Marketing Education Review

ISSN: 1052-8008 (Print) 2153-9987 (Online) Journal homepage: www.tandfonline.com/journals/mmer20

do gen x, y, and z students engaged in virtual teams of online mba classrooms heed instructions? preliminary evidence

Hemant C. Sashittal, Avan R. Jassawalla & Carolina Saffie-Robertson

To cite this article: Hemant C. Sashittal, Avan R. Jassawalla & Carolina Saffie-Robertson (13 May 2026): do gen x, y, and z students engaged in virtual teams of online mba classrooms heed instructions? preliminary evidence, Marketing Education Review, DOI: 10.1080/10528008.2026.2671279

To link to this article: https://doi.org/10.1080/10528008.2026.2671279

Published online: 13 May 2026.

MARKETING EDUCATION REVIEW
https://doi.org/10.1080/10528008.2026.2671279

Routledge
Taylor & Francis Group

DO GEN X, Y, AND Z STUDENTS ENGAGED IN VIRTUAL TEAMS OF ONLINE MBA CLASSROOMS HEED INSTRUCTIONS? PRELIMINARY EVIDENCE

Hemant C. Sashittal[a], Avan R. Jassawalla[b], and Carolina Saffie-Robertson[a]

[a]School of Business, St. John Fisher University, Rochester, NY, USA; [b]School of Business, State University of New York at Geneseo, Geneseo, NY, USA

ABSTRACT

While the literature is rich with insights for crafting instructions to aid collaborative learning in virtual teams, there is no empirical study of the extent to which students enrolled in online MBA programs and participating in virtual teams heed instructions, nor insights into the extent of heeding exhibited by multiple generations including Generations X, Y (Millennials) and Z. This article presents preliminary findings from a study that examined the extent to which each generation heeds instruction. Findings suggest that Gen Z students and teams composed of only Gen Z students heed instructions the least. While teams without any Gen Z members seem to heed instructions the most, teams with *any* Gen Z student present heed instructions poorly. The findings produce plausible explanations for the reluctance of MBA students to take courses that require teamwork, why employers complain about poorly prepared graduates, and why some avoid hiring Gen Z graduates entirely. The findings hold implications for early testing of MBA program entrants and extra preparations for heeding instructions to foster collaboration in multi-generation classrooms and virtual teams.

Team-based learning, commonplace in MBA classrooms, has invited considerable discussion in the pedagogy literature (Yu et al., 2025). Scholars strongly advocate in favor of instructing and guiding students for interacting with others and deriving course-related learning (Gresch et al., 2020). This advocacy aligns with the frequent complaint from instructors, i.e., when left to themselves and without sufficient instruction, students can experience inordinate difficulties in calibrating their contributions, fostering collaboration with others and deriving learning from classroom team projects (Jassawalla Avan et al., 2026). In response, scholars offer considerable insights into instruction-crafting (e.g., Alstete & Meyer, 2026; Fang & Avvari, 2026; Yue et al., 2026). This stream of research is relevant to this article because one of the coauthors teaches an elective course in an online MBA program, requires students to complete a learning assignment as part of virtual teams, and provides them with a list of literature-derived instructions for collaborative teamwork. As is true of workplaces and MBA classrooms, the classes are a mix of generations, i.e., Generation X (born 1965–1980, henceforth Gen X), Millennials (born 1981–1996, henceforth Gen Y), and Generation Z (born 1997–2012, henceforth Gen Z). Similarly, student teams can vary in composition, i.e., it is not uncommon to have teams with *only Gen Z* members, or teams with *no Gen Z* members, or *mixed* gen members.

The gap in current thinking relates to the abundant interest in instruction-crafting with no concern for instruction-heeding. The literature says much about instructions for completing complex team assignments (e.g., Wyland et al., 2023; Zhao et al., 2024), about guiding students engaged in online learning (Harris et al., 2020), and about effective instruction methods (e.g., Chen et al., 2025). The gap in current theory relates to the unanswered questions: (a) when instructed, do students representing multiple generational cohorts in virtual teams (i.e., Gen X, Gen Y and Gen Z student), and teams with varying composition (i.e., *no Gen Z* teams, *Gen Z only* teams, and mixed teams) heed instructions, and if so, do they heed equally well. This article reports initiating and preliminary findings rooted in a convenient sample, based on rater-mediated assessment of written reports submitted by students. Hence, contrasting with the intent to produce generalizable theory, the findings aim to stimulate new thinking and trigger new research in a substantive, consequential context of business education, i.e., of the 155,000 MBA students nationwide, about 45,000 are enrolled in online programs in which teamwork can occur in virtual environments only (Byrne, 2022).

