

## Designing and Implementing Course-Based Research in the Undergraduate Curriculum to Enhance Active Learning

Kara Chan and Yuyuan Zhuo  
Department of Communication Studies,  
Hong Kong Baptist University

### Abstract

Gaining experience of research in an undergraduate course equips students with analytical skills that are relevant to solving real-life problems. This article introduces the design and implementation of qualitative research activities in an undergraduate general education capstone course titled *Children as Consumers: Marketing to the Youth*. The course was delivered in a blended learning mode. Undergraduate students interviewed an informant about his or her favorite retail shop and compared the results with the assigned reading on the consumption habits of adolescents. Students in groups then participated in an empirical study using qualitative interviews to explore financial literacy among children and teens. Research activities include preparing applications for institutional ethical approval, designing interview questions, conducting qualitative interviews, analyzing qualitative data, and applying the research findings in the design of marketing campaign messages. In addition to the instructor's assessment, students received comments from the marketing professionals from the Investor and Financial Education Council, who reviewed all the presentation videos. Feedback from students was analyzed to examine their perceptions of the research activities and the research project. External reviews of the course design and implementation are presented. These research activities can be scaled up for larger classes or conducted in an online setting. Recommendations for implementing course-based research are provided in the conclusion.

**Keywords:** innovative pedagogy, blended learning, interdisciplinary course, research ethics, social sciences

---

Corresponding author: Kara Chan, Email: [karachan@hkbu.edu.hk](mailto:karachan@hkbu.edu.hk)

## **Introduction**

In the contemporary landscape of higher education, there is a consensus that traditional teaching methods are no longer sufficient to enhance students' academic capabilities. The passive acquisition of knowledge through lectures is ineffective, with students retaining a mere fraction of the information conveyed. This pedagogical shortcoming has spurred the exploration and implementation of alternative educational approaches, among which "Course-Based Undergraduate Research Experiences" have emerged as an innovative pedagogy (e.g. Wallin et al., 2016). Course-Based undergraduate research experiences, which have gained significant traction in Science, Technology, Engineering, and Mathematics (STEM) education, are now practiced in non-science disciplines, including marketing and communication (Ballen et al., 2017).

Traditionally, undergraduate students gain empirical research experience in independent study courses offered in the senior years of the curriculum as a required course or an elective option, e.g. a Final Year Project. Supervision of undergraduate research is usually conducted on a one-to-one basis. The number of undergraduate students benefiting from such experiences may be limited. However, course-based

undergraduate research is a means of involving all undergraduate students in both junior and senior years. The objective is to provide undergraduate students with an opportunity to solve a real-life problem in a selected discipline. Students are tasked with applying theoretical knowledge and practical skills to design a solution to a real-world problem. The course is thus designed to equip students with research skills that should benefit their future careers.

In this paper, we review the literature on undergraduate research as an innovative teaching pedagogy and then we illustrate the practice with a case study that provides empirical evidence of students' learning journey. The paper also discusses how to evaluate the outcomes of undergraduates' research experience, assesses the challenges faced by instructors and students on this kind of course, and provides new insights into the implementation of course-based research.

## **Literature Review**

Course-based undergraduate research experiences (CURE) are popular in STEM education, as they offer students the opportunity to engage in authentic research within a classroom setting. In contemporary higher education, course-based undergrad-

uate research experiences are increasingly recognized as vital, not only for STEM students but also for those in non-science courses (Ballen et al., 2017). Course-based undergraduate research has been shown to improve student outcomes across various disciplines, including social sciences (Ruth et al., 2021), music therapy (Dvorak et al., 2020), marketing (Mead et al., 2020), and sociology (Cuthbert et al., 2011). These experiences enhance students' research knowledge, content understanding, and critical thinking skills (Dvorak et al., 2020; Delventhal & Steinhauer, 2020; Jones & Lerner, 2019).

Course-based undergraduate research can be implemented as full-semester courses or shorter modules within traditional laboratory courses, with longer experiences yielding greater benefits (DeChenne-Peters et al., 2023). Importantly, course-based undergraduate research can significantly increase the number of students participating in undergraduate research when compared to traditional one-on-one mentoring approaches (Jones & Lerner, 2019). This teaching model emphasizes active student participation and collaborative knowledge creation, significantly enhancing learning outcomes and research capabilities (Bovill, 2020). Whole-class co-creation can serve as a more inclusive method of collaboration and help foster positive relationships,

which may enhance the broader departmental and institutional goals of creating effective learning and a heightened sense of community and belonging (Bovill, 2020). Harland and Wald (2018) discuss the concept of “powerful knowledge” and underscore the importance of “epistemic access” in education, particularly regarding the generative principles of knowledge acquisition. The “power” in powerful knowledge is realized through its application, by which individuals are enabled to make meaningful contributions to society (Harland & Wald, 2018). Such an approach can enhance academic success while preparing students to contribute positively to their communities.

