



Examining the Impact of Creative Writing in the Agricultural Classroom

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Project Summary

Writing is an invaluable teaching tool, allowing students to incorporate, fortify, and apply the knowledge they gain in the classroom to real-world situations (Reaves et al., 1993; Roberts-Nkrumah, 2005). Unlike their contemporaries in the humanities, agriculture students tend to be wary of writing assignments, often preferring fact-based multiple-choice or true/false assessments; however, writing remains a crucial component of professional communication in agricultural businesses. Recognizing the dual importance of writing as a learning tool and as a professional-development necessity, Osborn et al. (2023) and others have developed the novel approach to incorporate creative writing into the science classroom. Following their lead, this research develops a semester-long, scaffolded creative-writing alternative to the conventional paper in a lower-division agricultural business course. To determine the efficacy of the assignment and its impacts on student learning and information retention, two treatments were run in separate semesters. In the first treatment, students randomly received one of two prompts – a traditional research paper or an open-ended creative writing assignment. In the second treatment, students were given a choice. For both treatments and both prompts, there were multiple benchmarks to keep students on track. Controlling for several key demographics and other variables, the group with the creative writing prompt in the first treatment did not perform statistically differently on the final exam than the group assigned to the conventional paper. The same holds for the second treatment, as well as for course grades. Initial student reaction to the project was tepid, but upon completion, student surveys indicated openness to this approach, as long as students had the option to select their treatment. The long-term objective is to encourage student engagement and facilitate deeper learning through the employment of more flexible methods and allowing students to take a more active role in their learning experience.

