly on the process of epistemic maturity, there is evidence to suggest that it has a unique influence on students' epistemological development. Researchers have examined this tendency in several ways, including conducting interviews with students that were both organized and open-ended (Magolda, 2001; King & Kitchener, 1994). Through semi-structured and extended interviews with students, these studies have uncovered a pattern in how students' perspectives on knowledge and knowing change throughout their education. Some time, continued access to the participants and complex scoring processes to study the possibility of student viewpoint shifts. This was because the interview measures themselves were qualitative.

A major advancement in the field of epistemological belief research was made with the creation of The Schommer Epistemological Belief Questionnaire is available here (1990; Schommer-Akins, 2004). This is because the survey measures a phenomenon using pen and paper. That was previously investigated through interviews. Studies that applied this criterion in academic contexts reveal a favourable association between levels of education and the existence of more created and contingent attitudes about knowledge (Schommer, 1998). In addition, studies of people's epistemological views have indicated relationships between people's ideas and their performance, and these associations have been seen in populations other than undergraduate students. For example, students who subscribe to the philosophy of rapid learning tend to exaggerate their levels of comprehension, score worse on reading comprehension tests, and have lower grade point averages, according to research conducted by Schommer (1990 and 1993). These studies have also shown that people's views can shift in reaction to new experiences and information that comes their way. For example, research on teachers' epistemological views using Schommer's measure has been carried out by preservice and in-service teachers at various grade levels and academic institutions. (e.g., Brownlee, Walker, Lennox, Exley, and Pearce, 2009; Cheng, Chan, Tang, and Cheng, 2009; Jena & Ahmad, 2013). Academic journals have reported the results of these investigations (e.g., Fives & Buehl, 2008; Hillocks, 1999; Maggioni & Parkinson, 2008). These investigations often showed connections between instructors' knowledge-related views and learning-related beliefs, as well as relationships between these epistemological beliefs and instructional decisions; this suggests that teachers' knowledge-related views influence behaviour.

1.2 Task-specific beliefs

Numerous empirical research findings indicated that students' opinions regarding particular academic tasks were typically favourable. In one of this research, The Reading Beliefs Inventory (RBI) was used by Schraw (2000) to determine whether or not students thought that reading was important in their lives. It was primarily a transmission or a transactional activity. This was done to make it possible to interpret the study's findings. High performers on the RBI's transmission subscale strongly emphasized understanding and absorbing the author's intended meaning in their views.

Contrary to transaction views, which focus on the procedure of gleaning meaning from a text, this is the case. Students' reading views and the calibre of their writing, as shown in the paragraphs they wrote in response to the study's prompt, were correlated by the Reading Behavior Inventory (RBI). For readers with strong transactional and low transmission views, the writing exercise, including replies to the reading content, took substantially longer and was far more crucial.

Research that was carried out comparably and made use of the Writing Beliefs Inventory (White & Bruning, 2005) found that students' reading and writing beliefs had a significant impact not only on the quality of the writing that they produced but also on the degree to which they were interested in the work. This was the case regardless of whether or not they were interested in the work. Those participants who reported having strong transactional attitudes about writing, i.e. beliefs that writing is an act of communication as opposed to a demonstration act, reported feeling more successful about their writing. (Shell, Colvin, & Bruning, 1995). In addition, their findings demonstrated that students might have high transmission views about writing and strong transactional views about writing simultaneously. Those who do so, however, run the risk of approaching writing duties in a manner that prevents them from incorporating both essential information and their own opinions while generating prose. Even though students may simultaneously have high transmission and transactional perspectives about writing, this was the case. (p.182).

1.3 The Role of Beliefs in the Performance of Academic Tasks

According to research linking students' views on epistemology to their writing skills, some characteristics of students' epistemological viewpoints might predict how well they would do on a task that required them to write a paragraph (Kardash & Scholes, 1996; Mason & Boscolo, 2004; Schommer, 1993b). The quality of students' conclusion paragraphs may be predicted by their attitudes toward specific facts, as well as the importance of cognition and prior ideas of the issue, according to research by Kardash and Scholes (1996). According to a study on college students, students' epistemological stances and how well they fared on a test where they had to write a conclusion paragraph had a correlation (Schommer, 1993b). These results showed that the students' oversimplified conclusions were related to their beliefs about speedy learning and precise knowledge. Additionally, eighth-grade students' epistemological

viewpoints were found to be predictive of their ability to construct arguments in opposition to contested readings by Mason and Scirica (2006).

Mateos, Cuevas, Martin, Echeita, and Luna (2011) conducted more studies on the connections between college students' reading, writing, and epistemological notions and their level of success in an argumentative writing job. Based on the short synthesis essays the students had written regarding the contentious readings assigned as part of the project, their writing was graded. They discovered that only transactional reading beliefs were a valid indicator of how well the students portrayed various points of view in these so-called "perspective" essays. Correlational studies turned up this information. Writing beliefs or epistemological ideas were not significantly correlated with writing performance. However, they did discover a substantial link between writing abilities and reading attitudes.

These studies show a substantial association between task beliefs and rhetorical writing by linking task beliefs to argumentative writing by assigning participants a paragraph writing task. The idea of a connection between argumentative writing and one's beliefs was raised by a research study that included various data on student writing, including longer pieces of course-based writing. Researchers examined student writing to assess the rhetorical quality of the writing and the students' epistemological stance (Hays, Brandt, and Chantry, 1988; Hays & Brandt, 1992). Their qualitative investigation revealed a strong relationship between undergraduates' epistemic perspectives and the calibre of their writing. Essays with alternate perspectives and convincing arguments were more frequently written by students who adhered to constructivist epistemologies than by students who held other epistemologies. In this situation, the only source of information for classifying epistemological views was the papers the students had written. No further measure was used. Although a separate beliefs test was not included in the study's design, the researchers' work provides an important avenue of inquiry into the relationship between beliefs and the "in vivo" undergraduate writing projects students completed during the semester.

1.4 The Aims and Scope of This Particular Research

The following questions were addressed during this research in order to investigate the connection that exists between epistemological views, writing beliefs, and course-based rhetorical writing:

Part One

§ What connections exist between students' attitudes about writing and their beliefs about knowledge? Do the connections between writing beliefs and epistemological beliefs vary from the start to the conclusion of a semester?

Do students' knowledge and writing beliefs significantly alter over the semester?

Part Two

Are students' writing views, epistemological beliefs, and effectiveness in rhetorical writing related?

Part Three

What distinguishing qualities may be found in the writings that students who adhere to different writing philosophies have prepared?