Subject knowledge can be forgotten over time if it is not used, while research skills are enduring and can be sustained throughout life (Custer, 2010). Conducting authentic research studies related to subject content empowers students in knowledge creation (Harland & Wald, 2018). This pedagogy is a high-impact practice that develops critical thinking and intellectual independence among undergraduate students (Kuh, 2008). Students can acquire meta-cognitive skills that are highly transferable to other situations and careers. However, there are few studies on undergraduate students' research experience in the social sciences field (Kistner et al.,

2021). The present study attempts to address this deficit by providing evidence of students' learning through their participation in course-based research in the areas of marketing and communication.

In higher education, whole-class collaborative learning and teaching methods have been shown to foster positive interactions and relationship-building among faculty, students, and peers (Bovill, 2020). Researchers have proposed a model for CURE, highlighting the necessity of understanding how CURE operates and setting an agenda for its future research and evaluation (Corwin et al., 2015).

That said, the assessment of CURE remains a challenge, with instructors often preferring knowledge-and-skills-based assessment over attitudinal instruments (Kleinschmit et al., 2023). To address this, researchers have proposed developing CURE-specific assessment tools through collaborative efforts within CURE networks (Kleinschmit et al., 2023). As CURE continues to evolve, there is a need for consistent evaluation frameworks to better understand the effectiveness of its outcomes (Brownell & Kloser, 2015). Hitherto, most of the research evaluating CURE has concentrated on science-related courses, with a relative neglect of the social sciences. By offering evidence in the field of communication and marketing, the

present study aims to address this lack.

CURE can provide an inclusive entry point to scientific research, potentially improving diversity in the scientific community (Bangera & Brownell, 2014). However, research on the effectiveness of CURE for nonmajors or students straddling different disciplines is limited, necessitating further investigation into best practices and student outcomes (Ballen et al., 2017). While CURE generally receives positive feedback from students, specific benefits in research capabilities and conceptual understanding are not well-documented (Linn et al., 2015). Mentoring emerges as a crucial component of successful CURE, but it requires improvement (Linn et al., 2015). To better understand the impact of CURE, researchers have proposed modeling how students achieve desired short, medium, and long-term outcomes using social learning theory (Corwin et al., 2015). Corwin, Graham, & Dolan (2015) propose that CURE enables students to engage in a distinct mix of activities that lead to gradual progress in various cognitive, psychosocial, and behavioral results. It pinpoints the essential elements that need to be integrated into the design of all CURE evaluation frameworks if CURE is to be successfully executed. Those evaluation elements provide essential linkage to map out students' activities and outcomes.

### **Case Study: Practices of Course-Based Research in a General Education Undergraduate Course**

The case study of CURE discussed in the present paper is a general education course titled *Children as Consumers: Marketing to the Youth*, which is currently offered at Hong Kong Baptist University. It is a three-credit course with 45 contact hours of teaching and learning. This general education course was offered as an interdisciplinary thematic course for two years and as a capstone course from 2021. The General Education program at Hong Kong Baptist University consists of 18 units, with nine units on foundational courses, six units on interdisciplinary thematic courses, and three units on the general education capstone course. The general education capstone course seeks to enable students to provide innovative solutions to solve a societal or global problem, value teamwork, and apply what has been learned in the classroom to addressing an issue faced by the local, regional, and global community (General Education Office, Hong Kong Baptist University, 2024a).

In the cohorts studied, the class size varied from 25 to 36, and the students came from all disciplines. While focused on marketing and communication, the course drew upon knowledge from various

disciplines, including psychology, education, sociology, anthropology, cultural studies, as well as law and ethics. The course was mainly taught in face-to-face mode, though a blended learning approach was adopted for four out of the thirteen weeks of the course. Students needed to complete the online materials before they came to the class for these weeks. The entire class participated in experiential learning activities, including course-based research, during the class meeting time.

The students were introduced to the use of qualitative research as a tool to gain consumer insights in designing marketing communication campaigns. Most of the enrolled students had no prior experience in empirical research. Some of them had never conducted any qualitative research interviews. To overcome this challenge, a step-by-step scaffolding process was designed. In the first step, students were assigned to read a journal article titled “Attributes of young consumers’ favorite retail shops” that reported on the results of a qualitative study among adolescents (Yip et al., 2012). The instructor explained how the interviewing protocol was developed, the questions asked, how the themes were developed from the data, and the use of representative quotes.

A related in-class assignment was designed for one of the three-hour class ses-

sions. This task required students to replicate the above-mentioned qualitative study. Since it involved human subjects, approval for the research activity was sought from and granted by the institute's Research Ethics Committee. The application for ethical clearance was made three months before the course was offered. In the first hour of the class, the instructor briefed students about the ethical process involved in conducting a qualitative study, the rights of the interviewees, and the wording used in an informed consent form. Appendix 1 shows the assignment brief together with the assessment rubric.