CONTACT Hemant C. Sashittal sashi@sjfc.edu School of Business, St. John Fisher University, Rochester, NY 14618, USA

This article reports two initiating findings aligned with the preliminary intent of the study that addresses the gap in current business pedagogy literature. First, Gen Z students and *Gen Z only* teams heed instructions the least, Gen X students and *no Gen Z* teams heed instructions the most, i.e., the heeding depends significantly on the generation as well as the virtual team's composition. Second, multiple archetypes of heeding instruction are identifiable, i.e., the social learner who heeds mostly about interacting with others, the perfunctory heeder who goes through the motions, and the team-insensitive learner unmoved by any instruction. In this regard, we learn that Gen X students, and *no Gen Z* teams heed social learning related instructions better than others.

Conceptual Background and Hypotheses

The theoretical foundation of the study rests on issues of heeding instructions. The generational cohort of the student, online MBA courses, virtual teams, and the specifics of the instructions are contextual factors, they are separate from the substance of the proposed hypotheses about heeding instructions. Plainly, no empirically derived findings about instructing virtual student teams (Carle et al., 2024), or about multiple generational cohorts in classrooms (Kuzet et al., 2026; Schnell-Peskin et al., 2024) address the driving concerns of this study, i.e., to what extent are instructions provided to students in virtual teams heeded, and does this heeding differ with generations and the generational composition of the team.

Hypotheses

Current discussions devoted to instruction-heeding as a theoretical construct suggest that it is fundamental to: (a) human learning; it explains why some children play better than others (Pierce, 2021), (b) teamwork and learning among students (Matthews et al., 2012), and (c) effective job performance (Liu et al., 2021). Differences in heeding instructions explain why some and not all people can expand their personal capacity and contribute equally to intellectual capital of the firm (Naqvi & Lodhi, 2019). At present, the failure to heed instructions has invited academic attention as a key impediment to learning almost exclusively in the context of students in K-12 environments who are fluent in only one language and are taking classes and receive instructions in another (e.g., Herzog-Punzenberger et al., 2020). The absence of a theory of instruction-heeding precludes a literature-derived hypotheses test and implicates a preliminary investigation. Hence, in the context of online MBA classes in which students participate in virtual teamwork, the following hypotheses led data collection and testing efforts:

H1: The average heeding of instructions for virtual teamwork will vary significantly between

(a) Gen Z, Gen Y, and Gen X participants.
(b) Teams with varying generational compositions (*Gen Z only* teams, *No Gen Z teams*, and *Mixed Gen* teams).

H2: Multiple, significant profiles of participant-learner types, based on the scores they received for heeding instructions exist.

H3: Each archetype of heeding instructions will significantly differ with:

(a) Gen Z, Gen Y, and Gen X participants.
(b) Teams with varying generational compositions (*Gen Z only* teams, *No Gen Z teams*, and *Mixed Gen* teams).

The Study

The study was conducted in two sections of an elective course titled "Performance Management" in an online MBA program over two consecutive terms. The classes met via Zoom for 90 minutes once a week for 14 weeks. The course was designed to engage students in and produce learning about working with others in virtual teamwork. Teams were required to develop a "Behaviorally Anchored Rating scale" as an indicator of learning in the class and of their collaborative effort. During the initiating weeks of the term, students self-selected into teams of three or four members. They received instructions to aid collaborative teamwork and writing of their final report. Table 1 identifies the nine directions students received for virtual teamwork and presents the constitutive definition of each instruction. The evidence of heeding was gathered from the reflective reports that students submitted toward the end of the term.