2. Introduction and Part One: The Epistemological and Writing Beliefs of First-year College Students Across Composition

This study's main goal was to follow undergraduate students taking a lower-division college writing and rhetoric course throughout one academic semester regarding their epistemological viewpoints and writing habits (Writ 101). Because it has been noted that quantifiable epistemic shifts take a longer time frame, I hypothesized that students' overall epistemological views would not alter throughout the 14 weeks (Jehng, Johnson, and Anderson, 1993; King & Kitchener, 1994; Kuhn, Cheney, and Weinstock, 2000; Pirttila-Backman & Kajanne, 2001). Kuhn, Cheney, and Weinstock (2000); King and Kitchener (1994); Part, However, I did anticipate that during the semester, their task-specific perspectives on writing would change because of the nature of teaching rhetorical writing and the course's aims (Yancey, 2001).

2.1 Method

Setting and participants.

A well-known research institute in the South provided a writing class for students in the lower division throughout thirteen sessions, and 164 first-year students registered for the class. The

class was taught by individuals pursuing doctoral degrees in English, Rhetoric, or American Studies and who had at least four semesters of experience working as teaching assistants for classes that were closely related to the subject matter of the class. Writing 101 required students to complete certain coursework, readings, and assignments. Ninety-five percent of the first-year students who registered for the class during this particular fall semester claimed that they were between the ages of 18 and 19 at the time of their enrollment, with 44 percent of the students being female and 56 percent of the students being male. The following is a breakdown of the components in terms of their ethnic composition:

Seven percent of the population is comprised of Black or African-American people.

Sixteen percent of the population is comprised of Asian or Asian-American people.

Thirty percent of the population is comprised of Ling/a or Mexican-American people.

Forty-five percent of the population is comprised of White or Caucasian people.

Two percent of the population is comprised of Middle Eastern people.

Thirty-five percent of the first-year students in this class have chosen to major in the liberal arts. This is followed by 15 percent who have chosen to major in the natural sciences, 13 percent who have chosen to major in engineering, 10 percent who have chosen to major in business, 11 percent who have chosen to major in fine arts, 9 percent who have chosen education, and 5 percent who have chosen communications. In addition, twenty percent of the first-year students in this class decided to major in economics, and five percent of them selected to study communications. Eighty-four percent of the children stated that they had spent their whole lives in the United States, and virtually all of them could communicate in English as if it were their first language. Another 10% of the population had stayed there for more than four years, making up this percentage of the total. Students from other countries whose first language was not English were required to take the Test of English as a Foreign Language (TOEFL) and get a score indicating a level of English language ability acceptable for ordinary college coursework to be accepted into the class. Only students who met these requirements were eligible for enrollment in the class.

Students will learn how to read and write argumentative essays in this class, as well as how to apply the stasis theory to research a variety of topics. Everything is an Argument is the required literature for this course. Its inspiration comes from a procedural approach to writing, editing, argument construction and rhetorical theory (Lunsford, Ruszkiewicz, & Walters, 2010).

This course aims to assist students in expanding their aptitude for persuasive argumentation, critical thinking, and audience awareness. Since this course is a requirement for the university's core curriculum, students must complete it; however, they can also get credit for it by passing an exam in its place.

2.2 Sources of data

Survey of Epistemological Beliefs

A Schommer scale with 63 items was used to evaluate epistemic viewpoints (1990; Schommer-Akins, 2004; Schommer-Akins & Hutter, 2002). Items that inquired about the respondents' views on the nature of knowledge, the speed at which people acquire it, whether learning is a fixed talent, and the stability of knowledge were used to gauge their perspectives. A high score meant the participant thought knowledge and the aptitude for learning were unchangeable traits and that learning happened quickly. Each question received a rating on a scale from 1 to 5, with 5 being the highest.

The psychometric characteristics of the Schommer instrument and the study used to determine the subscales have both come under fire (Schraw, Bendixen, & Dunkle, 2002; Wood & Kardash, 2002). Schommer engaged a team of educational psychologists to divide each of the 63 items into distinct subgroups as he created the questionnaire. The final product was the twelve groups, each with two to eight pieces. Four orthogonal epistemic components were found in the 12 subgroups after factor analysis, which is a pattern that has been observed in several prior research projects (Hofer & Pintrich, 1997; Jehng, Johnson, & Anderson 1991; Schommer, 1990, 1993; Schommer & Dunnell, 1992; Schommer, Crouse, & Rhodes, 1992). Other research has questioned the classification of items before the conclusion of factor analysis, asserting that this step affects the scale's validity (DeBacker, Crowson, Beesley, Thoma, & Hestevold, 2008; Wood & Kardash, 2002; Wood, Kitchener, & Jensen, 2002). These assertions were stated in two studies, Wood, Kitchener, and Jensen (2002) and Wood, Kardash,

and Jensen (2002). The following academics have employed their study's EBQ and Schommer's 12 a priori item categories. Each has used principal axis factoring with Varimax rotation to get identical 4- or 5-factor answers. On the other hand, no study has attempted to reproduce the initial item classification phase performed by experts.

Due to the problems, I decided it would be best to utilize the most frequently used technology, which necessitated that I look at the factor structures of all 12 subcategories. The scale's final output, a 4-factor structure, was generated by both the early and late administrations. This structure generated loading patterns consistent with past EBQ analyses and explained 55% of the early semester variation and 53% of the late semester variation. Appendix A contains the item weightings for each of the 12 subcategories.

For Fast Learning, Authority, Certain Knowledge, and Impatience, each of the four subscales had dependability values (Cronbach's alpha) that varied from 0.67 early to 0.67 late. For Fast Learning, Authority, Certain Knowledge, and Impatience, these values were 0.75 and 0.73. (0.72, 0.74). (.63, .65) The total measurement reliabilities were 0.85 for the early test administration and 0.81 for the later test administration later in the semester.

Collection of Beliefs About Writing

The White and Bruning (2001) measure, created to gauge people's perceptions about the purpose of writing, was updated into this 11-item survey. The goal of the test was to look at how participants perceived the value of writing. The tool used questions using a Likert-type scale of 5 points, with 1 meaning strongly disagreeing and 5 denoting strongly agreeing, to allow respondents to express their degree of agreement with the proposition. A good grade suggested that the writer had a product-focused writing strategy and that they believed writing should be affected by authority. I concluded that the initial results did not represent the two-factor structure that had been developed in earlier research after performing a pilot study of the original WBI with around 150 rhetoric and writing students during the previous semester (White & Bruning, 2001; 2005; Mateos et al., 2011) I altered the scale by include items that assessed attitudes pertinent to rhetorical writing in order to address the issue of inconsistent factor loadings. A scale of one to five was used to assess these opinions. Three extremely seasoned rhetoric and writing professors helped with the revisions, and I also based them on discussions I had with my students during class. Appendix B contains the original White and

Bruning (2005) scale and these updated portions. I used the most recent version of the questionnaire and then used principal component analysis with an oblique rotation to analyze the modified writing beliefs inventory (Varimax). I repeated the analysis and extracted the three variables since the scree plot appeared to suggest that there were three variables to take into account. The sentence "A primary objective of writing should be to have to make as minimum adjustments as feasible" was removed from the text because it included a cross-loading error. The dependability coefficients for the three extracted components varied.70 to.75 with a total Cronbach's alpha of.71. This resulted in an overall Cronbach's alpha of.71. The Writing Beliefs Inventory results from the early and late semester administrations are compared, and their corresponding factor loadings are presented in Appendix B.