After explaining the ethical issues, the instructor demonstrated basic interviewing skills by role-playing with a teaching assistant and probing the answers to the first two questions of the interviewing protocol. The instructor then invited two students to come on stage and act as an interviewer and interviewee, respectively, for the remaining questions of the interviewing protocol. The role-plays provided an opportunity for the instructor to illustrate the use of follow-up questions. For the rest of the class time, students formed pairs and interviewed one another on the attributes of their favorite shops. The instructor and the teaching assistant observed the students' interviews and provided on-the-spot guidance. For example, the instructor helped

students identify responses that lacked specificity and demonstrated how to rectify them. The interviews were audio-recorded. Students prepared transcripts of the recordings according to a template. During grading, the instructor would point out specific areas that the students could improve in their interviewing skills. The instructor performed a qualitative analysis of the complete set of data. The process of qualitative data analysis was then explained in a presentation to the students, and the major themes identified were shared with the class.

The students were informed at the beginning of the study that the data collected from the interviews would be used in an academic publication. Students signed a consent form if they were content to allow the instructor and her collaborative researchers to gain access to the data for future publication. Students who were interested in making a significant contribution to the data analysis and write-up could identify themselves to the instructor. The benefits of such contributions as co-authors were communicated. All except one student gave consent to the use of the data for future publication. No student expressed interest in contributing to the subsequent data analysis and write-up.

After the study, the first author summarized a list of themes generated from

the qualitative study and asked students to compare these themes and the themes reported in Yip, Chan, and Poon's (2012) article about adolescents. By drawing on the interview data, the students as a group generated new knowledge about the market environment of young adults, which was compared with the data from the reading about adolescents' consumption behavior.

Finally, students in groups of five or six worked on a project with a government-funded organization, namely, the Investor and Financial Education Council. In this project, each group of students was required to design a marketing communication campaign that promoted smart consumption in online or offline purchases among children and adolescents. Students applied and obtained ethical approval from the institute and conducted qualitative interviews with children and teens to find out their online and offline consumption behaviors. Each group conducted ten interviews. Based on the results, the students drew insights and identified intervention strategies. The students were required to draft the interviewing guide, conduct the interviews, identify themes in the transcripts, and apply the insights to the design of their group's marketing communication campaign. Students created storyboards and printed posters to educate young con-

sumers about misinformation in consumption contexts. Students pre-recorded their 20-minute presentations using the Zoom platform and submitted them for grading. The project contributes to the communication of financial literacy among children and teens. Appendix 2 includes detailed information about the project assignment and its assessment rubrics.

Two marketing managers of the Investor and Financial Education Council were invited as partners in the students' learning journey. They went through all the presentation videos. Overall, they found the communication proposals strategic, creative, and research-driven. Even so, they provided specific comments for improvement. For example, some storyboards were considered lacking in gender balance. One marketing manager identified that the key visual of the poster wrongly encouraged overspending behaviors by featuring long payment receipts and two bulky shopping bags. Their comments were passed on to students.

### **Feedback from the Students**

Students taking the capstone course filled out a short questionnaire. Table 1 summarizes the results. Student feedback using Likert scales is consistently positive. Open-ended feedback included "*I learned*



*the qualitative research and the skill of interviewing children,” “This experience prepares me to do research on my own in the future,” and “I have to exercise communication skills with interviewees through asking questions concisely and precisely”.*

The analysis of student feedback on the capstone research project, involving 24 respondents, demonstrates a positive learning experience. Students reported a mean score of 4.69 (s.d. = 0.97) for their ability to design and conduct ethical qualitative research involving children and youth, indicating a strong emphasis on ethical practices. Additionally, the clarity of project requirements and expected deliverables was rated highly, with a mean score of 4.62 (s.d. = 0.94), suggesting that students felt well-informed about the objectives. They also noted significant learning in creating marketing communication content for children and youth, reflected in a mean score of 4.58 (s.d. = 0.95). Furthermore, students appreciated the opportunity to apply their learning to propose marketing solutions, achieving a mean score of 4.50 (s.d. = 0.99). Overall, the cumulative mean score of 4.59 (s.d. = 0.99) indicates that students found the capstone project to be a valuable and enriching educational experience. In the open-ended question, students commented that the most difficult part of the research process was quali-

tative data analysis. They needed to go through all the answers for a specific interviewing question to compare constantly the similarities and differences in order to generate the themes.