Sample and Data Analysis

The study emerges from a convenient sample of students who enrolled in the "Performance Management" course offered by a coauthor, i.e., it serves as an initiating sample from which only exploratory notions, and preliminary hypotheses are derivable. After two terms,

Table 1. Key statistics of measured variables (note: 0 reflects unacceptably low level of discussion, 1 reflects acceptable level of discussion, IH=*instructions heeded*).

Gen X (n = 28)	*Gen Y (n = 16)*	*Gen Z (n = 12)*	*Directions (sample size = 56)*	*Sample mean*
IH: 27 (96%)	IH: 16, (100%)	IH: 12 (100%)	Explain the contribution to the creation of the team's charter. (Yes = 55, No = 1)	.98
IH: 23 (82%)	IH: 16 (100%)	IH: 11 (92%)	Explain how the team's charter was influential in shaping the learning that occurred in the team. (Yes = 50, No = 6)	.89
IH: 6 (21%)	IH: 9 (57%)	IH: 11 (92%)	Explain the nature and extent of behavioral change that occurred in team and in self, because of teamwork (Yes = 26, No = 30)	.46
IH: 15 (54%)	IH: 8 (50%)	IH: 9 (75%)	Explain how self and others responded to feedback from others in the team. (Yes = 32, No = 24)	.57
IH: 3 (11%)	IH: 5 (31%)	IH: 9 (75%)	Explain usefulness of feedback for new learning (Yes = 17, No = 39)	.30
IH: 26 (93%)	IH: 15 (94%)	IH: 12 (100%)	Explain new knowledge you derived from the project (as separate from the one derived from team and peers). (Yes = 53, No = 3)	.95
IH: 4 (14%)	IH: 7 (44%)	IH: 10 (83%)	Explain new knowledge from assigned readings (Yes = 21, No = 35)	.38
IH:24 (86%)	IH: 16 (100%)	IH: 12 (100%)	Explain new knowledge you derived from the class (as separate from the one derived from team and peers). (Yes = 52, No = 4)	.93
IH: 2 (7%)	IH: 7 (44%)	IH: 9 (75%)	Explain knowledge derived from peers in the team. (Yes = 18, No = 38)	.32

the instructor collected 56 completed final reports. A year after the last final grades were submitted, the instructor sought and received the approval of the Institutional Review Board (IRB) of St. John Fisher University to use the reports as secondary sources of data for analysis (File No: 4531-121825-03). In the first step, adhering to the IRB guidelines, the instructor assigned a number (1 to 56) for each student report and used a spread sheet to record the generational cohort represented by that student (i.e., Gen X, Y or Z), the composition of the virtual team in which they participated (*Gen Z only* team, *mixed* team, or *no Gen Z* team), and the grade students received for the class. In the second step, the instructor shared the de-identified reports with the other coauthors for independent analysis (no information of student name or grade).

The coauthors, also business professors, independently rated each paper on each of the nine instructions heeded. If the report included a satisfactory, reflective discussion about how the student had followed an instruction, the report received a score of 1. If the report did not show signs of heeded instruction, the paper was awarded a zero. Each coauthor therefore created a spread sheet with 56 lines (one per de-identified student), and nine columns (one for each instruction, cells either were 0 or 1). As current scholarship devoted to rater-mediated assessment of text suggests, establishment of internal-validity, or consistency, or inter-coder reliability is essential (Khamboonruang, 2022). Hence, once the independently conducted binary classifications were complete, the coauthors met to compare the ratings. The independently produced Excel files matched (501 of 504 cells obtained from 56 rows and 9 columns devoted to each of the instruction), i.e., inter-coder reliability was greater than 99%. In the third step, the two independent coauthors presented the data file to the instructor for compilation into a single data file for analysis.

Findings

The sample included 28 (50%) Gen Z students, 16 (29%) Gen Y students, and 12 (21%) Gen X students. Four teams included *only Gen Z* participants (16 students), two teams included *no Gen Z* participants (8 participants), and eight teams represented a mix of generational cohorts (32 participants). As Table 1 shows, the most heeded direction relates to the discussion of the process by which the team's charter was developed. The least heeded instructions relate to discussion of new knowledge from peers, usefulness of feedback received, and new knowledge from readings by Gen Z students.

