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AI-SUPPORTED BLENDED LEARNING IN CONSUMER BEHAVIOR: LINKING GOALS, CASES AND ASSESSMENT

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Abstract: Students can often explain a consumer behavior concept yet struggle to use it when a market situation allows several plausible interpretations. Adding online materials does little to address this difficulty unless preparation, classroom discussion and assessment lead students through a connected analytical task. This paper develops such a design for a 48-hour undergraduate Consumer Behavior course at a local university in China. The design draws on the course development proposal, its documented teaching resources and literature on blended learning and educational AI. Six recurring cases organize the course, while knowledge, capability and values objectives guide five categories of questions. Scripted digital-human videos introduce selected content; conversational AI offers optional clarification and counterarguments. A hypothetical beverage-brand case shows how an initial explanation can develop into a group recommendation and an individual transfer response. The resulting framework specifies a teaching component for each of the project's six development objectives, including differentiated resources and criteria for assessing independent reasoning. Its contribution is a course-level design with explicit connections between tasks and evidence of learning. Student performance data are not analyzed, so the framework's effects on learning remain to be evaluated. The approach offers a practical starting point for teachers who want to integrate AI into case teaching without allowing generated answers to displace student judgment.
Keywords: Consumer behavior; Blended learning; Generative AI; Goal-problem-oriented teaching; Anchor cases; Curriculum design

1 INTRODUCTION

A student may correctly define a reference group and still struggle to explain a purchase. Was the buyer seeking approval from friends, responding to a discount, or choosing a product that suited an immediate need? Several explanations may fit the same brief case. In Consumer Behavior, the teaching challenge is to help students decide what evidence supports an explanation and when that explanation needs to change.

The course project examined here starts from three familiar problems: examples become dated, knowledge is divided by textbook chapters, and case discussion can turn into another teacher explanation. Students encounter a concept, hear a case and receive the preferred interpretation before they have worked through the uncertainty themselves. Online quizzes add opportunities to recall terms, but they do not necessarily change this pattern.

Blended learning creates room to distribute that work across preparation, discussion and revision. Its design nevertheless involves choices about interaction and support, as Boelens and colleagues show in their review [1]. The question is what students should do in each setting and how one task prepares them for the next. A platform filled with resources is not, by itself, a connected learning experience.

Generative AI adds a further complication. It can offer an explanation almost immediately, including when the student has not yet formed a view. The educational opportunities discussed by Kasneci and colleagues therefore come with a need to examine how assistance affects the task [2]. For this course, a useful AI response might be a counterexample that makes a student reconsider an assumption. A fluent, complete case analysis could instead remove the work the assignment was meant to elicit.

This paper develops a course design that places recurring cases and connected questions at the center of AI-supported blended learning. It addresses three practical questions: how to translate course objectives into analytical tasks, where digital tools can provide useful support, and what student work would show that the intended learning has occurred. The scope is deliberately course-specific, with attention to the resources and workload of a local undergraduate institution.

2 LITERATURE AND DESIGN RATIONALE

2.1 Organizing Learning Around a Continuing Problem

Research on educational digital transformation in China emphasizes changes in learning design and evaluation rather than simply adding technology. Zhu and Dai connect that transformation with learner needs, capability development and credible assessment evidence [3]. These concerns suggest a straightforward starting point for Consumer Behavior: identify the judgment students must make, then choose the activities and resources that help them make it.

The present design uses three objective domains. Knowledge concerns the meaning and limits of concepts. Capability

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concerns applying those concepts to evidence and defending a recommendation. Values concern the consequences of marketing decisions for consumers and other affected groups. A single case can engage all three, although the evidence required to assess them differs. Knowing a definition, constructing an explanation and evaluating a misleading claim are related but distinct accomplishments.

The project calls its approach goal-problem-oriented teaching. Here, the term describes a planning procedure: turn an objective into a question, decide what information the student needs, and identify the response that would demonstrate understanding. Five question categories support this procedure, from foundational distinctions to transfer under changed conditions. They are a way to organize a lesson, not a claim that every learner follows the same cognitive sequence.