The results indicate a generally positive learning experience for students participating in the capstone research project. The high average scores across various feedback dimensions reflect students' strong recognition of the project's emphasis on ethical research design, clarity of project requirements, and the development of marketing communication content aimed at children and youth. These findings suggest that the project effectively fosters the practical application of theoretical knowledge, allowing students to engage meaningfully with the subject matter. However, the slightly elevated standard deviation highlights the variability in student experiences and perceptions. Such variability may stem from several factors, including differences in students' backgrounds, prior knowledge, and individual learning styles. Some students may find the project straightforward and rewarding, while others might encounter challenges that affect their overall satisfaction and learning outcomes. Moreover, the diversity of the project components itself could contribute to this divergence in feedback. Engaging in qualitative research and creating marketing content requires



a range of skills that may not be equally developed among all students. This complexity might lead to varied levels of

confidence and competence, resulting in a broader spectrum of responses to the feedback survey.

**Table 1**

*Student Feedback (N=24)*

| Feedback on the capstone research project   | Mean* | s.d. |
|---|-------|------|
| I learned how to design and conduct qualitative research that involves children/youth in an ethical approach. | 4.69  | 0.97 |
| The project requirements and expected deliverables are clear.   | 4.62  | 0.94 |
| I learned how to create content for marketing communication to children/youth through research.               | 4.58  | 0.95 |
| The project enables us to apply what we learn to propose a marketing solution.                                | 4.50  | 0.99 |
| Average of above items  | 4.59  | 0.99 |

\*five-point scale (1 = disagree very much; 5 = agree very much)

The research activities enable students to acquire skills such as preparing ethical reviews, data collection, data analysis, and problem-solving. Further insights would be obtained by supplementing the anecdotal student comments with a more systematic collection of data relating to students' subsequent engagement in undergraduate research. However, as students were non-majors, the instructor could not track such future engagement. However, the instructor did hire one student as an assistant on her research project on health. The student was entrusted with tasks such as recruiting subjects, preparing ethical ap-

proval documents, and transcribing focus group interview transcripts. She performed her tasks with the confidence acquired from experience and expressed an interest in further studies.

### Output and Recognition

Three journal articles were published based on students' CURE assignments. They are listed in Table 2. In all three publications, the students' contribution to data collection was acknowledged. The design and implementation of the course received the 2021 Grand Prize at the International Contest

on Blended Teaching and Learning organized by Peking University. The general education capstone course was reviewed for offering in 2024. The reviewer's feedback was encouraging, with 96.75 points for its course syllabus and 100 points (i.e. full marks) for its implementation. The assessment criteria for the course syllabus included alignment with program intended learning outcomes, alignment with general education capstone course aims, course content, teaching and learning activities, and assessment methods. The assessment criteria for course implementation included alignment of course intended learning outcomes and course aims, teaching and learning activities, assessment design, and

grading. According to reviewer 1, "I am impressed by the quality of assessment methods and the approaches adopted to engage the students in their learning. Journal articles are an outcome of student learning. It would be very helpful to students to be a part of these publications as their work contributes to the research on the issues. All the necessary elements of a capstone course have been implemented effectively." According to reviewer 2, "The fact that three studies have been accepted for publication based on coursework done for this class is remarkable. This is exactly what we aspire to do, as educators." (General Education Office, Hong Kong Baptist University, 2024b).

## Table 2

### *List of publications generated from students' research work*

- 
- Chan, K. (2021). Children's perception of YouTube videos with product endorsements, *Asian Journal of Business Research*, 11(1). DOI 10.14707/ajbr.210101
- Chan, K. (2024). What marketers of after-school educational services and educators can learn from children's perceptions of intelligence, *Young Consumers*, 25(2), 273-287. <https://doi.org/10.1108/YC-12-2022-1647>
- Chan, K. and Li, Q. (2022). Attributes of young adults' favorite retail shops: A qualitative study, *Young Consumers*, 23(4), 555-569. <https://doi.org/10.1108/YC-01-2022-1442>
- 

## Discussion

This study reports on a case study of the design and implementation of a course-based undergraduate research experience

(CURE) in a general education course for undergraduate students. There is evidence that students successfully engaged in active learning and were equipped with basic skills in researching children in an

ethical manner. The planning phase of research-based or course-based studies must prioritize ethical considerations, underscoring the necessity of obtaining prior approval for the collection and dissemination of research data. This proactive approach mitigates potential issues related to data publication and ensures compliance with ethical standards, ultimately fostering integrity in educational research.

Students took on an active role in creating knowledge for the selected discipline. Diverse assignments and projects within educational settings substantively enhance student learning. Research informs pedagogical practices, cultivating a positive attitude toward inquiry-based learning. Acknowledging the time required for students to internalize research concepts is vital, as course-based research offers long-term benefits, including improved retention of knowledge and practical skills that extend beyond mere short-term memorization. The research activity was scalable and could be conducted online or with overseas interviewees. Students reported that they were more confident in conducting qualitative research and felt a sense of ownership of the knowledge they co-create.

