Teaching and Learning Sustainable Tourism Practices: A Class-wide Collaborative Enterprise

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Introduction

With the unprecedented challenges the world is facing, such as the climate crises and its devastating impacts on natural and cultural ecosystems, there has been a spark of interest in the rhetoric versus reality of sustainable tourism.[1] [2] The concepts of ecotourism, sustainable tourism, and sustainable development gained attention in the 1990s, particularly due to the release of *Our Common Future*.[3] As research on sustainable tourism has seen an increase over the last few decades, the literature mainly focuses on defining what sustainable tourism is and delineating theoretical and practical ideologies on the subject. Ruhanen et al.[4] examined 492 papers in the sustainable tourism field and found that sustainable tourism is maturing as studies are applying and measuring approaches laid out by theoretical and conceptual research. Even with 40+ years of sustainable development research, actual practices of sustainability at specific tourism destinations around the world have not been systematically addressed.

To investigate the premise that sustainable tourism is more of a rhetoric than a reality, the second author, decided to take an innovative approach to teach the joint graduate/ undergraduate *Sustainable Tourism: From Rhetoric to Real Practices* (GEOG 423/638) course, a class he has been teaching since 2011. While the instructor did provide five traditionally structured lectures, students got to develop their own course syllabus and be taught in a non-traditional manner. Alternative teaching methods such as flipped learning, collaborative education, and peer reviewing exercises were used while students explored sustainability practices and assessed sustainable tourism destinations worldwide.

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[1] Susanne Becken, "A Review of Tourism and Climate Change as an Evolving Knowledge Domain," *Tourism Management Perspectives* 6 (2013): pp. 53-62, https://doi.org/10.1016/j.tmp.2012.11.006.

[2] Lisa Ruhanen, Char-lee Moyle, and Brent Moyle, "New Directions in Sustainable Tourism Research," *Tourism Review* 74, no. 2 (August 2019): pp. 138-149, https://doi.org/10.1108/tr-12-2017-0196.

[3] World Commission on Environment and Development, "*Our Common Future,"* Oxford: Oxford University Press (1987).

[4] Lisa Ruhanen et al., "Trends and Patterns in Sustainable Tourism Research: A 25-Year Bibliometric Analysis," *Journal of Sustainable Tourism* 23, no. 4 (2015): pp. 517-535, https://doi.org/10.1080/09669582.2014.978790.

Innovative pedagogical practices at the higher educational level have been increasingly the focus of discussion and research.[5] According to Anthony,[6] active learning involves knowledge construction in which the learner is building on existing knowledge in comparison to the more traditional knowledge absorption. Instead of the traditional approach of replicating and regurgitating academic theory, active learning is about students being involved in the learning process and provides an opportunity for them to think critically about what they are presented.[7] Winterbottom[8] argues that active learners learn by addressing and posing scientific questions, analyzing evidence, connecting such evidence to pre-existing theoretical knowledge, drawing conclusions, and reflecting upon their findings. Freeman's et al.[9] meta-analysis study on undergraduate education found that lecture-based formatted course students are 55% more likely to fail than a course with at least some element of active learning. The results indicated that in active learning courses it improved the examination scores by 6%.[10] As such, more educators are encouraged to incorporate active learning styles into classrooms.

As higher education is meant to prepare students for the working world, courses should be taught in a way that equips students with the skills to transition into the workforce. Education should provide students with the ability to build and mobilize knowledge to solve problems, to create and implement ideas and projects for the knowledge-based society that values skills.[11] Higher education has been criticized for being disconnected from real-life problems.[12] Integrative and interdisciplinary teaching, such as problem solving, critical thinking, and systems thinking, is imperative for students to foster sustainability skills.[13] The format of this *Sustainable Tourism* course is one example of bridging the gap between education and practice.

The incorporation of active learning into the *Sustainable Tourism* course not only provided students with critical knowledge of sustainability in the tourism industry, but it also allowed students to develop important skills to help them transition into the workforce. The next section of this paper will explore the outline of the course, including the course outputs to better illustrate the teaching style of the course. A discussion regarding the teaching methods will succeed, mentioning the benefits of this teaching style and lessons learned. This paper will

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[5] Pierre Lévy, "As tecnologias da inteligência: o futuro do pensamento na era da informática", Editoria 2, no. 34 (2010).

[6] Glenda Anthony, "Active Learning in a Constructivist Framework," *Educational Studies in Mathematics* 31, no. 4 (1996): pp. 349-369, https://doi.org/10.1007/bf00369153.

[7] Michael Prince, "Does Active Learning Work? A Review of the Research," *Journal of Engineering Education* 93, no. 3 (2004): pp. 223-231, https://doi.org/10.1002/j.2168-9830.2004.tb00809.x.