2.2 Assigning AI a Specific Instructional Role

Reviews of AI in higher education and blended learning provide a reason to examine pedagogical purposes alongside technical functions [4-5]. An available tool should have a clear role in the course before it becomes a required activity. For example, an explanation tool may help with unfamiliar terminology; it does not follow that the same tool should judge a student's final recommendation.

Chinese discussions of large models and education also consider changes in teaching, content production and human-machine collaboration [6-7]. This paper translates those broad possibilities into smaller instructional decisions. A digital-human video delivers a teacher-checked script. A conversational agent responds to a student's question. Their outward presentation may be similar, but their reliability and supervision requirements are different.

UNESCO's guidance supports attention to educational suitability, human agency and privacy [8]. In the proposed course, the teacher selects the evidence and retains responsibility for assessment. Students may use AI to question an argument, but generated claims need checking against the case materials. The emphasis on deliberate learner participation is also consistent with Zhu, Dai and Hu's discussion of learning with generative AI [9].

2.3 Making Feedback Usable

Feedback matters when a learner can interpret it and use it to improve subsequent work. Carless and Boud describe this capacity as feedback literacy [10]. The design therefore gives students a reason to return to their initial explanation. Rather than merely receiving comments after an assignment, they identify a weak assumption, reconsider it and explain the revision.

Access to support also needs practical attention. Hu and Zhu place learning services at the center of equitable classroom digital transformation [11]. For this course, that means providing the required concepts and case evidence in accessible teacher-prepared materials. Optional AI dialogue can extend support, but successful completion should not depend on access to an external account or a paid service.

3 COURSE CONTEXT AND DESIGN METHOD

The project is based in the School of Economics and Management at Guangdong University of Petrochemical Technology. Its application describes a 48-hour Consumer Behavior course, with 13 original chapters organized into six modules through six recurring cases. The documented resource foundation includes the Chaoxing learning platform, a goal-question collection, digital-human videos for extension questions, values-related cases and exploratory use of conversational agents. These resources establish the starting context; they are not treated as newly completed outputs of the later project period.

The application identifies six development objectives: an updated anchor-case collection; alignment of objectives and questions; digitally supported scenarios incorporating values; a digital-human teaching component; differentiated foundational and extension resources; and diversified assessment with a method for judging objective attainment. A related publication by the project team discusses an environmental, social and governance perspective on smart courses [12]. It provides a basis for considering resource reuse, access and responsibility within course development.

The method is a conceptual design synthesis. The project requirements were organized into teaching decisions, related literature was used to examine those decisions, and a worked scenario was developed to make the proposed sequence explicit. Three considerations guided the synthesis: whether a task addresses its stated objective, whether work carries forward between learning phases, and whether the design can use the existing course platform and resources.

The unit of analysis is the curriculum design. No learner dataset, interview study or classroom experiment is reported. Accordingly, the outcomes described below are design specifications, while the beverage-brand scenario is hypothetical. This distinction permits a clear account of what the framework provides without inferring student achievement from project plans.

4 THE TEACHING DESIGN

4.1 Reusing a Case Without Repeating the Lesson

An anchor case gives students a situation they can revisit as their conceptual knowledge develops. The first encounter may concern an individual purchase; a later task can examine peer influence, and another can test the responsibility of a

marketing recommendation. Familiarity with the context saves explanation time, but each return must introduce a different analytical demand.

The six-module structure offers a manageable scale for the course. A syllabus map should preserve the required concepts from the original 13 chapters and show where each is taught and assessed. Modules need not receive equal time. Difficult distinctions may require direct instruction, whereas familiar material can be prepared before class. The case organizes the work without dictating an artificial timetable.

Case maintenance is equally important. Each record needs a source, a date, the concepts it addresses and a note about what has changed since the previous version. A popular online discussion can supply a teaching prompt, but comments from that discussion cannot automatically stand for the wider consumer population. The case brief should distinguish observable facts from promotional statements and the teacher's own interpretation.

4.2 Turning Objectives into Connected Questions

Consider the difference between a favorable attitude and a purchase intention. A foundational question asks students to explain that difference. The key-concept question then asks why the distinction matters for the case. These are small tasks, but a weak answer here gives the teacher a specific misconception to address before discussion becomes more demanding.