Research-led curricula often face limitations. Therefore, it is imperative to engage students in research projects that resonate with their local contexts. Such

relevance not only fosters higher-order and transferable skills but also facilitates collaboration with teaching assistants and industry professionals. Innovative approaches, like creating marketing communication campaigns based on empirical market research on the consumers and the marketing environment, enhance critical thinking, creativity, and problem-solving. Involving organization leaders as learning partners encourages students to engage with the community and promotes real-world working experience.

Integrating course-based research into undergraduate curricula presents several challenges. First, there are insufficient instructors in the higher educational sector who are experienced in designing and implementing course-based research experiences. Second, the curriculum structure is often too packed to incorporate a full-scale research project. Third, students are sometimes not well-prepared to employ software in analyzing qualitative and quantitative data. To address these challenges, we propose the following recommendations:

1. To engage students in qualitative interviews as an individual assignment. Students can adopt a qualitative interviewing protocol based on a published journal article and apply it to a different research population. The journal article can be sourced from

the course's reading list.

2. To engage students in quantitative surveys. Students can participate in a survey where the instructor has obtained ethical approval. Students can distribute the questionnaires to the target population and participate in the interpretation of the research findings. If data analysis using software such as Statistical Packages for Social Sciences (SPSS) is a barrier, the instructors can run the data analysis program and share the findings with the class. Students can learn how to interpret statistical tests and draw insights from the findings.
3. If data collection is not an option, the instructor can design an individual assignment requiring students to prepare an interviewing protocol or to draft a survey questionnaire for a topic in the curriculum. The instructor can give comments on the interviewing protocol or the survey questionnaire.

### **Limitations**

The evidence of student learning in this paper consists of the results of a short questionnaire that students in the course completed, feedback from an external organization on students' performance,

and external reviews of the course syllabus. In the future, it is desirable to collect additional evidence showing that the course has encouraged effective learning. End-of-semester student evaluations of the course, class observations from faculty, samples of completed course assignments, student grades and how they reflect the achievement of the course's intended learning outcomes are possible examples of additional evidence. Providing more evidence will strengthen the argument that course-based research encourages learning.

### **Conclusion**

This case study highlights the successful integration of course-based research within an interdisciplinary general education capstone course for undergraduate students. The findings demonstrate that students actively engaged in learning and acquired essential research skills, particularly in conducting research involving children in a responsible manner. The project was designed in a way that complied with standards and integrity in social sciences and marketing research. Students' active participation in knowledge creation and diverse assignments significantly enhanced their learning experience. Incorporating research into pedagogical practices fostered

a positive attitude towards inquiry-based learning, leading to long-term benefits such as improved knowledge retention and practical skills. Additional evidence can be collected in the future to further illustrate students' active learning.

### Acknowledgment

The preparation of the manuscript was supported by a Teaching Development

Grant of the Hong Kong Baptist University (Project title: Building a community of practice in research-informed teaching and learning, COP/2324/01). The blended learning materials developed for the course were funded by a Teaching Developing Grant of Hong Kong Baptist University (Project title: Developing blended learning for course GDSS/GDBU1867 Children as Consumers: Marketing to the Youth, SFFL/1718/04).

### References

- Ballen, C. J., Blum, J. E., Brownell, S., Hebert, S., Hewlett, J., Klein, J. R., McDonald, E. A., Monti, D. L., Nold, S. C., Slemmons, K. E., Soneral, P. A. G., & Cotner, S. (2017). A call to develop course-based undergraduate research experiences (CUREs) for non-majors courses. *CBE—Life Sciences Education*, 16(2), mr2. <https://doi.org/10.1187/cbe.16-12-0352>
- Bangera, G., & Brownell, S. E. (2014). Course-based undergraduate research experiences can make scientific research more inclusive. *CBE—Life Sciences Education*, 13(4), 602–606. <https://doi.org/10.1187/cbe.14-06-0099>
- Bovill, C. (2020). Co-creation in learning and teaching: The case for a whole-class approach in higher education. *Higher Education*, 79(6), 1023–1037. <https://doi.org/10.1007/s10734-019-00453-w>
- Brownell, S. E., & Kloser, M. J. (2015). Toward a conceptual framework for measuring the effectiveness of course-based undergraduate research experiences in undergraduate biology. *Studies in Higher Education*, 40(3), 525–544. <https://doi.org/10.1080/03075079.2015.1004234>
- Corwin, L. A., Graham, M. J., & Dolan, E. L. (2015). Modeling course-based undergraduate research experiences: An agenda for future research and evaluation. *CBE—Life Sciences Education*, 14(1), es1. <https://doi.org/10.1187/cbe.14-10-0167>

