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Revisions in Learning Pedagogies in Higher Education A Comparison of Learning Culture differences between Gen Z and Millennials.

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Abstract:

The present study delves into the perspectives of business students towards group projects, exploring how these perspectives have transformed over two distinct time periods, namely 2005-2007 and 2017-2018. Additionally, the research scrutinizes the influence of social styles on the students' perceptions regarding group projects. Data was gathered from 2,517 pupils using Likert-scale questionnaires across both time frames.

The findings suggest that, in general, students regarded group projects as considerably time-consuming, with slight changes in this perspective over the years. Nevertheless, there were marked variations in other attitudes, such as camaraderie, anxiety regarding group member contributions, and perceptions of negative group dynamics. These disparities were attributed to the generational shift from Millennials to Generation Z in the later cohort.

Furthermore, social styles (driver, expressive, analytical, and amiable) were discovered to impact students' attitudes towards group projects differently. Expressive and amiable personalities demonstrated greater enjoyment while working in groups, while drivers and expressive showed more inclination towards leadership responsibilities. Analytical individuals, on the other hand, exhibited less enjoyment of creative problem-solving in group settings.

Through factor analysis, the study identified three fundamental dimensions influencing attitudes towards group projects: concerns about time wastage and negative group dynamics, attitudes towards leadership and workload distribution, and preferences for clearer guidelines and assignments.

In conclusion, this research highlights the importance of factoring in students' attitudes and social styles when incorporating group projects in business education. By comprehending and addressing these variables, educators can design more effective and customized group project experiences, fostering positive learning outcomes and better preparing students for their future careers.

Keywords: Attitude, Group projects, Business students, Generation Z, Millennials, Social styles, Time management, Camaraderie, Leadership roles.

Introduction

The process of designing learning environments that incorporate active learning pedagogies is an intricate task that presents various complexities due to the contested and intertwined nature of their definitions. Therefore, in light of this challenge, the objective of this research article is to investigate the potential of classifying active learning pedagogies, namely project-based, problem-based, inquiry-based, case-based, and discovery-based, using both theoretical and practical lenses (Mahesh *et al.*, 2021). The intention here is to determine if such a classification can serve as a valuable tool for researchers and practitioners in comparing different pedagogies (Schlee *et al.*, 2020).

To achieve this goal, the study classified the five active learning pedagogies based on six constructivist elements. The research methodology involved a comparative analysis and a content analysis, both of which were informed by a comprehensive systematic literature review. Through this approach, the authors sought to gain insights into the distinctive

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characteristics of each pedagogy and how they align with their theoretical underpinnings and real-world implementation (Mejía *et al.*, 2022).

The study's findings revealed that all active learning pedagogies share a common primary goal of learner-centeredness. However, a notable dissonance emerged between the theoretical principles and the practical realities of implementing these pedagogies. This dissonance complicates the process of differentiating active learning approaches, making the classification as a comparative tool less effective than anticipated (Shorey *et al.*, 2021). This research article sheds light on the challenges of classifying and comparing active learning pedagogies. While the research highlights the shared emphasis on learner-centeredness, it also emphasizes the importance of acknowledging the disparities between theory and practice (Dwivedula *et al.*, 2019). As such, further research and consideration are needed to better understand and utilize the potential of classification as a tool for enhancing pedagogical practices in active learning environments (Santosa, M. H. 2017).

The provision of flexible learning opportunities to learners is a crucial aspect of modern education. This allows students to exercise control over different aspects of their educational journey, including the timing, location, and mode of learning (Hernandez *et al.*, 2020). The concept of flexibility in education is student-centered and closely linked to the idea of flexible pedagogy, which entails adopting teaching and learning approaches that accommodate the diverse choices of learners (Nicholas, A. J. 2020). Technology-enhanced learning, also known as e-learning, leverages information communication and technology (ICT) to augment and support the learning experience. Hence, technology and flexible pedagogies are natural allies, as technology enables flexible learning opportunities and encourages adaptable educational systems, staff, and students (Kyrousi *et al.*, 2022).