Writing as a product had dependability values of 0.72 for early delivery and 0.70 for late delivery. Writing that was authority-based had reliability coefficients of 0.79 and 0.75. Writing that was intended to avoid conflict had reliability coefficients of 0.75. Early in the research, writing was assessed as a product, and later on, it was assessed as an action based on authority (.78, .74). The total measurement reliabilities were 0.85 for the early test administration and 0.81 for the later test administration later in the semester.

I visited each of the 13 Writ 101 sections that had agreed to participate during the third week of the 16-week semester, went through informed consent, reviewed the study procedures, and handed them the first survey. These visits occurred in the middle of the lesson, but the teachers left the room at this point so order to prevent them from being able to identify which students had consented to take part in the exercise. In the fifteenth week of the semester, I returned to repeat the process and distribute the surveys to the participants.

2.3 Findings

The evolution of philosophical and literary ideas across time.

By comparing the early and late semester Pearson correlation coefficients within measurements, it was possible to discover the connections between epistemological stances and writing views (Table 1). For example, the Schommer's Epistemological Beliefs Questionnaire's subscales showed statistically significant associations in both the early and the

late administrations. Additionally, in the early and late administrations of the survey throughout the semester, there was a substantial correlation between each Writing Beliefs subscale.

Significant early-semester relationships were discovered for the majority of items on both the Writing Belief and the Epistemological Belief subscales. For instance, the findings from each knowledge belief subscale showed a significant relationship between the notion of writing as a product and the student's perceptions of learning as occurring quickly, authority as being all-knowing, knowledge as being certain, and their low tolerance for ambiguous information. Additionally, there was a significant association between early semester EBQ scores and the notion that writing should avoid conflict (.18-.29). Additionally, students who felt writing should be used to report authorities' opinions were more inclined to believe in certain knowing (.13), omniscient authority (.20), and frustration with ambiguous knowledge (.20). Our conclusion from this is that writing should be utilized to report authority' opinions.

None of the other subscales exhibited an association that was even marginally significant with how individuals regard writing as a product towards the end of the semester. The striking change in students' attitudes regarding product-focused writing from the start to the conclusion of the semester, which is covered in more detail in the next section of the study's discussion, may help explain this. First, the students believe that writing should steer clear of issues. In contrast to impatience with ambiguous information, this perspective was substantially linked with quick learning (.15), omniscient authority (.21), and specialized knowledge beliefs (.23). Although it was no longer linked to quick learning and annoyance with unclear information, students' impression that the goal of writing is to transmit the opinions of authorities remained strongly connected with omniscient authority (.30) and particular knowledge beliefs (.24). Table 1 shows the Pearson correlations between the writing belief scales (wb) and the epistemological belief subscales (bbq).

Three groups of correlations are distinguished: stability indices on a diagonal, time one above, and time two below.

	EBQ FL	**EBQ OA**	**EBQ CK**	**EBQ IA**	**WB WP**	**WB WRA**	**WB WAD**	

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EBQ Fast Learning	-.11	.21*	.12*	.27*	.16*	-.02	.21*	
EBQ Omniscient Authority	.40*	-.19	.25*	.35*	.19*	.20*	.29*	
EBQ Certain Knowledge	.31*	.30*	-.05	.29*	.16*	.13*	.19*	
EQB Impatience with Ambiguity	.70*	.50*	.26*	.03	.28*	.20*	.27*	
WB Writing as Product	.03	.06	. 09	.09	.19	.03	.18*	
WB Writing Report Authority	.11	.30*	.24*	.24*	-.02	.05	.24*	
WB Writing Avoids Disagreement	.15*	.21*	.23*	.23*	.15*	.15*		.09
*$p < .05$								

Measuring change in beliefs across the semester.

I performed a repeated-measures multivariate analysis of variance (MANOVA) on students' early- and late-semester scores on the EBQ and WBI subscales to see if their scores on the epistemic beliefs scale had changed over the semester.

Two of the epistemological belief subscales, Fast Learning (F(1, 163) = 216.86, p .01) and Certain Knowledge (F(1, 163) = 165.39, p .01), showed a substantial decline from early to late semester. Other subscales, such as Authority and Impatience, did not significantly change students' ratings throughout the semester. Table 2 lists the means and standard deviations.

Recall that the EBQ scores range from high to low, with high scores indicating a more absolutist epistemology and low levels indicating a notion of contingent knowledge, challenging authority, and flexible learning. Writing as a Product (F(1, 163 = 6.80, p.01) and Writing should Avoid

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Disagreement (F(1, 163 = 8.10, p.01) were found to have undergone a substantial change according to the modified Writing Beliefs Inventory findings. Remember that Writing should avoid conflict and that a high score implies a perspective of writing as a process. Over the semester, students' perceptions of the primarily product-based nature of Writing shifted, as seen by post-test results showing an acceptance of revision as a necessary component of the process and a perspective on writing as audience communication. In addition, the way that students now view disputes and the need to include other viewpoints in their Writing was altered, which was also crucial. Late in the semester, students were more inclined to mention disputes and different viewpoints in Writing.

Table 2 shows the findings of a multivariate analysis of the early and late EBQ and WBI subscales.

Fast Learning*	3.9	3.3	25.23	216.86	.00	.57
	(.40)	(.30)				
Authority	3.0	3.0	.07	.32	.57	.00
	(.40)	(.40)				
Certain Knowledge*	3.6	3.0	23.69	165.39	.00	.51
	(.40)	(.40)				
Impatience	3.3	3.2	.53	2.49	.12	.02
	(.40)	(.40)				
Writing Beliefs Inventory						
Writing as a product*	1.50	1.38	1.08	6.80	.01	.04
	(.62)	(.67)				
Writing as authority-based	2.65	2.64	.00	.01	.93	.00
	(.82)	(.76)				

Writing should avoid disagreement*	2.62	2.43	2.96	8.10	.01	.05
	(.86)	(.90)				
* p < .01						

Over the semester, there was little change in the ratings that students gave at the beginning of the semester to indicate how they felt about how authorities' opinions appeared on their work. The three questions on the "Report Authority" scale were created to gauge the degree to which students believed that effective writing required properly capturing the opinions of subject matter experts and using direct quotations in one's writing. The use of sources, correct citation style, and avoiding distorting facts by using logical fallacies like erecting a straw man were heavily stressed in Writ 101. However, the students were expected to take ownership of their learning. Citation conventions and proper source usage were certainly stressed in class, but it is also plausible that this inhibited the students' sense of ownership and appropriation of their work.