- Custer, E. J. (2010). Long-term retention of basic science knowledge: A review study. *Advances in Health Sciences Education*, 15(1), 109-128. doi: 10.1007/s10459-008-9101-y
- Cuthbert, D., Arunachalam, D., & Licina, D. (2011). 'It feels more important than other classes I have done': an 'authentic' undergraduate research experience in sociology. *Studies in Higher Education*, 37(2), 129-142. <https://doi.org/10.1080/03075079.2010.538473>
- DeChenne-Peters, S. E., Rakus, J. F., Parente, A. D., Mans, T. L., Eddy, R., Galport, N., Koletar, C., Provost, J. J., Bell, J. E., & Bell, J. K. (2023). Length of course-based undergraduate research experiences (CURE) impacts student learning and attitudinal outcomes: A study of the Malate dehydrogenase CUREs Community (MCC). *PLOS ONE*, 18(3), e0282170. <https://doi.org/10.1371/journal.pone.0282170>
- Delventhal, R., & Steinhauer, J. (2020). A course-based undergraduate research experience examining neurodegeneration in *Drosophila melanogaster* teaches students to think, communicate, and perform like scientists. *PLOS ONE*, 15(4), e0230912. <https://doi.org/10.1371/journal.pone.0230912>
- Dvorak, A. L., Davis, J. L., Bernard, G., Beveridge-Calvin, R., Monroe-Gulick, A., Thomas, P., & Forstot-Burke, C. (2020). Systematic review of course-based undergraduate research experiences: Implications for music therapy education. *Music Therapy Perspectives*, 38(2), 126-134. <https://doi.org/10.1093/mtp/miz023>
- General Education Office, Hong Kong Baptist University. (2024a). GE programme & courses, level 3: GE Capstone. [https://ge.hkbu.edu.hk/en/ge\\_programme\\_courses/ge\\_courses/course\\_list](https://ge.hkbu.edu.hk/en/ge_programme_courses/ge_courses/course_list)
- General Education Office, Hong Kong Baptist University. (2024b). Review report on level 3 GE Capstone experiential learning. Internal record.
- Harland, T., & Wald, N. (2018). Curriculum, teaching and powerful knowledge. *Higher Education*, 76(4), 615-628. <https://doi.org/10.1007/s10734-017-0228-8>
- Jones, C. K., & Lerner, A. B. (2019). Implementing a course-based undergraduate research experience to grow the quantity and quality of undergraduate research in an animal science curriculum. *Journal of Animal Science*, 97(11), 4691-4697. <https://doi.org/10.1093/jas/skz319>

- Kistner, K., Sparck, E.M., Liu, A., Sayson, H.W., Levis-Fitzgerald, M., & Whitney Arnold, W. (2021). Academic and professional preparedness: Outcomes of undergraduate research in the humanities, arts, and social sciences. *Scholarship and Practice of Undergraduate Research*, 4(4), 3-9. <https://doi.org/10.18833/spur/4/4/1>
- Kleinschmit, A. J., Rosenwald, A., Ryder, E. F., Donovan, S., Murdoch, B., Grandgenett, N. F., Pauley, M., Triplett, E., Tapprich, W., & Morgan, W. (2023). Accelerating STEM education reform: Linked communities of practice promote creation of open educational resources and sustainable professional development. *International Journal of STEM Education*, 10(1), article no. 16. <https://doi.org/10.1186/s40594-023-00405-y>
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Association of American Colleges and Universities.
- Linn, M. C., Palmer, E., Baranger, A., Gerard, E., & Stone, E. (2015). Undergraduate research experiences: Impacts and opportunities. *Science*, 347, No. 6222. <https://doi.org/10.1126/science.1261757>
- Mead, J. A., LeMay, S. A., Hawkins, R. R., Morgan, F. N., & Allman, H. F. (2020). The U Choose Awards: A marketing research, branding, and community engagement project. *Marketing Education Review*, 31(2), 190-195. <https://doi.org/10.1080/10528008.2020.1827959>
- Ruth, A., Brewis, A., & SturtzSreetharan, C. (2021). Effectiveness of social science research opportunities: a study of course-based undergraduate research experiences (CUREs). *Teaching in Higher Education*, 28(7), 1484-1502. <https://doi.org/10.1080/13562517.2021.1903853>
- Wallin, P., Adawi, T., & Gold, J. (2016). Linking teaching and research in an undergraduate course and exploring student learning experiences. *European Journal of Engineering Education*, 42(1), 58-74. <https://doi.org/10.1080/03043797.2016.1193125>
- Yip, T. C. Y., Chan, K., & Poon, E. (2012). Attributes of young consumers' favorite retail shops: A qualitative study. *Journal of Consumer Marketing*, 29(7), 545-552. <https://doi.org/10.1108/07363761211275045>



**(Appendix 1)**

Assignment brief and assessment rubric of an individual assignment

GCAP3115 Children as consumers: Marketing to the youth

Assignment 1 “Young adults and favorite shop”

You are assigned to form a pair. Conduct an interview with one another with the following questions in Chinese. Show the study information sheet and get the interviewee’s agreement to participate before data collection. Practice your interview skills by asking follow-up questions, such as repeating the question WITHOUT any elaboration, “Please give an example to illustrate”, “Please tell me more” etc. Follow-up questions are not new questions loosely related to the topic. You shall ask follow-up questions when the interviewee gives you vague and ambiguous answers.