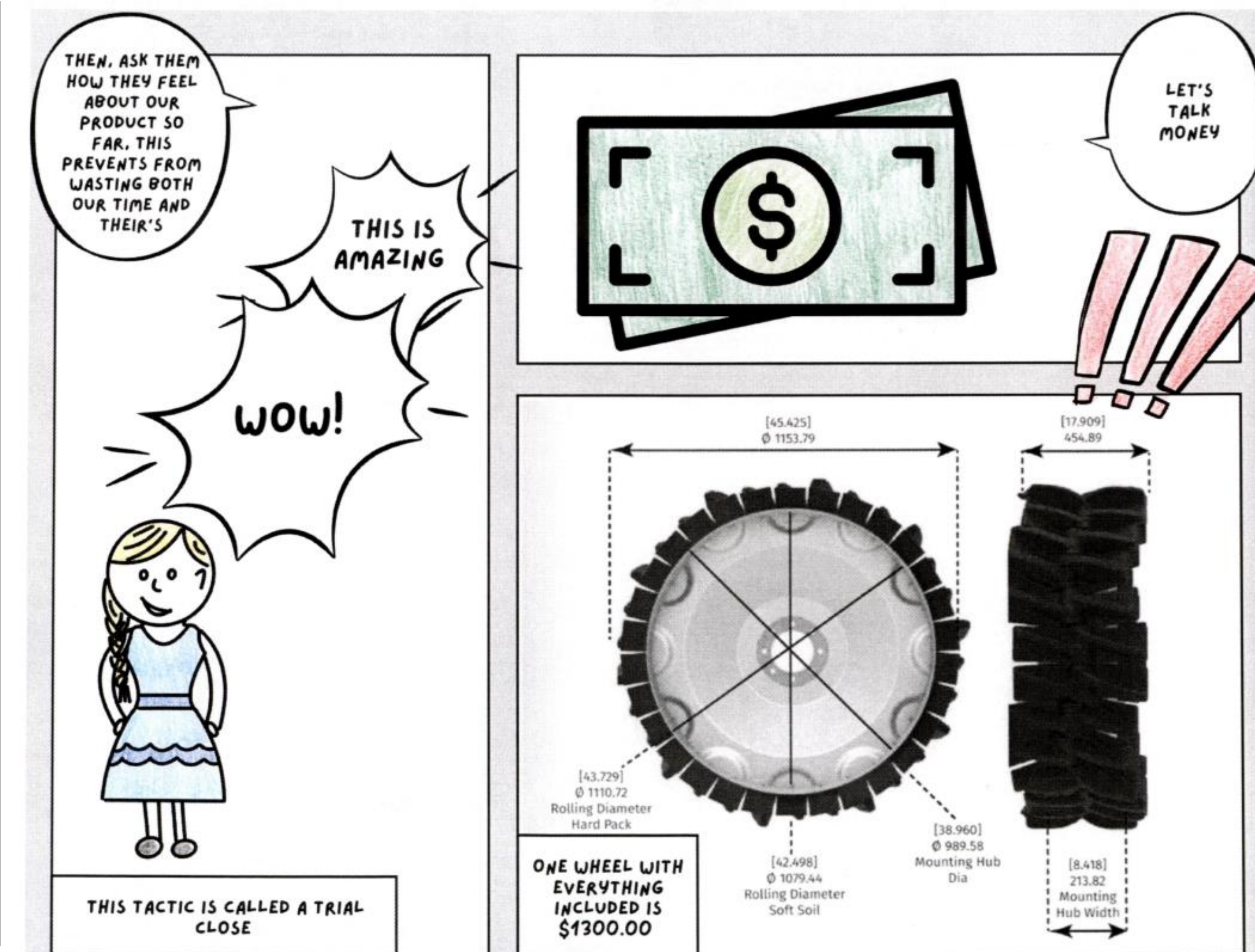


Figure 1. Comic book image from Spring 2024.



Motivation

- Writing and verbal communication are crucial components of any career in business, but aside from simply being a useful skill, writing is an intrinsically valuable teaching tool (Reaves, 1993).
- Students in agricultural disciplines tend to push back on writing assignments more than their counterparts in the humanities and other disciplines with heavy emphasis on verbal and non-applied components.

Research Objective

To reduce student trepidation and boost confidence in writing and communication by breaking down negative stigma and fostering creativity.

Methods

- Following (Osborn et al., 2023), a highly flexible, individual creative writing assignment was developed for use in an agricultural sales class.
- In Semester 1, the classroom was split into two groups randomly – half were assigned a traditional writing assignment (a guided “research” paper), and the others received the creative writing assignment.
- In Semester 2, students self-selected assignments.
- Each assignment had three benchmarks and a detailed rubric for grading, and students received timely feedback on each benchmark to make improvement on further drafts.

Key Takeaway: Students randomly selected into the creative writing assignment self-reported higher satisfaction and gains in knowledge, freedom of choice had negative impact on final exam scores.

Variable	Coefficient Est.	Std. Dev.
Creative Writing Dummy Variable	-0.0145	(0.029)
College GPA	0.0876**	(0.028)
Female	0.0471*	(0.024)
High School GPA	0.0237	(0.045)
Age	0.0099	(0.009)
Freedom of Choice	-0.0654**	(0.031)
Freedom of Choice, Chose Creative	0.0653	(0.049)
Understanding of Instructions	0.0090	(0.007)
Perceived Knowledge Gain	0.0123	(0.017)
Enjoyment of Assignment	-0.0006	(0.007)
Observations	73	
R-squared	0.4300	
F statistics	4.68	

Table 1. OLS regression showing impacts of demographics and personal assessments on final exam grades.

Further Examples



Comic 2



Dialogue



Story 1



Story 2

Results and Discussion

- A major complaint in Semester 1 involved students’ inability to choose between options (though many stated that they preferred not to choose); in Semester 2, 33.33% selected the creative writing option.
- Among students in the creative writing group, the majority selected a narrative-style paper, with a few choosing dialogues/podcast scripts or comics.
- *Ceteris paribus*, participation in the creative writing option – whether forced or chosen – had no statistically significant impact on final exam or course grades.
- When students had the option – regardless of their choice – they generally felt that their knowledge improved more based on having participated in the writing assignment, and their understanding and enjoyment of the assignment likewise positively impacted their perceived learning.

References

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- Reaves, R. R., Flowers, J. L., & Jewell, L. R. (1993). Effects of writing-to-learn activities on the content knowledge, retention, and attitudes of secondary vocational agriculture students. *Journal of Agricultural Education*, 34(3), 34-40.
- Roberts-Nkrumah, L. B. (2005). Using Writing to Promote Thinking in a First Year Agriculture Course. *NACTA Journal*, 49(3), 17-23. <http://www.jstor.org/stable/43765966>