3. In the second section of the lecture, we will examine how the students' final papers and epistemological stances relate to one another.

This portion of the study aimed to assess the relationship between students' rhetorical composition performance and their writing and epistemological viewpoints. The researchers were particularly interested in the kids' performance. When contrasting this procedure with the paragraph-writing tasks from earlier experiments, a change in strategy may be noted. These tasks were developed due to participants' participation in research (Kardash & Scholes, 1996; Mason & Boscolo, 2004; Mateos et al., 2011; Schommer, 1990). Eighty-one freshmen papers were randomly selected from a larger sample, scored, and included in the research after writing performance data from the student's final course papers were gathered. This increased the overall number of research publications to 198.

3.1 Approach

The data comes from the same measures and context utilized in the first portion of the study, plus the final course paper.

composing persuasive papers and essays

The students had to write a "Proposal Argument" between 5 and 7 pages as their final project for the course. They had to independently research a topic of their choice for this particular paper, cite at least five reliable sources, and provide a solution for a specific audience. For instance, one student asked for more nutrient-dense supper options in the on-campus dorm cafeteria in a letter to the university's head of the food division. Each one of the rhetorical ideas and techniques the students had studied during the semester was to be used in the proposal paper. Students had to submit a rough draft of their work at least two weeks before the due date to get feedback, and then they had to rework it and submit it as their final product. This was done to make the writing process model stand out more. Only the finished versions of the suggested arguments were gathered for this investigation. Eighty-one first-year papers were evaluated using a Charney-developed grading scale (2004). There are ten separate parts to this rubric, which are listed in Table 3.

Five professors, a Ph.D. candidate with a cumulative teaching experience of at least five academic years, made up the pool of raters. They participated in a two-hour norming session using the detailed scoring guide extensively. This manual had an extract in Appendix C and described the characteristics of each category at each of the five levels. Each paper's 10 separate parts were graded using a process called "blind scoring." This indicates that the raters were unaware of the student's scores on the writing belief and epistemological belief scales and their access to the student's personally identifiable information. Two raters graded each paper. Excellent levels of consensus were reached among raters on a given topic, ranging from 87 to 96 percent overall. The evaluations for each component were averaged when it was established that there was a high degree of reliability between the two raters.

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Table 3 lists the 10 elements of the scoring rubric.

Component	Description *To what extent does the writer:*	Mean (SD)
Exigence	Motivate the reader to keep reading? Demonstrate the scope and context of the problem? Take on a clear and arguable position about the position/controversy?	3.68 (1.08)
Audience Awareness	Address a specific audience in an appropriate, persuasive way? Demonstrate awareness of an audience or readers?	2.33 (1.08)
Logic	Make a clear claim and use reasons and evidence to support claims?	3.51 (.97)
Avoid Certitude and Generalizations	Does the writer come across as fair-minded? Does the writer qualify statements and acknowledge uncertainty in the proposal, or come across as narrow-minded?	3.22 (1.24)
Source Integration	Maintain control of the argument while leveraging sources to support it?	3.22 (1.24)
Counterargument	State, acknowledge, consider, and fairly represent the opposition?	2.91 (1.26)
Rebuttal	Respond to opposing arguments in a clear, reasonable way that demonstrates understanding?	2.93 (1.25)
Organization	Organize paragraphs in a readable, follow-able, consistent way that is free of tangents?	3.56 (1.03)
Source Quality	Select references from reputable sources such as the library databases and news sources? (versus general web searches and Wiki)	3.97 (1.08)
Clarity and Word Choice	Use language that is appropriate and clear in a way that makes it easy to follow the writer's ideas?	4.00 (.85)

Data reduction procedures for paper components

I chose to do component analysis (also known as Principal Component Analysis or Varimax rotation) on the 10 parts of the work after the papers had been assessed and the rater dependability was found to be satisfactory. The quality of the sources was a factor that made it challenging to organize the variables, and it could be claimed that it differs from the other criteria since it may be the consequence of teachers' guidelines for what makes for good sources. As a result, I conducted the study again, omitting the "source quality" variable this time. The resulting screen map showed a two-factor solution, but their cross-loading continued even when Exigence, Logic, and Source Interpretation/Integration were gradually eliminated from the study. This was true even though the screen map predicted a two-factor solution. As a result, I

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eliminated the cross-loading elements and developed an explanation based on only two variables that could explain 73 percent of the variation. The "Contingency" component deals with audience awareness, avoiding certainty, counterargument, and rebuttal, while the "Clarity" component handles organization and word choice. "Contingency" has an alpha coefficient of 0.86. .70 is the alpha coefficient. Table 4 is a list of the factor loadings.

Table 4. Factor loadings for paper components

Component	**Contingency**	**Clarity**
Audience Awareness	.31	-.10
Avoid Certainty	.33	14
Counterargument	.40	-.14
Rebuttal	38	-10
Organization	-.18	.63
Word Choice	-11	56
Mean (SD)	*3.16 (1.16)*	*3.87 (.90)*

The means for the two factors were calculated by directly averaging the component ratings included in each factor after the paper components were reduced to two basic factors. After the paper components were taken out, this was carried out. The results of the belief scale scores of the first-year students were then compared to the means of the paper parts. Since they were closer to when the students completed their final papers, the ratings from the later portion of the semester were given precedence over the ratings from the early semester on the belief scale. In other words, the last month of the semester, which was considerably closer to the time the late-semester scale was given, was when students were obliged to write their proposal papers.

Table 5 displays the relationships between the main paper components and the belief subconstructs. We found that the Writing Belief subscales and the Contingency paper component had a statistically significant adverse relationship. This shows that students were more likely to be the writers of papers that received lower grades on the Contingency component of their course papers if their beliefs reflected writing as a product, the aim of writing as to report authority, and the concept that effective writing should avoid controversy. The aggregate grades of these pupils' papers were likewise lower. In other words, there was a substantial correlation between the students' writing beliefs and how well they could incorporate contingent information into their writing.