Afterwards, transcribe the answers with the questions and your follow-up questions. A transcript is a narrative account of the entire conversation, including the self-introduction, questions, follow-up questions, and answers for all questions, including the demographic questions. Do not change the number of the questions and put follow-up questions in brackets without any numbering. Transcribe in written Chinese, not Cantonese Chinese. You can include English words used by the interviewee. At the end of the interview, please record the duration of the interview and report it together with the demographic information of the interviewee.

Interviewing is a powerful tool to obtain qualitative information related to motivation, emotion, and inner feelings that may not be captured by surveys. Be curious and be patient, listen well, and let the interviewee feel comfortable talking.

List of questions for the interview

介绍自己：

我是浸会大学的学生，正进行一项青年人与店铺的意见调查，所有讨论内容绝对保密，下列问题没有正确或错误的答案，我只想知道你个人的看法，多谢合作。如你对这研究有任何问题，

可联络 \*\*\* 教授, 电邮 \*\*\*\*。我可以开始问吗?

1. 我知道你拍了两张相片是有关你喜欢的店铺的, 一张是外观, 一张是店内, 可否展示店铺外观的照片, 并讲述一下店铺的外观是怎样的呢?
  2. 可否展示一下店铺内的照片, 讲述一下店内是怎样的呢?
  3. 请讲出店铺的名称、地点和售卖的货品 / 提供的服务。
  4. 你为什么喜欢这个店铺? 可否详细地讲给我听? 还有没有其他原因让你喜欢这个店铺呢? (问至没有其他原因为止)。
  5. 可不可以详细讲述一次你在这店铺遇到的经历。
  6. 你去这个店铺时, 通常是自己一个去, 还是和其他人一起? 如有其他人, 是哪些人呢?
  7. 你去这个店铺时, 你的心情通常是怎样?
  8. 你会几耐去一次这个店铺, 每次去大概待多长时间呢?
  9. 请问您的年龄, 性别和住房类型  
(租住公屋 / 居屋 / 私人楼宇; 自置公屋 / 居屋 / 私人楼宇; 员工宿舍; 其他 \_\_\_\_)
- 访问结束, 非常感谢您抽出宝贵的时间回答我的问题。

Record the duration of the interview: minutes.

Grading criterion (total 32 points):

The transcription is clear, rich, and well-organized. The interviewing guide is followed strictly: 25 points

Completeness of interviewees' demographics: 3 points

Format: 2 points

Record duration of interview: 2 points

## (Appendix 2)

Assignment brief and assessment rubric of a group research project

GCAP3115 Children as Consumers: Marketing to the Youth

Group project “Be a smart consumer” marketing communication project for the organization Investor and Financial Education Council

You are a group of marketing communication interns of the organization “Investor and Financial Education Council” for four weeks. You are assigned by Mr. \*\*\*, the marketing director to create content for a new column of “Children/youth & Money” on the organization’s website.

<https://www.ifec.org.hk/web/en/young-adults/index.page>

You are going to conduct a literature review about the topic of smart consumers and design a qualitative study with a visual element that gathers perceptions about being a smart consumer among elementary school children (p.4-6) or lower form secondary school students (form 1-3). Your team will analyze the data and come up with themes for the data. Based on the research insights, you shall deliver creative content in the form of two short videos to be broadcast on the website and an A2-size poster to be published online and distributed in the form of hard copies for school visits. For the videos, you can use storyboards or a draft video clip for presentation.

The communication objectives are:

1. To identify common tricks/traps in online as well as offline consumption behaviors that are relevant to your target audience
2. To learn what actions that they can take in the purchase process to be a smart consumer
3. To know what they can do if they think that they are not being treated fairly as consumers.

Please complete the following tasks.

1. Background: Read and quote TWO relevant journal articles and ONE survey report that are related to this topic. Journal articles are not newspaper articles or survey reports. They are academic publications written by researchers through a vigorous and scientific research process and are peer-reviewed for publication. Use databases such as ProQuest to locate these articles. If you can’t find the exact demographic group that fits your target audience, find any demographic group. You will argue that there is previous research finding on this topic among target group X. You want to see if your target group had similar behavior. Studies can be conducted in any part of the world. For the survey report, it should be conducted in Hong Kong. You may find relevant studies from your organization. Summarize what these journal articles and survey reports have found. This becomes your literature review of the study.