The challenging question introduces a complication: consumers praise a product but face a constraint that makes purchase unlikely. Students must reconsider their explanation rather than simply add another concept name. A practical question then asks what the brand should do, given the available evidence and limited resources. Finally, an extension question changes the consumer group or setting and asks which parts of the recommendation still hold.

This sequence connects knowledge, capability and values. Conceptual accuracy supports the explanation, the explanation supports the recommendation, and the recommendation raises questions about consequences. Teachers can shorten or reorder the sequence where necessary. What matters is that a later question uses the reasoning developed earlier, instead of starting an unrelated activity.

4.3 Connecting Preparation, Discussion and Revision

Before class, students receive a short case brief, the essential concepts and a focused preparation task. A scripted digital-human video can introduce the situation, with a text alternative containing the same information. Students submit an initial explanation and identify something the brief does not tell them. This gives the teacher more useful information than a record that the video was opened.

Classroom work begins with a point of disagreement in those responses. The teacher adds information or asks groups to compare two explanations. Platform polls can reveal the distribution of views, but the majority answer is not treated as the correct one. Groups must identify evidence, state an assumption and explain why their interpretation fits better than an alternative. Direct teaching remains appropriate when discussion reveals a shared conceptual error.

After class, an individual task changes one condition in the case. Students revise their argument and identify the reason for the change. The teacher can direct a learner back to a short foundational explanation or offer an extension reading when the initial reasoning is already sound. Preparation and group discussion thus become material for further work, rather than completed activities with no later use.

4.4 Keeping Digital Assistance Within Bounds

Scripted digital-human videos are suitable for stable explanations and reusable case introductions. Their content can be checked before release and corrected when the case changes. Conversational AI has a different function: it allows a student to ask for clarification or test an argument. The proposal records exploratory use of Doubao and Zhipu Qingyan, but the framework does not assume that either constitutes a validated adaptive teaching system.

A useful interaction begins with the student's own interpretation. The agent can then ask for supporting evidence, offer a competing explanation or point out a condition under which the argument would fail. For instance, a student attributing purchase entirely to social influence could be asked what evidence would distinguish that account from a price-based explanation. The educational task remains the student's judgment about the alternatives.

Teacher review is still necessary. Prompt instructions cannot guarantee factual accuracy or consistent behavior, so course-relevant questions should be tested before an agent is recommended. Students need a route for reporting dubious responses and access to teacher-prepared support when dialogue is unhelpful. Identifiable student records are unnecessary for these case-analysis exchanges.

4.5 Differentiating Resources and Embedding Responsibility

The resource collection separates what every student needs from what a student may explore further. The foundational pathway contains the concepts and evidence required for assessment. Extensions add a different consumer group, conflicting evidence or a more demanding decision. They should not quietly become prerequisites for a satisfactory grade.

Responsible marketing belongs within the decision itself. If a group proposes scarcity messaging, it must explain whether the claimed scarcity is real and what the message might lead consumers to believe. If it recommends an

environmental appeal, it must identify evidence for that appeal. Such questions connect values with the substance of marketing analysis. They also leave room for reasoned disagreement: assessment concerns the quality of the argument, not conformity to a preferred slogan.

5 A WORKED BEVERAGE-BRAND SCENARIO

The following fictional case illustrates the design. A beverage brand launches a reusable cup with a limited-edition visual design. Online comments praise its appearance, yet purchasing remains limited. The case contains no observed company data; its purpose is to show how a common marketing question can develop across learning phases.

In preparation, students distinguish attention, attitude, intention and behavior. Each proposes an explanation for the apparent gap between favorable comments and purchasing. One might suggest that the cup is attractive but unnecessary; another might question whether those commenting belong to the target market. The task asks what further information would help, rather than inviting a complete marketing plan from a short brief.

The classroom version adds fictional information about differences in price sensitivity and opportunities to use the cup. Groups now compare expressive approval, functional mismatch and budget constraints. Each explanation leads to a different information need. Comments about design may reveal appeal, for example, while telling the group little about willingness to pay. The teacher can ask which observation would most strongly challenge the group's preferred explanation.