Higher education institutions can benefit significantly from e-learning, which supports flexible pedagogies, making it easier for educators to balance teaching, research, and diverse student cohorts. However, e-learning also poses challenges that must be addressed (Swanzen, R. 2018). Technology can facilitate approaches that might not be feasible with traditional teaching methods, but it also brings new complexities and decision-making for educational providers. The current report focuses on e-learning as one aspect of flexible pedagogies, recognizing the commonalities it shares with other reports within the set of study (Bilonozhko, N., & Syzenko, A. 2020).

The report's primary objective is to explore the relationship between e-learning and pedagogy, examining how e-learning and flexibility can enhance existing educational practices and create new opportunities. It also discusses the impact of these factors on institutional systems and provides an example of how learning and teaching are influenced. The report concludes with a typology of flexibility enabled by e-learning, summarizing its findings and offering suggestions (Dhinakaran *et al.*, 2020).

In the context of e-learning, the promotion of flexible pedagogies lies in the natural alignment of technology with flexible learning and delivery methods. Flexible learning addresses the pace, place, and mode of learning, which are crucial aspects that shape the educational journey of learners. Pace refers to the delivery schedules, which can be tailored to individual preferences within overall deadlines. Place involves the physical location of learning, whether it's at home, work-based, during commutes, or while traveling abroad. Mode encompasses

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learning technologies, such as blended learning or distance learning, facilitated by ICT products (Ismail *et al.,* 2021). By combining these three elements of flexibility (pace, place, and mode), a pedagogical approach can be visualized as a three-dimensional space of flexible learning. This space ranges from no flexibility to increasing levels of choice, allowing modules or programs to be positioned based on their flexibility profile. Ultimately, e-learning and flexible pedagogies have the potential to transform the educational landscape, providing learners with a personalized and enriched learning experience that meets their needs and aspirations (Frank, A.2021).

Learning pedagogies refer to the various approaches and methods used in teaching and facilitating learning. These pedagogies help educators create effective instructional strategies to engage students and enhance their learning experience. Here are some popular learning pedagogies (Cattaneo, K. H. 2017):

1. **Traditional Pedagogy**: This is the most common form of teaching where the instructor is the central figure in transferring knowledge to students. It emphasizes direct instruction, rote memorization, and passive learning.
2. **Constructivism**: Based on the idea that learners construct their own knowledge by actively engaging with new information. It encourages hands-on activities, problem-solving, and critical thinking.
3. **Collaborative Learning**: This pedagogy focuses on group work and cooperative learning. It promotes teamwork, communication skills, and the sharing of ideas through discussions and group projects.
4. **Project-Based Learning**: Students work on a project over an extended period, allowing them to explore real-world problems and develop essential skills such as research, problem-solving, and creativity.
5. **Flipped Classroom**: In a flipped classroom, students study the material independently before coming to class. Class time is then utilized for activities and discussions, allowing for deeper understanding and application of concepts.
6. **Experiential Learning**: This approach emphasizes learning through firsthand experiences and reflection. Students learn by doing, making connections between theory and practice.
7. **Game-Based Learning**: This pedagogy uses game elements, such as challenges, rewards, and competition, to engage students in learning activities. It promotes active participation and motivation.
8. **Personalized Learning**: This approach tailors' instruction to meet individual students' needs, interests, and learning styles. It allows students to move at their own pace and take responsibility for their learning.
9. **Blended Learning**: Blending traditional face-to-face instruction with online resources and activities. It combines the benefits of both traditional and digital learning, offering flexibility and personalization.
10. **Inquiry-Based Learning**: This pedagogy encourages students to ask questions, investigate, and explore topics of interest. It fosters curiosity, critical thinking, and analysis.
11. Literature Review: In the realm of team projects, Hansen's (2006) extensive literature review revealed that group projects are generally favored by business students. However, concerns have been raised regarding effective communication and ensuring equitable contributions among group members. The issue of uneven contributions has

been extensively explored in the business education literature. further noted that less motivated students could negatively impact the performance of highly motivated students, casting doubt on the perceived benefits of team projects. To enhance team performance, several studies have proposed various strategies, including improved instructor discussion of group dynamics, clear communication, building trust, setting evaluation criteria, implementing peer assessments, and applying appropriate penalties for noncontributors, as suggested by Brooks and Ammons (2003) and Chapman and Van Auken (2001).