[8] Mark Winterbottom, "Active Learning," Cambridge Assessment International Education, (2016), https://www.cambridgeinternational.org/images/271174-active-learning.pdf.

[9] Scott Freeman, Sarah L. Eddy, Miles McDonough, Michelle K. Smith, Nnadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth. "Active Learning Increases Student Performance in Science, Engineering, and Mathematics." Proceedings of the National Academy of Sciences 111, no. 23 (2014): 8410–15. https://doi.org/10.1073/pnas.1319030111.

[10] Ibid

[11] Eva Maria Miranda, "Ensino superior: novos conceitos em novos contextos," Revista de Estudos Politecnicos 5, no. 8 (2007): pp. 161-182, http://www.scielo.mec.pt/pdf/tek/n8/v5n8a08.pdf

[12] Andreia Carvalho et al., "Pedagogical Innovation in Higher Education and Active Learning Methodologies – A Case Study," Education + Training 63, no. 2 (2020): pp. 195-213, https://doi.org/10.1108/et-05-2020-0141.

[13] Zuzana Straková and Ivana Cimermanová, "Critical Thinking Development—a Necessary Step in Higher Education Transformation towards Sustainability," Sustainability 10, no. 10 (2018): p. 3366, https://doi.org/10.3390/su10103366.

wrap up with some final thoughts on the course structure and improvements in course content, delivery and learning outcomes in the future.

Outline and Outputs of the Class

The objective of *Sustainable Tourism: From Rhetoric to Real Practices* was for participants to gain a thorough understanding of the potential and pitfalls of sustainable tourism as to relevant global economic, environmental, and socio-cultural practices. The end goal of the course was to critique the current status and drivers of sustainable tourism. There were three learning outcomes for the course: (1) critique, evaluate, and articulate current sustainable practices as examined through selected case studies; (2) develop research, synthesis, and evaluation skills; and (3) determine and critique sustainable tourism framework of assessment.

On the first day of class, the secondary author and primary instructor of the course walked into the mixed undergraduate/graduate course and handed the class the course syllabus. To their surprise, it was blank. The instructor explained that the class was going to collaborate and develop the course content, delivery methods, and assessment criteria together. The first five weeks comprised of the course instructor giving traditional-styled lectures on sustainable development and tourism, to give the class the background information required to assess tourism destinations. The next two weeks were taught in a workshop-like manner where the students and course instructor looked through indicators of sustainability and examples of sustainability matrices. Together, a sustainability matrix was developed that the class would be used to evaluate destinations that claimed they were sustainable. The sustainability matrix was divided into four sections: Environmental Significance; Economic Significance; Socio-Cultural Significance; and Institutional and Political Significance. Each of the four sections had indicators students would use to evaluate a destinations sustainability.

The class was then divided into three teams, that had a combination of graduate and undergraduate students. Each team was tasked to come up with 10 case studies throughout the term, presenting two each week to the class. The teams chose their case studies based on destinations having some claim to being sustainable. For instance, this could be due to a destination being awarded a sustainability credential such as being one of the Top 100 Green Destinations or holding UNESCO World Heritage Site Status. After researching the selected destination, the team would come up with a score based on the matrix criteria. The three teams presented their two case studies, a total of six each week, to the class each week stating what the destination was doing well and where they were lacking. The class and course instructor were able to ask questions about the findings and could re-evaluate the destination if needed.

Once all the case studies were presented to the class, and the class agreed upon the sustainability rating, 28 coloured destination templates were designed. Each case study was linked to the United Nation's 17 Sustainable Development Goals (SDGs) to show the broader connection between destinations and sustainable development. Then, a 93-page compendium of the case studies was created collaboratively. The compendium was made up of an introduction on sustainable tourism, methods used to evaluate the case studies, the 25 case study templates, a discussion on the sustainability rhetoric versus reality found from the case study analysis, a conclusion on the subject, and the key references used. *Figure 1* illustrates the key elements from the course as well as the order of the course outputs. As a class, the compendium was presented to the geography department, where other students and professors could ask about the class, the project, or key findings. Finally, the class teamed up to write a manuscript-styled paper, with the intention of submitting it for publication in an academic journal, regarding the sustainability assessment findings.