2. Your research: Design a list of about 8 to 12 questions for the qualitative study using an interviewing method. The study needs to include a visual element as a starting question that leads into the interview. You can use a projective method to ask your interviewee to complete a story. For example, Q: Suppose this lady is going to shop for a tablet. Can you tell me a story about her being tricked by the shop's salesperson into making a not-so-good consumer choice?
3. Based on the list of questions, please prepare the ethical clearance form to be vetted by the Department of Communication Studies with your signatures, and the study consent forms in Chinese (one for the parent and one for the child/youth). The number of interviewees per group is 10 (3 males 7 females or any combination that added up to 10 with at least two from one sex). No monetary reward for participation.
4. When the ethical approval is obtained, conduct the interviews and transcribe the interviews. Please keep the audio files of the interviews just in case we have doubts about your data. The audio file can be destroyed at the end of the course (i.e. May 31, 2021). Deadline for transcripts together with a signed consent form in one file: March 17, 2021 submitted and assessed individually
5. Blended learning session on March 11: Identify 3-5 major themes from your current data set. Themes are conceptual insights from the answers to all questions. For example, one of the themes may be that teens are afraid to make a complaint because they dare not to go into a confrontation. Select one to two representative quotes for each theme. Please bring your printed copies of the transcripts for the working session.
6. Marketing communication deliverables: Two storyboards for videos (each video of duration not more than one minute) plus an A2 size poster for distribution to schools. The marketing communication deliverables should be informed by your research insights, the psychological development stage of your target audience, and the communication skills you learned from the social marketing to children/youth lecture.
7. A lecture on storyboarding will be given on March 18. Teaching materials will be uploaded soon for groups that want to jump-start their creative process.
8. March 25 is reserved as the day for putting all the things together for a presentation. The presentation deck needs to be uploaded on March 28, 2021. No more changes will be made afterward.
9. Presentation day: April 1, 2021.

### **Details of your presentation**

Prepare a 20-minute presentation (no Q&A). Over-run will not be allowed. All members should participate in the presentation unless the member has health or COVID-related issue on the day or the member has prior approval from the instructor to be absent on the presentation day. The presentation should contain the following areas

- The first slide shows group members' names and the organization's logo
- summary of research literature from TWO journal articles and ONE survey report with formal citations in APA style
- research method of your study (how; when; where of data collection; how the data is analyzed)
- results: analysis of your interviews in the form of major themes supported by at least one representative quote
- how your research lead to your marketing communication deliverables
- creative content in the form of two short videos to be broadcast on the website and an A2 size poster to be published online as well as distributed in the form of hard copies for school visits
- for videos: either storyboards or a draft video clip
- conclusion

### **Assessment rubric**

EVALUATION of the presentation (40 points); peer evaluation of the contribution of members (4 points); interview transcripts (16 points); and ethical procedure and permission form (4 points)

|  |    |   |   |   |   |
|--|----|---|---|---|---|
| Presentation   |    |   |   |   |   |
| Group assessment   |    |   |   |   |   |
| Summary of literature review   | 5  | 4 | 3 | 2 | 1 |
| Summary of TWO journal articles that are relevant with full citation                       |    |   |   |   |   |
| Method and summary of findings of your study   | 10 | 8 | 6 | 4 | 2 |
| Identify themes from the interviews with a clear summary, supported by illustrative quotes |    |   |   |   |   |

|  |    |   |   |   |   |
|--|----|---|---|---|---|
| Creativity of the deliverables (able to engage the TA; draw on insights from lectures and your research; fresh and relevant ideas) | 10 | 8 | 6 | 4 | 2 |
| Presentation skills (eye contact, volume of voice, fluency, more than reading the slides, time management, vocabulary)             | 5  | 4 | 3 | 2 | 1 |
| Presentation slides (English formalities; well-organized; visual elements, font size readable; right use of time)                  | 10 | 8 | 6 | 4 | 2 |
| <hr/>  |    |   |   |   |   |
| Group assessment total (maximum 40)  |    |   |   |   |   |
| Individual assessment  |    |   |   |   |   |
| <hr/>  |    |   |   |   |   |
| Peer evaluation using a separate form;   |    | 4 | 3 | 2 | 1 |
| Transcripts clear, rich and well-organized, with follow-up questions   | 12 | 9 | 6 | 3 |   |
| Transcripts of correct format, with the demographic information, and duration of interview   | 4  | 3 | 2 | 1 |   |
| Follow proper ethical procedure; hand in a signed consent form of the parent and the child; and the data permission form           | 4  | 3 | 2 | 1 |   |
| <hr/>  |    |   |   |   |   |
| Individual assessment total (maximum 24)   |    |   |   |   |   |
| <hr/>  |    |   |   |   |   |

Received December 31, 2024

Accepted May 19, 2025