Table 5: Correlations between the article's major elements and the overall belief scale scores

Belief measure subconstruct	Contingency	Clarity
EBQ Fast Learning	.03	-.15
EBQ Omniscient Authority	-.13	-.18
EBQ Certain Knowledge	-.08	-.11
EQB Impatience with Ambiguity	-.01	-.17
WB Writing as Product	-.35*	-.08
WB Writing Report Authority	-.30*	-.29*
WB Writing Avoids Disagreement	-.32*	-.19
* $p <. 01$		

The relevance of the Clarity component of the paper, which includes both the document's structure and word choice, is illustrated by the substantial relationship between the idea that writing should reflect authority's thinking and clarity of prose. Students' compositions tended to be less well-organized and less intelligible when they were taught that writing should be used to report the opinions of people in authority. There was no direct correlation between the results on the knowledge or belief questions and the paper's components.

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4. Linking the goals of rhetorical writing and attitudes toward writing

The results of part two of the study revealed a statistically significant relationship between the "Contingency" element of students' papers and each of the three Writing Beliefs subscales. The quality of the article's counterargument and rebuttal is one of these subscales, along with audience awareness and avoiding certainty. When responding to the "Contingency" feature, students were likelier to create papers of lower quality if they believed that writing was a commodity, that writing served to convey the views of authority, or that writing avoided confrontation. Conversely, students with a more positive viewpoint on writing considered it a tool for knowledge production. They saw it as a way to recognize and examine disagreement and were more likely to produce papers that were better at articulating contingent knowledge.

The next section may find an extract from students' proposals in their final course papers. By reading this, you can better grasp how various writing attitudes could manifest in students' writing performance. I chose first-year student papers with Writing Belief subscale values at least one standard deviation above or below the mean for this qualitative research methodology. Avoiding certainty, counterarguments and rebuttals, and audience awareness are the "Contingency Paper Factor" components around which the discussion of these students' papers is structured.

4.1 Opposing Claims and Rebuttals

Counterargument negotiation, one of the most crucial rhetorical techniques, makes authors seem more trustworthy by creating the idea that they are fair and reasonable. Students were urged to handle opposing viewpoints by providing counterarguments and rebuttals in their writing as part of the proposal paper assignment. In response to the request, this was completed. Writing Beliefs subscale scores for Andrew, a first-year journalism major, showed a process-oriented (1.25), interactive (1.53), and not opposed to acknowledging disagreement perspective on writing. Andrew's paper received a high score on the paper's "Contingency" factor (4.21) but had lower scores on the Writing Beliefs subscales (1.32). The following is an example of his excellent use of rebuttals and counterarguments, both of which are expressed in italics:

Hatch and others opposed to flag burning must understand that burning the American flag is rarely done for amusement. Most of the time, it is a declaration that's made under extreme pressure, especially when the protestor in question feels that his or her rights have been violated and needs some public platform... With God's help, I will never disrespect the American flag because I cannot fathom why someone would feel the need to do so. On the other hand, there are certain individuals whose circumstances are frequently so dire that it does not seem appropriate to communicate in any other way... It is unquestionably true that the causes for which individuals fought in the 18th century were far more significant. However, now that we have rejected Imperial England's policies, we have the freedom to express our disapproval of the key policies of our government.

In his statement, Andrew acknowledged that flag burning is a radical and perhaps disrespectful method of protest. He stressed his disgust with the practice, joined potential opponents, and highlighted the conditions that must be followed for people to participate in this type of protest, emphasizing the right to free speech. He joined any possible rivals as well. The result is a response to opposing points of view that is both logical and convincing.

Paul, a different first-year student, performed higher on the Writing Beliefs tests. His findings showed that he had a writing viewpoint that was more product-focused (2.07), as well as the belief that writing is utilized to report the opinions of authority persons (3.64). When writing on child soldiers in Uganda, Paul used less precise material with generalizations, references, and sources. Although he included a lot of background material on the subject, he only used one sentence to make his argument for action, saying that "educating youngsters might be the first of several steps the world can do to assist ease the anguish of the innocent children." He did not make a case for action using the background knowledge. Although some believe education is important for kids, they also believe it does not guarantee their daily security. The author of his study never touched upon this topic.

Regarding the paper's contingency factor, Paul received a 2.25. Like Paul, other students who received lower marks on the counterargument, rebuttal, and avoiding certainty paper appeared to have difficulty formulating a specific plan of action and instead concentrated on other professionals' background information and opinions. Since it felt like these students were trying to box themselves in, it was challenging to think of arguments opposing their opinions. These

pupils missed opportunities even to be aware of competing ideas because they automatically reverted to the information transfer mode.

4.2 Avoid making broad generalizations or claims of ultimate truth.

Cassie submitted a paper with a low grade on the overall contingency factor since she is unsure if she wants to pursue a Liberal Arts degree (1.72). Additionally, she earned a failing score for steering clear of certainties and generalizations (1.72). (2.92). Her corpus of work reflects her writing goals, which include a desire for writing that avoids controversial subjects and recalls the opinions of those in positions of authority (3.47). (3.52). She made many assumptions that almost border on being offensive when she stated that officials in charge of college admissions should give SAT scores less weight when making admissions choices. By citing her sources and making claims that implied conclusions that did not necessarily follow from the information she had provided, Cassie suggested that she was having trouble constructing her argument:

People who oppose the SAT typically belong to underrepresented groups and come from lower socioeconomic levels. The percentage of black early childhood children who need daycare and educational programs was the greatest of any race, per the information gathered by the National Center for Education Statistics in 2001. They represented 64% of the total (Source 1). They are born into disadvantaged and impoverished conditions, and their high school education is insufficient to prepare them for a test of this kind. Because a sizable portion of minorities cannot afford the $26 test price, they are underrepresented at several national universities (Source 1). Minorities in the US have challenges while taking the SAT because the application process is too costly, and the subject matter is perceived as being too challenging.

Cassie misinterpreted the data given by several of her sources when seeking to show the links between racial inequality, poverty, and accessibility to higher education. As a direct result, her conclusions were overly broad and simplistic.

Successful students presented their thoughts and the ideas from their sources as reasonable but unproven. They steered clear of making either absolute or general claims. Business major Rachel's writing belief scores indicate that she has a procedural perspective on writing (1.48) and a viewpoint on writing that recognizes debate (1.05). She completed work that received a 4.50 out of 5 on the avoidance of certainty scale and a 3 out of 5 on the contingency scale (3.78). In

her essay, she used reliable sources, such as scientific research, to back up her case for limiting the length of time that kids are exposed to food advertisements: We must first identify the flaws in the present marketing framework before we can start to address the problem of properly communicating with youngsters. The first thing that could be seen is a situation where kids spend too much time unwinding after school. In order to demonstrate the important connection between children's TV viewing habits and their desire to eat, a case study involving 700 kids aged 10 to 15 was carried out. The research revealed that eating while watching television was one of the key factors in the children's selectively increasing weight. Even if the statistics cannot be trusted, it is quite probable that seeing food advertising or promotions on a children's television channel led to increased food intake (Source 1) The writing style of David, a biology student who advocated in favour of directing funding toward stem-cell research, stands in stark contrast to Rachel's paper. According to David's study, it should not be surprising that the government should support attempts to create biological clones. I cannot imagine how science could ever advance without it. It is common knowledge that the government funds researchers looking for new medications. David's low scores on the paper contingency factor (2.0) and the avoiding certainty paper component (2.0) on the writing belief scales show that he thinks writing should convey authoritative viewpoints (4.16). (2.14).