Do Students Heed Instruction?

Hypotheses H1a and H1b relate to the heeding of instructions by generations and teams. The results from one-way ANOVA tests for equality of means based on the generations of students and for the composition are reported in Table 2 (statistics relevant to significant items reported).

The heeding of instruction is generally low; only about a third of all student heed instruction about discussing the usefulness of feedback received from others (30%), the new knowledge gained from peers (32%) and new knowledge gained from reading (37%). When examined separately, Gen Z emerges as the lowest heeder of instruction; only 7% discuss new knowledge gained from peers, only 11% discuss usefulness of feedback from others, and only 14% discuss learning derived from assigned reading.

Table 2. Heeding of instructions by generations (test of H1a and H1b supported).

		N	Mean	F Test
H1a: SUPPORTED				
Item: *Behavioral change reported*	Gen Z	28	.2143	F = 12.1
Welch test statistic = 18.304, F = 29.208, p.001.	Gen Y	16	.5625	p < .001
Brown-Forsythe test statistic = 12.813,	Gen X	12	.9167	
F = 38.395, *p* < .001	Total	56	.4643	
Item: *Usefulness of feedback*	Gen Z	28	.1071	F = 11.002
Welch test statistic = 10.005, F-22.920, p.<.001	Gen Y	16	.3125	p < .001
Brown-Forsythe test statistic = 9.286,	Gen X	12	.7500	
F = 33.104, *p* < .001	Total	56	.3036	
Item: *New knowledge from assigned readings*	Gen Z	28	.1429	F = 12.006
Welch test statistic = 13.839, F = 24.923, p.<.001	Gen Y	16	.4375	p < .001
Brown-Forsythe test statistic = 11.059,	Gen X	12	.8333	
F = 36.211, *p* < .001	Total	56	.3750	
Item: *New knowledge derived from peers*	Gen Z	28	.0714	F = 13.74
Welch test statistic = 13.503, F = 21.194, *p* < .001	Gen Y	16	.4375	p < .001
Brown-Forsythe test statistic = 10.898,	Gen X	12	.7500	
F = 30.912, *p* < .001	Total	56	.3214	
H1b: SUPPORTED				
Item: *Behavioral change*	*Gen Z only* team	16	.2500	F = 4.67
Welch test statistic = 6.847, F = 21.333, *p* = .005	*Mixed* team	32	.4688	p = .014
Brown-Forsythe test statistic = 5.788, F = 38.243,	*No Gen Z* team	8	.8750	
p = 006	Total	56	.4643	
Item: *Use of feedback*	*Gen Z only* team	16	.0625	F = 4.8
Welch test statistic = 6.294, F = 17.953, *p* = .008	*Mixed* team	32	.3438	p = .012
Brown-Forsythe test statistic = 4.834, F = 17.522,	*No Gen Z* team	8	.6250	
p = .021	Total	56	.3036	
Item: **H1b**. *New knowledge from reading*	*Gen Z only* team	16	.0625	F = 9.9
Welch test statistic = 17.811, F = 19.945, *p* < .001	*Mixed* team	32	.4063	*p* < .001
Brown-Forsythe test statistic = 13.903, F = 31.223,	*No Gen Z* team	8	.8750	
p < .001	Total	56	.3750	
Item: *New knowledge from peers*	*Gen Z only* team	16	.0625	F = 7.02
Welch test statistic = 9.125, F = 18.378, *p* = .002	*Mixed* team	32	.3438	p = .002
Brown-Forsythe test statistic = 7.796, F = 20.415,	*No Gen Z* team	8	.75	
p = .003	Total	56	.3214	