Research on Millennials and Generation Z: In addition to studying student personalities, research has also delved into the attitudes of two generational cohorts towards group projects. The 2005-2007 sample predominantly consisted of Millennials, while over 70% of the 2017-2018 sample represented Generation Z, the succeeding generation to Millennials in undergraduate college programs (Seemiller & Grace, 2016). Generation Z, born in or after 1995, is recognized as a distinct generation from Millennials and is projected to play a pivotal role in shaping the future of educational institutions. Given that Generation Z students have witnessed the impact of the Great Recession on their families and neighbors, they prioritize financial decisions and are concerned about student loan debt. They are willing to sacrifice privacy for success in college and welcome interventions from professors and the university to improve educational outcomes. For Generation Z, college education is not just about acquiring a degree but serves as a stepping stone to a successful career (Josuweit, 2018).

Research on Social Styles: The study on social styles utilizes Merrill and Reid's (1981) social style dimensions, which measure personality traits that are crucial in the context of group projects. The dimensions center on how individuals relate to others. Merrill and Reid identified four social styles that are based on the combination of assertiveness and responsiveness traits. Analyticals are low in assertiveness and responsiveness and are described as critical, indecisive, and orderly. Drivers are high in assertiveness and low in responsiveness, characterized as pushy, decisive, and efficient. Expressives are high in both assertiveness and responsiveness and are described as manipulative, enthusiastic, and dramatic. Amiable, on the other hand, are low in assertiveness and high in responsiveness, seen as supportive, agreeable, and dependable. The social styles research has been widely used in sales training and is known to impact team dynamics, particularly when certain styles clash, such as drivers and amiable or analytical and expressive (Jaleniauskiene, E., & Juceviciene, P. 2015).

Material and Methodology:

The primary objective of the present scoping review was to comprehensively accumulate and amalgamate the extant literature pertaining to the various typologies of learning styles, predilections, and necessities of healthcare learners who are affiliated with the Generation Z cohort.

In the present investigation, our objective is to scrutinize the perceptions of business students towards group-based assignments and the extent to which these perceptions have transformed over time, namely in the period spanning from 2005 through 2007 to 2017 through 2018. Given the prominent role that team projects play in business education, it is imperative to take into account variables that may influence student attitudes towards these

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collaborative assignments. To evaluate personality traits, we employ Merrill and Reid's (1981) social dimensions of personality, which focus on how individuals engage with others. Examining how distinct personality groups approach group projects could furnish valuable insights for designing team-based projects in the business curriculum.

Our inquiry is guided by the ensuing research questions:

1. Research Query 1: Have the attitudes of students towards group projects experienced any modifications from the years 2005 through 2007 to the years 2017 through 2018? If so, what are the nature and extent of these changes?

2. Research Query 2: Do social styles, as identified by Merrill and Reid's dimensions, have any bearing on attitudes towards group projects?

3. Research Query 3: Which of the following factors possesses greater influence on student attitudes towards group projects: the passage of time from 2005 through 2007 to 2017 through 2018 or student personality characteristics?

To collect data, a questionnaire was formulated in collaboration with marketing research students, comprising ten statements that measure attitudes towards group projects. The students' responses were collected using a 5-point Likert-type scale. In addition, a copyrighted scale by the TRACOM Group was employed to measure assertiveness and responsiveness, in conjunction with social styles, which encompasses 30 bipolar opposite descriptors.

Results

A total of 549 students from two business schools accredited by the Association to Advance Collegiate Schools of Business participated in the study. Among these, 303 surveys were gathered between 2005 and 2007, and 246 surveys were collected during the academic year of 2017 through 2018. The sample was composed of 51% males and 49% females, primarily consisting of juniors and seniors in upper-division business classes. Approximately 70% of the latter sample was identified as Generation Z, with the remaining 30% classified as the tail end of the Millennial generation. Notably, the attitudes of the late Millennials closely resembled those of Generation Z, suggesting shared experiences and similar attitudes between the two groups. There were no statistically significant differences between the responses from the two universities, allowing for a combined analysis of the data.