4.3 Attracting many people in

The purpose of this essay component, which was also a component of the "Contingency" paper element, was to evaluate the degree to which the students' articles fit the interests and concerns of a target audience. This evaluation was done in conjunction with the "Contingency" paper element. Although the standard assignment question emphasizes selecting and appealing to a particular target audience, each of the 81 papers submitted by first-year students received an average of 2.33. (1.08). This was the outcome of the test that measured "audience awareness." When composing a sizeable section of the pieces, a substantial amount of thought was given to a very large population.

Ben's letter to the principal of his public school, in which he advocated against mandating steroid testing for high school sports, is an example of an audience-aware proposal. In his letter, Ben urged the principal not to require such testing. A reference to Ben's letter illustrates how audience awareness is exhibited in the proposal. Ben exhibited an awareness of the writing process (1.12

on the Writing Beliefs scale) and acknowledged various writing ideologies (1.32). Regarding the argument, he was given an uncharacteristically high score of 4.56 on the contingency factor. His article was a particularly effective illustration of audience awareness because he identified a particular audience, referenced this audience's concerns in cost and viability, and drew on common knowledge of previous championships and elections in the town. His article was a particularly effective illustration of audience awareness. All of these different aspects had a role in determining the overall usefulness of the work. These characteristics are emphasized in the next portion of his work, which is written in italics for clarity. As a direct consequence of this, Ben was able to cultivate positive relationships with both the superintendent and the board of trustees of the school:

To all of the members of the School Board, as well as Superintendent Webber:

I will be the first to say that I struggled with addiction for the entirety of my time in high school. I excelled academically across the board and was quite active in extracurricular activities. I was almost obsessively interested in those things. During my four years at Laughton High School, I participated in many extracurricular activities, such as tennis, soccer, track and field, cross country, music, chemistry, UIL number sense, and team math. I also engaged in all of these activities. In two of those instances, we finished in the first place, which was more than enough to earn us the title of state champions. On the other two occasions, we came in second place.

What a remarkable feat this is! Twenty males were in our group, and none of us used steroids. If we required additional muscle, the weight room was available to us. Why would we subject ourselves to the possibility of being harmed by anything if doing so would put a damper on our prospects of winning the state championship? Dr. Webber, in your professional opinion, which of the following explanations do you think is the most reasonable for why the students in the Central Independent School District are being subjected to the examinations? I merely request that you and the other board members consider it carefully before taking any action. The price of each steroid test is one hundred dollars. The first point of reference When we take a deeper look at our country's current educational system, I believe you will agree with me that this is a topic that is quite fascinating to discuss. Where can we get the money to keep on with this project if we want to see it through? Even though we just finished building a brand-new elementary school a year ago, we are already encountering problems due to budget constraints. You should not

expect the municipality to foot the bill for the drug tests either. Exactly where is that brand-new location where live art performances are being held? Oh, I get it. Even though the federal government was going to pay for the building, the local municipality opted not to go forward with it.

However, even when students talked to an audience on a topic relevant to their own lives and experiences, the audience was not always persuaded by their arguments, nor were their ideas always favourably received. For example, Gabe, an engineering student in his first year, sent a letter to his superintendent. The aspects of Gabe's message that are underlined below clearly addressed this audience. In addition to that, he highlighted this audience in particular. His scores on the Writing Belief scales indicate that Gabe's worldview is centred on the product (2.11), and he writes to communicate the viewpoints of highly regarded persons (3.52). Because his strategy had a "Contingency" component, he was penalized with a lower score (2.51).

This recommendation comes from Gabe Smith, who attended Graff High School and is in Director Herrington's best interests.

The purpose of this conversation is to investigate any remarks regarding the dress code that may not receive adequate consideration.

The following is a complete sentence: Dr. Herrington, as the school district's leader, you have the authority to alter the educational system in any way you see appropriate. However, I am concerned that this authority is increasingly being used to restrict the freedoms of students. Because of this, children cannot express themselves freely, and you and the school board must be made aware that our students require a higher level of recognition and an increase in their level of personal responsibility. This letter, which I am writing to each of you to encourage change, is being written with some predetermined notions regarding the topic. You should all be aware that making students wear certain colours to school will not substantially impact how they view their own personal life, despite the fact that you could require them to do so. This method of controlling gang violence has only successfully prevented it from occurring in educational settings.

Even though writing the essay in the form of a letter did not guarantee that the argument would be more audience-aware, it might have helped the student contextualize the assignment and

develop the appropriate appeals if they were very familiar with both the audience and the topic (one's high school administration policies). Even though writing the essay in the form of a letter did not ensure that the argument would be more audience-aware. In the following example, the student writes for an audience that is not specifically specified and may not even exist. The author, Steve, has spent his first year at college working for a degree in biology. He received a low score on the contingency component of his work and had a product-focused (2.43 on the writing belief scale) and disagreement-avoidant (2.84 on the scale) writing philosophy (2.65). Within the context of his plan, he advocated for a stricter regulatory framework for bioengineered crops to be implemented by the government. On the other hand, the article's content and the audience it was directed toward hinted at an approach that was more in line with a research study. Because he did not identify an audience in his paper and did not even hint that there was one, his "Dear Organization" section appeared to be an afterthought that was inserted in order to fulfill the requirement of the assignment to address an audience:

On behalf of the Biotechnology Industry Organization, we would like to express our warmest greetings to you today.

The evolution of biotechnology has led to the invention of a ground-breaking approach to the production of commodities. This method exceeds prior methods in terms of its capacity to create a greater output and efficiency. On the other hand, the use of biotechnology in agricultural settings is a major cause for concern. Because they were, in a way, manufactured on purpose by man, many people are skeptical about whether or not it is genuinely safe to consume them. Although it is not impossible, further research and effort need to be put into this project to succeed. Compared to other countries, which utilize less than 18 percent of their land for agricultural purposes, the United States is the world leader in bioengineered agriculture since it uses 72 percent of its total land area for agricultural purposes.

Steve then elaborates on the topic and outlines agricultural genetic engineering. His intended audience, the "Biotechnology Organization," is probably already aware of this information.