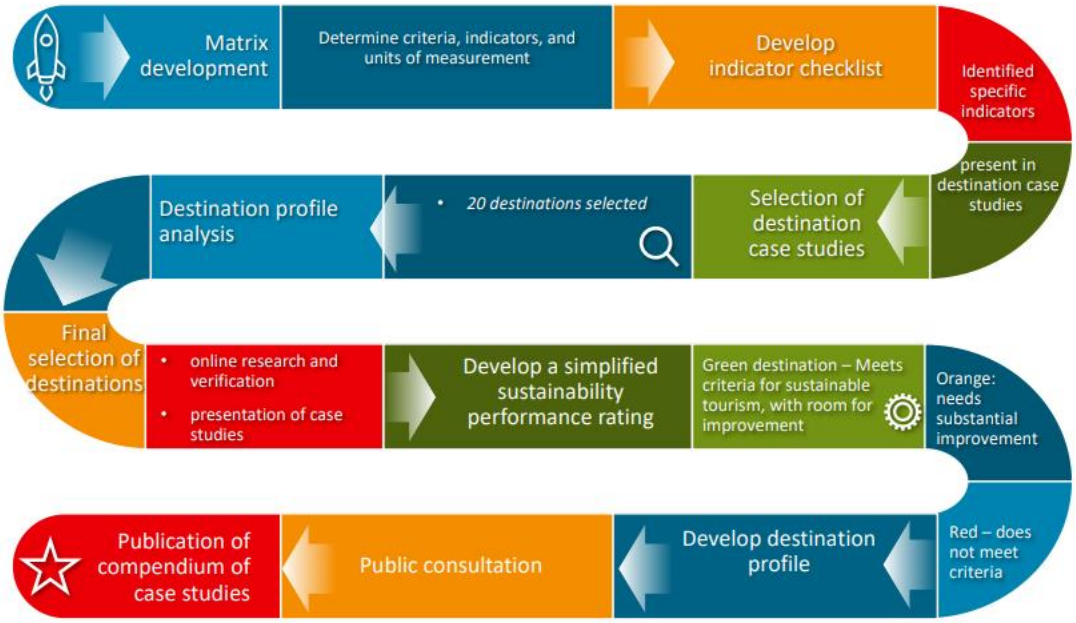

Figure 1. Flowchart of *Sustainable Tourism* Course Elements and Outputs.

Reflections on the Course

Due to this course's innovative teaching approaches, there were many benefits the students received: engaging coursework; developing practical skills; and gaining industry knowledge. Firstly, since this course adopted multiple non-traditional teaching styles such as flipped learning, collaborative work, and peer-reviewing exercises, students found the course engaging. As students needed to be physically in class with teammates to work on assignments, it created high attendance rates. Collaboration between students was also high as students would talk to other groups for support or clarity on assignments. Overall, the students who took this course had a positive experience and found it useful. This is congruent with other studies that found incorporating active earning strategies into university courses significantly enhances student learning experiences.[14] [15] The quote from John Dewey, an educational researcher, summarizes active learning the best, "Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results".[16]

One of the objectives of this Geog 423/638 course was to put more emphasis on "student learning" than on "student performance." Performance was measured in individual student

[14] Scott Freeman, Sarah L. Eddy, Miles McDonough, Michelle K. Smith, Nnadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth. "Active Learning Increases Student Performance in Science, Engineering, and Mathematics." Proceedings of the National Academy of Sciences 111, no. 23 (2014): 8410–15. https://doi.org/10.1073/pnas.1319030111.

[15] Elli J. Theobald et al., "Active Learning Narrows Achievement Gaps for Underrepresented Students in Undergraduate Science, Technology, Engineering, and Math," Proceedings of the National Academy of Sciences 117, no. 12 (September 2020): pp. 6476-6483, https://doi.org/10.1073/pnas.1916903117.

[16] John Dewey, "Democracy and Education: An Introduction to the Philosophy of Education," Thinking in Education, pp. 161 (1916), New York: the Free Press.

engagements and contributions, and group learning and sharing. Student performance was assessed based on individual and group contributions. The vast majority ended up performing well-above the standard performance in other geography courses taught at the University.

A second benefit students received from taking this course was developing practical skills that are highly valued in the workplace. Studies have highlighted the gap that school's curriculum need to align the skills developed in the classroom with the corresponding skills required in the job market.[17] [18] Employers want to hire graduates with workplace-ready skills such as teamwork, communication, and problem-solving.[19] The structure of this course provided students with the opportunity to develop the highly sought-after skills of teamwork, critical thinking, and communication skills.

As this course was designed to be collaborative, students had three months of working in group settings with individuals from diverse backgrounds. Students learned how to delegate tasks, how to communicate with one another, and how to manage time in a group setting. Teamwork is one of the most sought-after skills by employers, so much so that in all sectors, it is the most used competence in the daily performance of workers.[20] In today's workforce, teamwork is one of the frequently listed required soft skill on job advertisements,[21] and this course provided students with an avenue to gain this transversal skill in the sustainability field.