Table 1: Attitudes towards projects

Attitudes towards Group Projects	**2005–2007**	**2017–2018**	**Total**	**F**	**df**	**p**
Group projects waste a great deal of time	3.01	2.98	3.00	0.09	2,517	0.76
I enjoy the camaraderie of working with other group members	3.67	3.50	3.60	3.98	2,516	0.05*

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Attitudes towards Group Projects	2005–2007	2017–2018	Total	F	df	p
I am anxious when I join a group because I fear that group members will not produce up to my expectations	3.40	3.61	3.49	4.70	2,515	0.03*
Professors don't give us enough guidelines for group projects	2.89	3.04	2.96	2.39	2,517	0.12
I enjoy taking the leadership role in group projects	3.49	3.39	3.44	1.11	2,517	0.29
Group projects bring out the worst in people	2.44	2.89	2.54	26.85	2,515	0.00*
Group projects allow me to exercise creative problem-solving skills	3.56	3.40	3.49	3.24	2,516	0.08
I learn more on group projects than when I study for exams	3.05	3.00	3.03	0.17	2,516	0.68
I do most of the work when I am involved in group projects	3.36	3.31	3.34	0.37	2,516	0.54
I dislike assignments that do not have a clear-cut correct answer	3.33	3.43	3.38	1.00	2,516	0.32

Attitudes towards projects were measured with a Likert scale: 1 = strongly disagree and 5 = strongly agree.

Statistically significant at the .05 level.

Table 2: Attitudes towards projects were measured with a Likert scale

Attitudes towards Group Projects	Driver	Expressive	Analytical	Amiable	Total	F	df	p
Group projects waste a great deal of time	3.29	2.88	3.07	3.00	3.00	2.47	4,515	0.06
I enjoy the camaraderie of working with other group members	3.30	3.74	3.14	3.74	3.60	10.76	4,516	0.00*
Professors don't give us enough guidelines for group projects	3.04	2.99	2.87	2.90	2.96	0.09	4,515	0.96
I enjoy taking the leadership role in group projects	3.57	3.68	3.19	3.11	3.44	12.22	4,515	0.00*
Group projects bring out the worst in people	2.84	2.59	2.69	2.56	2.64	1.49	4,513	0.22

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Attitudes towards Group Projects	Driver	Expressive	Analytical	Amiable	Total	F	df	p
Group projects allow me to exercise creative problem-solving skills	3.56	3.60	3.14	3.46	3.49	4.01	4,514	0.01*
I learn more on group projects than when I study for exams	2.92	3.15	2.71	3.05	3.03	2.73	4,514	0.04*
I do most of the work when I am involved in group projects	3.57	3.41	3.14	3.20	3.34	2.52	4,514	0.01*
I dislike assignments that do not have a clear-cut correct answer	3.55	3.25	3.53	3.41	3.38	1.93	4,514	0.12

Attitudes towards projects were measured with a Likert scale: 1 = strongly disagree and 5 = strongly agree.

- Statistically significant at the .05 level.

Table 3: Attitude towards group projects

• **Attitudes towards Group Projects**	**Factor 1**	**Factor 2**	**Factor 3**
Group projects waste a great deal of time	0.66	0.06	-0.11
I enjoy the camaraderie of working with other group members	-0.56	0.44	0.28
I am anxious when I join a group because I fear that group members will not produce up to my expectations	0.54	0.37	-0.05
Professors don't give us enough guidelines for group projects	0.48	0.30	0.47
I enjoy taking the leadership role in group projects	-0.25	0.70	-0.45
Group projects bring out the worst in people	0.56	0.22	0.21
Group projects allow me to exercise creative problem-solving skills	-0.64	0.52	0.03
I learn more on group projects than when I study for exams	-0.59	0.45	0.21
I do most of the work when I am involved in group projects	0.41	0.61	-0.37
I dislike assignments that do not have a clear-cut correct answer	0.35	0.25	0.56

The table above shows the unrotated factor loadings of attitudes toward group projects. Factor 1 mainly corresponds to the belief that group projects waste time. Factor 2 is characterized by attitudes towards leadership and workload distribution. Factor 3 is associated with preferences for guidelines and clear-cut assignment instructions. Combined, the three factors explain 55.62% of the variance, with Factor 1 accounting for 26.42%, Factor 2 for 18.64%, and Factor 3 for 10.56%.