From Steve's research, two key lessons may be applied to the great majority of the works with lower audience awareness scores. First, while talking to an institution that lacked a name and a face rather than a real person, authors surely found it challenging to envision and connect with their audience. They found it challenging to engage their audience as a result. Second, while

audience awareness issues may be the consequence of targeting an overly broad audience, students may mistakenly perceive their audience's interests and prior knowledge, leading to fewer or wrong appeals. If Steve had reevaluated and changed it to include a group of concerned citizens or a Congressional representative interested in agricultural technology, the degree of prior knowledge he intended his reader to possess could have been more reasonable.

5. The Investigation's Importance

This study aimed to investigate the linkages between first-year students' writing and knowledge beliefs and how those beliefs affected the participants' writing. At the same time, they were enrolled in a composition course. First-year writing courses are described as "public photo forums" by Eberly (1999) because they provide students with the chance to start taking part in larger discussions about the policies that affect their daily lives. Therefore, it is advised for students to view communication as a succession of statements and debatable claims and a dialogue between the speaker and the listener (Bizzell, 1997; Hairston, 1997; Berlin, 1988). This type of environment was well suited for a study of epistemological and writing beliefs because rhetorical writing encourages consideration of the audience and alternative perspectives (Yancey, 2001), which on the surface, would seem to encourage epistemological growth and shifts in beliefs about writing. Instead, the study discovered that rhetorical writing fosters epistemic development and changes in writing-related attitudes.

5.1 Belief alterations

Over just one academic semester, students' perspectives regarding specialized information and speedy learning underwent major shifts, which was a complete surprise. Longitudinal and cross-sectional studies have been conducted in the past to investigate various epistemological points of view. Based on the findings of these experiments, it appears that knowledge and learning beliefs may shift slowly, albeit slowly. The glacial pace at which the opinions of college students develop over multiple semesters and academic years is shed light on by studies that monitor participants over time, such as those conducted by Magolda (1992). In a cross-sectional study, similar educational-level trends have been identified, with considerable epistemic variances across college students in various academic years (Schommer, 1990; Schommer, Crouse, &

Rodes, 1992; Schommer, 1993; Schommer, 1998; 2004; Schommer-Aikins & Easter, 2006). In 1994, King and Kitchener conducted a survey using a cross-sectional design. They received responses from more than a thousand students enrolled in non-college, junior college, and university programs. By clicking here, you may read their findings, which demonstrated disparities not just between single semesters but also between whole school years. The findings of these researchers, when taken as a whole, offer insight into how undergraduate students' perspectives on the nature and consistency of knowledge have been gradually shifting over +the course of time.

The present investigation found that the first-year students' epistemological notions on the subject of rapid learning and certain knowledge had experienced a significant shift that was not anticipated. These are the two subscales included in the epistemic views questionnaire. This shift might be the consequence of how the content in Writing 101 is structured, which is a factor that has a significant impact (a partial eta squared value of.57 for rapid learning and.51 for definite knowledge). The course focuses on contemporary aspects of popular culture that may be understood by a diverse range of individuals, such as the culture around food and beverages, music, heroes and superheroes, sports, and other topics pertinent to the field. In addition, students are instructed in constructing and evaluating arguments and identifying rhetorical characteristics such as exigence, audience, and boundaries (Bitzer, 1999). The students in their first year of college may have experienced a profound shift in their epistemology due to the material covered in the class, the model of the writing process presented, and the continual reminder that everything can be reduced to an argument. Students were expected to be able to articulate the significance of setting about the comprehension of a text as one of the primary goals of the Writing 101 course. Particularly, the concept of conditional meaning was emphasized throughout the entirety of the various levels of the course. The students were given the assignment of writing an essay in which they were to explore the significance of context. Because the current study's design did not include a control group, it is impossible to ascribe the students' shifting attitudes on the subject matter to their level of self-assurance in their knowledge and capacity to acquire the content rapidly. However, this class component and its consequences for epistemic growth need to be further studied using a study design that includes a sample of students who are not currently enrolled in the Writ 101 class.

According to studies done in the past utilizing a control group, there is a connection between

epistemic progress and certain teaching methodologies. According to research by Kienhues, Bromme, and Stahl (2008), students at German universities who received "refutational epistemological training" had a greater shift in their advanced epistemological views than those who just got informational instruction. No of the pupils' prior epistemological training was the case. According to the results, epistemologically "naive" students who got an education that involved reading texts presented as two conflicting arguments saw a higher change in epistemology than their classmates who just received informational teaching. This was true even after accounting for the pupils' prior understanding of the instruction's subject matter (DNA fingerprinting). Like this, the course material for Writ 101 urged students to evaluate various opposing viewpoints on contentious issues. This prerequisite required reading about several, sometimes opposing, points of view on important subjects (e.g. environmental conservation, the fast food industry, standardized testing, the US role abroad). Students were required to create works that directly addressed audience members who might not share their point of view and comprehend the reasons for other points of view. The coursework for Writ 101 may parallel cognitive work similar to this since "refutational instruction" by Kienhues, and colleagues (2008) showed that specific types of instruction can change students' beliefs toward a more contingent view of knowledge and an understanding of learning as a slow process.

5.2 The relationships between one's belief in their writing skills and the epistemic indicators of their paper grades

Researchers discovered that there were typically substantial correlations between students' early and late semester perceptions of their writing and knowledge in the study that is the subject of this article. That is to say, during the administrations of both surveys, a significant correlation was established between the majority of the subscales on the modified Writing Beliefs Inventory (WBI) and the Epistemological Beliefs Questionnaire (EBQ). Late in the semester, however, the students' much reduced epistemological beliefs about the rate at which they gained knowledge and certainty, as well as their writing beliefs about writing as a product and the avoidance of dispute, changed the nature of the link. The students' epistemological and writing views underwent considerable modification, which caused a shift in the correlation's nature (Table 2). The EBQ subscales remained closely related to one another after receiving both treatments. The perception of writing as a product based on the Writing Belief scale and the EBQ subscales showed a moderately strong but significant link at the start of the semester. In terms of their

capacity to see writing as a finished work, the student's test scores dramatically increased after completing Writ 101, a course highlighting the significance of a process model of writing. As the semester went on, it is possible that there was no longer a strong correlation between these two subscales as a result of this change, in addition to the significant drop in students' epistemological beliefs regarding specific knowledge. This may have been the case due to the shift and the students' declining epistemological perspectives on specific knowledge.