Archetypes of Heeding Instruction

We hypothesized that heeding of the 9 separate instructions will vary along multiple and not one dimension, and archetypes of heeding instructions are identifiable. H2 is supported; Table 3 shows the three labeled dimensions of instruction-heeding and the factor loadings between measured variables and that dimension. Aligned with the preliminary intents, the components are not presented as robust, generalizable notions; they serve to stimulate new thinking and research only. Hair et al. (1998) explicate issues of sample size, factor loadings, and number of measured variables associated with the identified dimensions as key issues of robustness. The justification for inferences drawn from Table 3 include: (a) few measured variables load on any component (three, two and one respectively), suggesting more rather than less robustness, and (b) the concern with non-robustness of communalities is tempered by the magnitude of factor loadings (they range from .727 to .891, cross = loading does not exceed .211). For instance, Hair et al. (1998, p. 112) note that for factor loadings higher than .75 (as we find in the data for all except the third component), a sample size of 50 can yield significant results. Rooted in this reasoning, we find preliminary and neither definitive nor generalizable evidence to support H2; three archetypes of heeding instruction exist.

The first type of participant student is the *social learner*. This student follows directions about interacting with others, i.e., discusses the usefulness of feedback from team members, reports behavioral changes, and discusses new knowledge derived from peers. This archetype of heeding instructions does not mention the charter or discuss its influence, speaks very little of the learning derived from the assigned readings, and very little about the knowledge gained from the class or the project. The second type of participant is the *perfunctory learner*. This archetype goes through the motions, they follow the *first* direction received, i.e., they discuss participating in the process of framing a charter. Then they proceed to discussion of learning derived from the project. This archetype is insensitive to other directions. The third type of learner participant is *unsocial and team insensitive*. This type makes no mention of the team, the charter, of the feedback from team members or peers; s/he only discusses the learning derived from the class. It is noteworthy that none of the archetypes heed instructions in significant ways about discussing the

Table 3. Identifying archetypes of heeding instruction (tests of H2 & H3).

Rotated Component Matrix[a]				
H2 SUPPORTED: Archetypes identified				*Factor Loadings*
SOCIAL LEARNER: This participant's final paper reflects acquisition of new knowledge from feedback in the team, from interacting with peers, and evidence of behavioral change				
Behavioral Change discussed in report				.769
Usefulness of feedback discussed in report				.891
New knowledge derived from peers discussed in report				.727
PERFUNCTORY PARTICIPANT: This participant is going through the motions to demonstrate fealty to the charter the team was required to create and heeded instruction about new knowledge derived from the project				
Process of developing charter discussed in report				.858
New knowledge from project discussed in report				.845
INSTRUCTION INSENSITIVE: This participant focuses entire attention on saying they gained new knowledge from the class				
New knowledge from class only discussed in report				.778
H3 partially SUPPORTED				
		N	***Mean***	***Anova***
SOCIAL LEARNER By generational cohort	Gen Z	28	.16	F = 26.6
	Gen Y	16	.49	p < .001
	Gen X	12	.87	
	Total students	56	.40	
SOCIAL LEARNER By team composition	*Gen Z only* team	16	.15	F = 10.34
	Mixed team	32	.43	p < .001
	No Gen Z team	8	.83	
	Total	56	.40	

a. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations.

influence of the charter, responsiveness to feedback, or from assigned readings.

Do Archetypes Differ with Generation and Team Composition?

We find partial support for the hypothesized linkages between archetypes of instruction-heeding and generation of student, and composition of the team (H3). The social learner archetype's heeding scores: (a) differ significantly across generations; Gen X is a social learner, Gen Z is not, $F = 16.38$, $p = .001$), and (b) differ significantly across teams based on their membership; *no Gen Z* teams are social learners, other team types are not, $F = 6.54$, $p = .003$). Perfunctory learners are undifferentiable by generation or team composition. Finally, the Gen Z student is most likely to exhibit insensitivity to instruction ($F = 4.37$, $p = .017$).

Construct Validity

Attesting to convergent validity, the one-way ANOVA shows systematic relationship between the students' grade and the archetype of social learners, i.e., the mean factor score differs with final grade ($p = .01$, $F = 4.19$). Similarly, the correlation between final grade of the students and scores on the social learner archetype is significant. The finding converges with the prediction that heeding instruction improves learning (Matthews et al., 2012). Attesting to discriminant validity, the one-way ANOVA shows absence of relationships between heeding scores of students associated with the other archetypes. Predictably, correlations between grades and student scores on these archetypes are insignificant. This too aligns with the prediction; perfunctory heeding or ignoring instructions is essentially about *not* heeding instructions and is predictably unrelated to learning and performance by students.