Additionally, students worked on their critical thinking ability. This class was meant to challenge the current notions of sustainability and assess whether destinations that have sustainable accolades are actually doing sustainable work. This encouraged students to think about the four pillars of sustainability and develop an assessment matrix for evaluating tourist destinations. Moreover, students went beyond the typical researching skills that university courses demand and analyzed key trends between the case study destinations. Critical thinking is an important determinant of work-place successes, i.e., it is assumed that those who are good in critical and analytical thinking can better perform when working independently.

Thirdly, as presentations were a large component of the course, whether through the weekly case study presentations or through the compendium presentation, students enhanced their communicating soft skills. Students were able to practice their public speaking, deck designing skills, listening and presentation writing skills, while building confidence speaking in front of a crowd. In 2017, at the Graduate Management Admission Council Corporate Recruiters Survey, employees choose communication skills as the most important skill set when hiring for a mid-

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[17] Susandari, and Peri Akbar Manaf. 2021. "Inter-Organizational Alliance in Improving the Quality of Learning Through Academic and Industry Alignment". Cometra Education 1 (1). http://cometrajournal.com/index.php/education/article/view/21.

[18] Zimmer, Wendi K., and Paul Keiper. "Redesigning curriculum at the higher education level: challenges and successes within a sport management program." Educational Action Research 29, no. 2 (2021): 276-291.

[19] Innovative Research Universities, "Work Integrated Learning – Definitions and Case Studies," (2011), http://www.iru.edu.au/our-activities/projects/work-integrated-learning.aspx

[20] Javier Barraycoa Martínez and Olga Lasaga Millet, "Competition Team Work: Beyond The Cut and Paste," *Revista de Comunicación Vivat Academia* 13, no. 111: pp. 65-69 (2010), http://dx.doi.org/10.15178/va.2010.111.65-69

[21] Pilar Martinez Clares, Cristina Gonzalez Lorente, and Nuria Rebollo-Quintela, "Competencias para la empleabilidad: un modelo de ecuaciones estructurales en la Facultad de Educación," *Revista de Investigación Educativa*, 37 no. 1: pp. 57–73 (2019), https://doi.org/10.6018/rie.37.1.343891.

level position.[22] The *Sustainable Tourism* course went beyond teaching students relevant knowledge, it additionally provided students with essential transversal skills such as teamworking, critical thinking, and communication skills.

The final benefit students received from this course was gaining important industry knowledge for the sustainability industry. After taking this course, students are better equipped to work in the sustainable development/tourism workforce. Students built the skills to make decisions on sustainability assessments, providing them the confidence to do this in the field. They also learned about on-the-groundwork destinations are taking to advance the sustainable development goals. Finally, students have learned the complexities of sustainability and balancing the four pillars in the tourism industry. Overall, this course provided students with the knowledge to prepare them to transition into a destination manager or sustainability officer.

There were a few challenges as well. From the instructor's perspective, the course was very intensive., e.g., in workload, student interactions, and time management. The continuous assessment of individual and group performances meant that the instructor had to remain vigilant about "who and how" aspects of student contributions. From the student's perspective, how well a student performed depended on overall performance, collaboration and rapport within each group. As such, groups that did not work together well did not perform, and this reflected on individual student performance too.

Conclusion

This *Sustainable Tourism c*ourse went beyond the theoretical teachings that most classes offer and it prepared students for the working world through knowledge translation and skill development. By incorporating active learning components such as flipped learning, collaborative education, and peer reviewing exercises, students were more engaged in the course and received numerous benefits. This paper will conclude with some final thoughts from a student who took the course and the course instructor.

"I really enjoyed the format of this course, even though it was unconventional. I was hesitant at first as I have never walked into a course where the students created the grading scheme, however, it made the course more adapted to our needs as students. Moreover, this course provided me with critical knowledge and skills that helped me transition into the sustainable tourism field. It opened my mind to what sustainability is and the challenge of balancing it at the destination scale. Furthermore, I have showcased many of the learning outputs from this course during interviews and while working as a tourism researcher. It also made me realize that I wanted to pursue a master's degree in this field and from the collaborative nature of the course, I could talk to the course instructor who guided me through the master's application process. Overall, I think this was an extremely practical course that prepared me for the workplace" – Anonymous undergraduate student.

From the Professor's perspective, the course goals, themes, content, delivery and assessment provided an "outside the box" approach to teaching and learning. It empowered the students in making decisions about learning outcomes, learning mediums, and performance metrices used

[22] MBA, "Communication Skills Still Super Important to Employers," Communication Skills Still Super Important to Employers, (2020), https://www.mba.com/information-and-news/research-and-data/employers-seek-communications-skills.

in student grading. The course facilitated above than normal student interactions (with instructor and peers) and provided opportunities for additional informal interactions beyond the classroom.

This course provides an example of what university courses can offer students, to make them more knowledgeable, but also better prepared for transitioning into the sustainability field.

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