The students' underlying epistemological views, as determined by the Epistemological Views Questionnaire, did not significantly correlate with any component of their persuasive writing. These results are consistent with those of Mateos and colleagues (2011), who discovered that students' argumentative writing was not significantly influenced by their epistemological viewpoints. It has been demonstrated in past research with undergraduate students that there is a strong relationship between the calibre of the students' conclusion paragraphs and the epistemological ideas they hold (Kardash & Scholes, 1996; Mason & Boscolo, 2004; Schommer, 1993b). One of the objectives of the current study was to gather "actual" artifacts from the student's coursework, and one method to do this was not by asking them to write particularly for the study. The assignment question remained the same throughout the course, despite efforts to standardize the scoring of these papers by using a rubric (Appendix C) and scorer training. Despite this, there was undoubtedly a significant amount of error variation in the student-submitted articles. The way the common assignment question was introduced and supported in the classroom and how much help students received with their research methods and their interest in the subject probably differed from one instructor to the next. The Writ 101 proposal project provided many chances for variance in how the students handled the topic, even if the actual work was the same for all students. Due to the variety of themes, source quality, feedback forms, and student excitement for the project, the link between writing performance and beliefs may become murky. Previous studies have shown a connection between one's epistemological beliefs, the force of their arguments, and how interesting the subject is (Mason & Boscolo, 2004). This implies that any study utilizing course-based writing should assess students' enthusiasm for the topics they are writing about and consider the support they receive from instructors and outside research. Future work could potentially seek to provide students with a more regulated writing job by limiting the number of instructors supporting the project, its topic, or the resources students may use for the writing assignment, following the framework of earlier research. This would be

in line with the desire to provide pupils with a writing assignment that is more tightly controlled.

It is conceivable that a link between the students' epistemological viewpoints and their overall writing performance in the course, which was assessed using various artifacts, may have been made. This connection could also apply to general academic achievement. Such results would support the theory that an association between children's grades and their epistemological beliefs, as measured by the EBQ (Schommer, 1993a; Schommer, 2002; Schommer, Crouse, & Rhodes, 1992; Schommer & Dunnell, 1994). More specifically, the subscale that assesses students' perceptions of the certainty of information has been linked to academic success among high school and college students (Trautwein & Ludtke, 2007).

The Writing Beliefs in a new format The EBI did not significantly correlate with any of the proposal document's constituent parts. On the other hand, inventory subconstructs had a close relationship with every element of the contingency paper. Remember that the article's dependent elements included audience considerations, avoiding certainty, a counterargument, and a response (Table 4). as a result, the pupils' paper scored The degree to which they felt writing is a product, that writing serves to report authority, and that successful writing avoids controversy, the degree of contingency was lower. The results of Mateos and colleagues (2011) do not conclusively show that task beliefs and writing performance have a substantial connection. While they did not discover any correlation between reading beliefs and performance on other tasks, these researchers discovered a strong correlation between university students' reading beliefs and their writing skills. However, remember that the WBI component structure did not perfectly replicate White and Bruning's first work with the scale in pilot research that served as the foundation for our current analysis. Remembering this knowledge is crucial. Based on the findings of focus groups, I included questions that directly addressed students' viewpoints on rhetorical writing (Appendix B). The fact that I modified numerous WBI questions and linked them with the particular purpose of rhetorical writing may have impacted the updated WBI's finding that there is a significant correlation between students' rhetorical writing quality and their opinions on contingency in writing. The new WBI discovered this connection. To put it another way, it is possible that the new items were used to evaluate students' perceptions about the thought processes they utilize while writing rhetorically.

5. 3 Audience awareness, epistemological development, and educational consequences

The current study's proposal paper scoring findings indicated that the students' proposals obtained insufficient scores on the audience component (2.33 on a scale of 5 points). However, audience awareness is essential to rhetorical writing education (Yancey, 2001). (2.33 on a 5-point scale). Although the Writ 101 assignment question emphasized audience and study of numerous ideas, students may have resorted to familiar genres, such as the "traditional" research paper that is popular in high school and college courses (Bean, 2011). The cultivation of students' audience awareness needs to be a component of the writing process included in rhetorical writing as a part of the instructional process. According to a study by Roen and Willey in 1988, first-year composition students saw considerable improvement in their essay scores when they modified their work while keeping the target audience in mind. According to McAlexander (1994), in order for authors to connect with and respond to their readers, it was essential for them to be able to assume roles and have the ability to perceive various points of view. In addition, he went into detail on how authors can demonstrate that they understand their audiences. She had the belief that authors who are "egocentric" (the term she used to identify such authors) are unable to or are unable to conceive of having a reader. As a result, they do not have a method for collecting feedback on their work. She used the term "egocentric" to characterize such authors. According to Alexander's assessment, " decentered " authors have a more reactive sense of self and are more receptive to imagined critique. Decentered authors are also more likely to be self-critical.

Despite criticism from composition instructors and scholars, the research paper paradigm is frequently used in writing training. Richard Larson (1982) argued that research papers are a "non-form of writing" and argued in favour of tasks emphasizing students' agency and control over their research processes. Larson published his critique in 1982. This occurred more than 25 years ago. The requirement that first-year students submit research papers was characterized by Davis and Shadle (2000) as an instance of academic hazing. They clarified that the goal of "freshman research writing" was "to attempt to impose a set of standards concerning the ownership of the known, as well as to introduce students to the previously known" (p.425). Research papers are an example of writing cut loose from its original context. They do not effectively educate students for critical and active involvement in civic life. Instead, in order to complete these writing projects, students are required to take into account the opinions of

purported "authorities" and "experts," which may prevent them from having the chance to expand their knowledge and writing horizons.

When teaching first-year composition, it may be difficult to strike a balance between encouraging students to take more nuanced viewpoints on texts and writing and placing a high focus on writing that is supported by research and argument. Finding this balance can be a challenge. Throughout the semester, the individuals who took part in the current study maintained the viewpoint that the objective of writing is to chronicle the perspectives of those who occupy authoritative positions. Information literacy was a significant component of the curriculum for Writ 101, just like it is in other first-year writing courses. This was accomplished by emphasizing how important it is to use trustworthy research sources and to use such sources as references throughout the recommended argument. This highlights how important it is to cite reliable sources, which may help to explain why students' perceptions of writing that represents the opinions of authorities have not changed over time. Students' perceptions of writing that represents the opinions of authorities have not changed over time.

There is a good chance that the "perfect storm" for epistemological development can be created by instructing students in a manner that requires them to take into account the perspectives of those who disagree with them, encourages them to investigate different kinds of arguments, and analyzes those arguments through written assignments and in-class discussions. When we teach our students this rhetorical approach to reading and writing, for example, in first-year composition, we frequently observe an improvement in both their capacity for critical thought and their capacity to perceive a diversity of viewpoints. This is one of the most rewarding aspects of our jobs as educators. More research is required if we will have a better understanding of how the design of courses and assignments influences the epistemic growth of students. Our understanding of the kind of academic tasks most likely to foster such improvement would be enhanced as a result.

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