Discussion

While caution must be exercised in drawing untested inferences, this research suggests that low-level instruction-heeding among MBA students enrolled in online programs deserves renewed scholarly attention. First, hiring managers place inordinate importance on the applicants' capacity to work in teams (Gray, 2024), and employers are concerned about preparation of fresh graduates for teamwork (Wyland et al., 2023). Preparing students for teamwork in workplaces is essential for any online MBA program; instructions in this regard trigger only low-level adherence among Gen Z – widely represented in MBA classes across the nation (Maher, 2025). Low-level instruction-heeding, if carried to the workplace as an enduring attitude or behavioral trait, might explain some of the skepticism in the workplace about the preparation of Gen Z students (Petkova et al., 2021). Second, the findings lend support to scholars of pedagogy who advocate for new instruction to fit with the needs of Gen Z students (Chandel et al., 2025). It is likely that the current instruction does not adequately fit with Gen Z students, i.e., while this study examined instruction-heeding in the context of teamwork, heeding of instruction in other classroom

contexts also seems justified. Third, defining "producing students who heed instructions" as valuable learning outcomes of MBA programs, and their regular assessment – seems deserved. Finally, expecting a single class or a instructor to address this underdeveloped skill may not address the issue in a significant way, and blaming unprepared Gen Z students for underdeveloped skills seems counterproductive in programs dedicated to delivering workplace-relevant education.

Recommendation for Educators

Educators are cautioned that general cohorts in their classes, and generation-related composition of virtual teams – differ systematically when it comes to heeding instruction. Hence, our preliminary investigation cautions that provision of instruction is currently producing low to near-absent level of instruction-heeding. Gen Z and *Gen Z only* teams heed instructions the least. Additionally, assigned readings clearly have very little effect, not many follow instructions about discussing their readings – particularly Gen Z students. There is more to having students read, and *most* students are unresponsive to this instruction. This finding deserves immediate attention of educators, scholars, and program instructors; the absence of evidence about student reading is a central issue. There are very few alternative ways of learning, sans reading, for students enrolled in online MBA programs. Educators may also consider designing multiple loops of "instruction-show evidence of heeding instruction-face consequences" with the use of small-scale assignments spaced over the duration of the term.

Based on our findings, we can also speak to administrators of MBA programs who manage enrollment and the process by which students proceed through coursework. The onus of preparing Gen Z students to heed instructions is too much to bear if placed on instructors alone, and told to craft better instruction. This responsibility is shared by administrators and calls for the crafting and implementation of program-wide solutions.

Future Research Directions and Conclusion

Based on our findings, several avenues of future research are identifiable. First, our findings are based on binary classification of students, future research is called to develop sensitive measures for "the extent to which instructions are heeded." Second, the linkages between the extent of heeding instructions on course-related learning, and on the development of socioemotional and soft-skills deserve investigation. Third, and likely the most consequential question worthy of future research raised by our study relates to the inordinately low adherence to instructions for reflecting and writing about the learning derived from readings. Finally, the preliminary findings can aid future inquiry and testing to determine whether the low-level instruction-heeding among students in general, and among Gen Z students and by teams that include Gen Z participants are: (a) triggering anxiety about teamwork (Schlee et al., 2020; Xethakis et al., 2024), regarding teamwork as an avoidable chore in classrooms (McMurtie, 2024) and tune out (Mintz, 2025), (b) leading MBA students to avoid classes that require teamwork (Wyld, 2021), (c) leading scholars to complain about poorly prepared graduates of business programs their underdeveloped teamwork skills (Petkova et al., 2021), and (d) leading employers, citing poorly developed soft skills, to avoid Gen Z applicants (Elting, 2024).

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported that there is no funding associated with the work featured in this article.

Ethics Statement

This study has the approval of St. John Fisher University's Institutional Review Board's approval (File No: 4531-121825-03).

