

Digital Framework for Co-Creation: Using Google Docs for Collaborative Learning

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Introduction/Need for Innovation

The theory of socially constructed learning posits that knowledge is actively built through social interaction (Aldawi & Maher, 2023; Olesen, 2020). As learners engage in dialogue, collaboration, and feedback to co-construct understanding, learning becomes more meaningful than solitary study (Aldawi & Maher, 2023). This approach views students as participants who share, compare, and refine ideas together, highlighting the importance of social context in developing deeper understanding and shared knowledge (Aldawi & Maher, 2023; Olesen, 2020).

Instructors in higher education increasingly embrace tools that support socially constructed learning. For example, Google Docs enables synchronous and asynchronous collaboration, allowing multiple people to co-author documents in real time (Olesen, 2020). It allows students to work individually or in groups, contribute to different sections of a document, and engage in meaningful peer feedback, while also enabling instructors to provide targeted support (Rabu & Badlishah, 2020). Features like commenting and revision history support transparency and accountability, helping to address limitations of traditional classrooms such as limited engagement and delayed feedback (Ishtaiwa & Aburezeq, 2020). As digital tools become more central to education, platforms like Google Docs not only streamline document sharing but also offer opportunities to redesign instruction through collaborative, learner-centered practices such as co-creating shared guides that serve as study tools and professional resources.

How it Works

Google Docs is an online word processing software that allows users to create, format, and collaborate on documents, via browser on a computer and through an app on smart devices such as phones and tablets, that are saved in Google's cloud-based servers (Google, 2025a; Ishtaiwa & Aburezeq, 2020). With Google Docs, users can edit text, add images, tables, links, charts, and bookmarks, and create separate tabs for different sections within the document (Google, 2025b). The idea to utilize a shared Google Doc to complete collaborative assignments was implemented in a junior-level undergraduate course. This course focused on creating experiences in positive youth development in agricultural education through supervised agricultural experiences, career development events, and being involved in the National FFA Organization as student leaders through the implementation of the program of activities. Students fostered socially constructed learning within the shared Google Doc, called the Advisor's Guide to Effective Chapter Management, in small groups during class. For each lecture topic a tab was created within a single Google Doc, with subtabs for to each individual group to complete the tasks assigned to them. Collaborative tasks included: redesigning an ineffective chapter meeting from an advisor's perspective; brainstorming program of activities events from an advisor's perspective; and devising risk management strategies for real-life scenarios.

Results to Date/Implications

This idea was implemented during the second half of the spring 2025 semester, from the week after spring break to the last day of class. Student feedback was collected at the end of the semester via a Qualtrics survey with three, five-point Likert-type items (with one being *Not Beneficial at All* and five being *Very Beneficial*) and one open-ended response question. Eight of 14 students responded to the survey (57%). Overall, students found the Advisor's Guide to Effective Chapter Management to be beneficial in helping them understand course content ($M =$

3.5) and would be beneficial to future sections of this course ($M = 3.5$). Despite this, they felt it would not be beneficial to them in the future ($M = 2.75$).

Within the written commentary themes of *collaborative learning and peer insight*, *varied relevance based on career intention*, and *a need for guide organization and clarity* emerged. Students noted the guide gave them opportunities to collaborate with their peers and see the course ideas from different perspectives. Student 4 felt that the guide allowed students to “collaboratively and effectively [compile] lots of useful and important material into one centralized location.” Related to career intention, students who did not plan to become SBAE teachers did not see the document as having use in the future. Student 5 felt that, while “...it could be very beneficial with future classes”, it would not be beneficial to them because they “don’t want to teach after graduation.” Finally, students felt the Advisor’s Guide needed more organization and clarity for it to be useful to them in the future as well as to future classes. Student 7 felt that there is “...potential for this to be successful...” and “...would be better if it was getting reviewed in a manner that would ensure that the advice actually makes sense for advisors”.

These findings highlight the value of collaborative tools in fostering peer learning and practical insight among preservice SBAE teachers. While students pursuing SBAE teaching as a future career found the guide useful, those with different career goals saw limited relevance, which indicates a need for more transparency regarding the transferability of skills due to using a shared document. Additionally, concerns about clarity and organization suggest that instructor oversight for responses and improved structure are essential for making such tools more effective and broadly applicable.

Future Plans/Advice to Others

To strengthen the quality and relevance of the collaborative guide, future versions will include structured templates and regular instructor review (after each class and before the next) to ensure alignment with course goals. There will also be an added focus on making the guide more adaptable for students with different career interests by including customizable sections or optional content tracks. Over time, this model will be refined for broader use across teacher preparation and agricultural education courses to support sustainable, student-generated resources. For instructors looking to use collaborative tools like Google Docs, it’s important to provide clear expectations, assign purposeful roles, and check in regularly to maintain quality and usefulness. Scaffolding with templates and examples helps keep students focused and engaged. Designing with flexibility in mind also makes the activity more relevant for students with varied goals. Ultimately, modeling the thoughtful use of collaborative tools helps prepare future educators to lead student-centered classrooms of their own.

Costs/Resources Needed

Implementing this idea requires an online file-sharing platform, such as Google Docs or Microsoft Word, that supports real-time collaboration. Google Docs is free, while other platforms may have associated costs. Instructors should plan to integrate the activity into the course schedule well in advance, allowing time for collaboration, feedback, and a heads-up regarding when to bring devices to class. Clear document structure, guiding prompts, a brief orientation on how to use the platform, and time for instructor review will help ensure smooth implementation and content quality.

References

- Abdul Rabu, S. N., & Badlishah, N. S. (2020). Levels of students' reflective thinking skills in a collaborative learning environment using Google docs. *TechTrends*, 64(3), 533-541. <https://doi.org/10.1007/s11528-020-00504-5>
- Aldawi, F., & Maher, A. (2023, May). The role of Google docs in enhancing collaborative writing in higher education institutions. In *2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA)* (pp. 266-269). IEEE. <https://doi.org/10.1109/MI-STA57575.2023.10169399>
- Google Docs Editors Help. (2025a). How to use Google Docs. <https://support.google.com/docs/answer/7068618?hl=en&co=GENIE.Platform%3DDesktop>
- Google Workspace Learning Center. (2025b). Google Docs cheat sheet. <https://support.google.com/a/users/answer/9299931?sjid=3558280762501452215-NC>
- Ishtaiwa, F. F., & Aburezeq, I. M. (2015). The impact of Google Docs on student collaboration: A UAE case study. *Learning, Culture and Social Interaction*, 7, 85-96. <http://dx.doi.org/10.1016/j.lcsi.2015.07.004>
- Olesen, M. (2020). Cooperative collaboration in the hybrid space of google docs based group work. *Education Sciences*, 10(10), 269. <http://dx.doi.org/10.3390/educsci10100269>