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Discussion

Across all social styles, there is a consistent attitude towards group projects wasting time, indicating no statistically significant difference. However, social styles differ in their enjoyment of camaraderie, with expressive and amiable demonstrating higher enjoyment compared to drivers and analytical (Seemiller *et al.,* 2020). This suggests that social and relational aspects may be more important for certain personalities when working in groups. The level of anxiety about group member contributions is relatively similar across personality types, with no statistically significant difference (Saxena *et al.,* 2021). Similarly, all social styles perceive a comparable need for clearer guidelines from professors, implying that there is no significant difference. Nonetheless, differences in the enjoyment of leadership roles are statistically significant, with drivers and expressive showing higher enjoyment compared to analytical and amiable. This finding suggests that some personalities may be more inclined to take on leadership responsibilities within group projects (Murad *et al.,* 2019).

The perception that group projects bring out the worst in people is consistent across all social styles, indicating no statistically significant difference. Analytical, however, report lower enjoyment of creative problem-solving in group projects compared to other social styles (Gouda, H. 2022) This finding highlights a potential difference in how certain personalities engage with creative tasks within group settings. Moreover, expressive report higher learning through group projects compared to analytical, with statistically significant differences. This suggests that certain personalities may find group projects more conducive to their learning style (McNally *et al.,* 2020).

Overall, this study's results offer valuable insights into the underlying structure of attitudes towards group projects, highlighting distinct dimensions that influence students' perceptions of group work. These findings are essential for business educators to comprehend the attitudes of students towards group projects and the factors that may impact these attitudes (Castillo, F. G. 2020).). In light of the evolving educational landscape, educators can utilize this knowledge to design effective and engaging group project experiences that cater to the preferences and needs of different student cohorts and personalities. Furthermore, fostering a positive group culture, providing clear guidelines, and promoting effective communication and teamwork may enhance the overall success and outcomes of group projects in business education (Pretti *et al.,* 2021.

Conclusion:

The present study has investigated the attitudes of business students towards group projects and how these attitudes have transformed over time, in addition to varying based on social styles. The findings of this study offer valuable insights into the perceptions of students and shed light on the factors that shape their attitudes towards group work. The comparison between the 2005-2007 and 2017-2018 cohorts revealed that the perceptions of group projects as time-wasting activities have remained relatively stable over time. Nevertheless, significant changes have been observed in specific attitudes. The 2017-2018 cohort indicated a decrease in enjoyment of camaraderie, an increase in anxiety about group member contributions, and a perception that group projects bring out the worst in people. These differences could be attributed to the generational shift from Millennials to Generation Z, reflecting the evolving preferences and priorities of the newer cohort (Maloni *et al.,* 2019).

Furthermore, the study has identified four social styles (driver, expressive, analytical, and amiable) that influence attitudes towards group projects differently. Expressive and amiable exhibited a higher enjoyment of camaraderie, while drivers and expressive were more inclined towards leadership roles. Analytical, on the other hand, exhibited a lower enjoyment of creative problem-solving in group projects. These insights can aid educators in understanding the diverse needs and preferences of students based on their social styles, allowing them to customize group project experiences accordingly (Gerhardt, M. W. 2016).

The factor analysis has revealed three underlying dimensions influencing attitudes towards group projects. Factor 1 indicated concerns about time wastage and negative group dynamics, while Factor 2 highlighted attitudes towards leadership and workload distribution. Factor 3 was associated with a preference for clearer guidelines and assignments. Understanding these factors can guide educators in designing effective group projects that address specific student concerns and preferences (Bíró, G. I. 2014). In conclusion, this study highlights the significance of considering students' attitudes, generational differences, and social styles when implementing group projects in business education. Educators should concentrate on fostering positive group dynamics, providing clear guidelines, and acknowledging the diverse learning preferences of students to enhance the effectiveness and positive outcomes of group projects. By aligning group project design with students' attitudes and social styles, educators can create engaging and productive learning experiences that prepare students for success in their future careers (Clarke *et al.*, 2009).

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