References

Alstete, J. W., & Meyer, J. P. (2026). Personalized, experiential, and future-centric: An adaptive business education framework. *Journal of International Education in Business*, *19*(2), 200–216. https://doi.org/10.1108/JIEB-03-2025-0036

Byrne, J. A. (2022). *By the numbers: How rare is your MBA degree? Poets and Quants*. Retrieved November 16, 2025, from https://poetsandquants.com/2022/04/27/size-of-top-u-s-mba-programs-by-enrollment/

Carle, H., Scheuer, C. L., & Swartz, S. (2024). Was transitioning to the virtual environment worth it: Effects of different virtual team projects during the COVID-19 pandemic. *Higher Education, Skills and Work - Based Learning*, *14*(1), 218–235. https://doi.org/10.1108/HESWBL-12-2022-0285

Chandel, R., Bhagat, A., Malhotra, A. S., Rohilla, R., Kaur, G., & Prakash, K. (2025). Jigsaw technique: Will it help Gen Z nursing students? *Advances in Physiology Education*, *49*(2), 304–313. https://doi.org/10.1152/advan.00145.2024

Chen, Y., Preston, J. C., & Li, Y. (2025). Enhancing collaboration and critical thinking in CSCL environments: The interplay between team dynamics and pedagogical innovation. *International Journal of E-Collaboration*, *21*(1), 1–24. https://doi.org/10.4018/IJeC.376010

Elting, L. (2024). Managers don't want to hire Gen Z workers, citing a lack of soft skills - Survey says. *Forbes*. Retrieved December 4, 2025, from https://www.forbes.com/sites/lizelting/2024/12/23/managers-dont-want-to-hire-gen-z-workers-citing-a-lack-of-soft-skills-survey-says/

Fang, B., & Avvari, M. V. (2026). Teaching my past self: A dual perspective on designing a research-based capstone unit in the Master of International Business. *Journal of International Education in Business*, *19*(2), 217–242. https://doi.org/10.1108/JIEB-07-2025-0102

Gray, K. (2024). *The key attributes employers are looking for on graduates' resumes*. national association of colleges and employers. Retrieved november 24, 2024, from https://www.naceweb.org/talent-acquisition/candidate-selection/the-key-attributes-employers-are-lookingfor-on-graduates-resumes

Gresch, E., Saunders, M., & Rawls, J. (2020). Are we bonding yet? Using a mixed methods survey design to evaluate team-building exercise outcomes. *Business Education Innovation Journal*, *12*(1), 83–91.

Hair, J. F., Tatham, R. L., Anderson, R. E., & Black, W. (1998). *Multivariate data analysis* (5th ed.). Prentice-Hall.

Harris, B. N., McCarthy, P. C., Wright, A. M., Schutz, H., Boersma, K. S., Shepherd, S. L., Manning, L. A., Malisch, J. L., & Ellington, R. M. (2020). From panic to pedagogy: Using online active learning to promote inclusive instruction in ecology and evolutionary biology courses and beyond. *Ecology and Evolution*, *10*(22), 12581–12612. https://doi.org/10.1002/ece3.6915

Herzog-Punzenberger, B., Altrichter, H., Brown, M., Burns, D., Nortvedt, G. A., Guri, S., Eline, W., Funda, N., Magdalena, F., McNamara, G., & Joe, O. (2020). Teachers responding to cultural diversity: Case studies on assessment practices, challenges and experiences in secondary schools in Austria, Ireland, Norway and Turkey. *Educational Assessment, Evaluation and Accountability*, *32*(3), 395–424. https://doi.org/10.1007/s11092-020-09330-y

Jassawalla Avan, R., Sashittal, H. C., & Witt, A. (2026). How transformative learning theory can inform team building pedagogy. *Journal of Management Education*, *50*(1), 102–134. https://doi.org/10.1177/10525629251388109

Khamboonruang, A. (2022). Building an initial validity argument for binary and analytic rating scales for efl classroom writing assessment: Evidence from many-facets rasch measurement. *Reflections*, *29*(3), 675–699. https://files.eric.ed.gov/fulltext/EJ1361633.pdf

Kuzet, I., Todorovic, M., Manojlovic, M., Ding, R., Kovacevic, I., & Obradovic, V. (2026). Developing behavioral project management competencies - The generation footprint. *International Journal of Managing Projects in Business*, *19*(8), 99–123. https://doi.org/10.1108/IJMPB-06-2025-0227