At this point an AI-generated recommendation can serve as an object of criticism. Suppose it proposes a scarcity campaign because positive comments supposedly prove demand. Students examine the inference: which evidence supports it, which assumption is missing, and what might happen if that assumption is wrong? The generated text is clearly labeled and is never introduced as survey evidence or a consumer response.

The practical task asks for a communication recommendation with a stated limitation. The values question concerns both the accuracy of a scarcity claim and the evidence behind any environmental message. These questions keep responsibility inside the marketing decision. A visually attractive recommendation is insufficient if it relies on an unsupported claim about consumers or the product.

For the individual extension, the target group changes from university students to office workers. Students identify an assumption that may no longer hold and explain what new evidence they would seek. Their short revision memo must connect that change to the recommendation. The sequence produces three assessable pieces of work: an initial explanation, a group decision and an individual transfer response.

6 ASSESSMENT AND OBJECTIVE COVERAGE

Assessment should make the reasoning behind an answer visible. Short quizzes can check conceptual distinctions, but case responses are needed to examine explanations and recommendations. Group work is accompanied by an individual response so that a polished collective submission does not obscure differences in understanding.

Four criteria provide a consistent basis for feedback: conceptual accuracy, relevant evidence, coherence of reasoning and consideration of alternatives or consequences. A strong response names the mechanism linking a proposed action to an expected consumer response and identifies a limit to that explanation. A weak response may use the correct vocabulary while leaving the connection unstated. The same criteria can guide feedback on early drafts and judgment of later work.

Platform records serve a narrower purpose. A low completion rate can alert the teacher to a problem, but access frequency alone does not establish understanding. Any subsequent attainment calculation should identify the assessed task, scoring rule, included students and threshold. Comparisons over time also require comparable tasks. Otherwise, a higher score could reflect easier assessment rather than stronger learning.

The framework gives each of the six development objectives a concrete counterpart. The case-record specification addresses collection and updating. The three objective domains and five question categories connect intended learning with tasks. The linked learning phases provide the digitally supported scenario, while decisions about marketing claims incorporate values. Scripted presentation and optional dialogue define the digital-human component; foundational and extension pathways organize resources. Finally, the assessment criteria and evidence requirements specify how attainment could be examined.

All six objectives are therefore covered within the completed design. Coverage is an outcome of the design process, distinct from verified deployment or measured learning gains. The correspondence provides a basis for checking subsequent teaching records and identifying any component that remains incomplete in practice.

7 DISCUSSION AND LIMITATIONS

The framework's main contribution is to carry one analytical problem through different settings. Students prepare a view, encounter reasons to question it and then defend a revised interpretation. AI can assist at particular points, but the course remains workable with teacher-written explanations. This flexibility matters when technical access or teacher preparation time is limited.

Resource maintenance also becomes more manageable when stable conceptual explanations are separated from changing market details. A new product example need not require remaking every video. This responds to the resource

and oversight concerns in the project's related ESG discussion [12]. It does not establish an environmental benefit, which would require separate evidence about production and use.

The design has limits. Its documentary basis is one course project, and the worked scenario cannot show how the sequence operates within actual classroom time. The paper does not establish student acceptance, reduced teacher workload or improved achievement. Conversational responses may also vary, making routine teacher oversight an ongoing requirement rather than a one-time preparation task.

Evaluation should begin with ordinary teaching evidence: dated materials, initial and revised responses, scoring records and transfer tasks completed without AI. Independent scoring of a subset of responses would help check the consistency of judgments. These records would allow a later study to ask whether students became better at explaining consumer behavior, and which parts of the sequence contributed to that change.

8 CONCLUSION

This paper translates the six development objectives of a Consumer Behavior course project into an integrated blended-learning design. Recurring cases give the course continuity; connected questions make its objectives teachable; and differentiated resources support preparation and revision. Digital-human videos and conversational AI have specific supporting roles, while assessment focuses on the reasoning students can demonstrate.

The framework provides a practical specification for course implementation and evaluation. Its value lies in making the relationship between a teaching activity and the evidence it should produce explicit. Establishing effects on learning is the next empirical task.

COMPETING INTERESTS

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