Liu, R., Yang, J., & Zhang, F. (2021). Managing technology transfer between coopetitive firms: The roles of coopetition, asset specificity and justice. *Journal of Business and Industrial Marketing*, *36*(5), 765–781. https://doi.org/10.1108/JBIM-10-2019-0462

Maher, N. (2025). *What is the average age of MBA students at top B-schools like MIT, Sloan, Wharton & Kellogg?* Retrieved December 5, 2025, from https://www.businessbecause.com/news/mba-degree/9330/average-age-of-mba-students

Matthews, K., Janicki, T., He, L., & Patterson, L. (2012). Implementation of an automated grading system with an adaptive learning component to affect student feedback and response time. *Journal of Information Systems Education*, *23*(1), 71–83.

McMurtie, B. (2024). Customers in the classroom. *Chronicle*. Retrieved November 30, 2025, from https://www.chronicle.com/article/customers-in-the-classroom

Mintz, S. (2025). Re-engaging students in an age of distraction. *Inside higher ed*. Retrieved November 30, 2025, from https://www.insidehighered.com/opinion/columns/higher-ed-gamma/2025/06/26/why-students-tune-out-and-how-change

Naqvi, F. N., & Lodhi, A. (2019). What constitutes intellectual capital for IT-software industry? A delphi study. *Paradigms*, *13*(2), 1–9. https://doi.org/10.24312/1996130201

Petkova, A. P., Domingo, M. A., & Lamm, E. (2021). Let's be frank: Individual and team-level predictors of improvement in student team effectiveness following peer-evaluation feedback. *The International Journal of Management Education*, *19*(3), 2–15. https://doi.org/10.1016/j.ijme.2021.100538

Pierce, H. (2021). Nurturing care for early childhood development: Path to improving child outcomes in Africa. *Population Research and Policy Review*, *40*(2), 285–307. https://doi.org/10.1007/s11113-020-09581-z

Schnell-Peskin, L., Riley, G., Hodnett, K., Gryta, V., & Kisamore, A. (2024). Meeting the needs of students in higher education multigenerational classrooms: What can educators do? *The International Journal of Information and Learning Technology*, *41*(1), 73–85. https://doi.org/10.1108/IJILT-04-2023-0057

Schlee, R. P., Eveland, V. B. N., & Harich, K. R. (2020). From millennials to Gen Z: Changes in student attitudes about group projects. *Journal of Education for Business*, *95*(3), 139–147. https://doi.org/10.1080/08832323.2019.1622501

Wyland, R. L., Hanson-Rasmussen, N., & Gullifor, D. P. (2023). The build and bond: A team exercise. *Organization Management Journal*, *20*(4), 156–168. https://doi.org/10.1108/OMJ-06-2022-1560

Wyld, D. (2021). *Solving the paradox of teamwork in today's classroom teams*. https://vocal.media/education/solving-the-paradox-of-teamwork-in-today-s-college-classroom

Xethakis, L. J., Rupp, M., & Plummer, B. R. B. (2024). Why students feel anxious in group work: An investigation into students' perspectives on the sources of their anxious experiences in group work. *Frontiers in Education*, *9*, 1461747. https://doi.org/10.3389/feduc.2024.1461747

Yu, A. H., Uncles, M., & Jiang, Z. (2025). The process of co-creation in educational services: Insights from interviewing co-creative actors in higher education. *Journal of Service Theory and Practice*, *35*(3), 349–376. https://doi.org/10.1108/JSTP-04-2024-0100

Yue, Y., Chen, S., & Wang, Q. (2026). The impact of innovation and entrepreneurship competition participation and its team roles on undergraduate students' leadership. *Journal of Leadership Education*, *25*(1), 76–91. https://doi.org/10.1108/JOLE-08-2024-0099

Zhao, X., Fu, N., & Freeney, Y. (2024). Being at one with each other: Leader-follower (in)congruence in transformational leadership and team performance. *Leadership & Organization Development Journal*, *45*(2), 190–207. https://doi.org/10.1108/LODJ-05-2022-0240