

Survey Items Constructs and Subconstructs

This document outlines the survey instrument used to evaluate students' perceived skill development following participation in a semester-long digital business simulation. The survey, administered via Qualtrics, assessed four key constructs:

Decision-Making Skill Development (analytical thinking, strategic decision-making, risk management, adaptive iteration),

Teamwork Skill Development (communication, coordination, conflict resolution, leadership in teams),

Leadership Skill Development (initiative, team motivation, strategic vision, ethical accountability), and

Job Market Preparedness (confidence, professional collaboration, employability, adaptability).

Each construct was measured through 16 Likert-scale items (1 = Strongly Disagree to 5 = Strongly Agree), grouped into thematic subconstructs to capture nuanced learning outcomes. Participants received the following instructions:

"Please indicate your level of agreement with the following statements regarding your experience with the business simulation. Use the scale below:
1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree."

Open-ended questions supplemented quantitative data, allowing students to elaborate on their experiences. This structured approach ensured consistent measurement while accommodating qualitative insights.

Survey Section: Decision-Making Skill Development

Subconstruct: Analytical Thinking and Problem-Solving

1. Participating in the business simulation improved my ability to analyze complex business problems effectively.
2. The simulation helped me understand how to break down a business challenge into smaller, manageable components for better decision-making.
3. I feel more confident in my ability to assess different strategic options before making a business decision.
4. The experience enhanced my critical thinking skills when evaluating financial and market data to inform decisions.

Subconstruct: Strategic and Data-Driven Decision-Making

5. The simulation strengthened my ability to make data-driven decisions rather than relying on intuition alone.
6. I have learned how to interpret financial reports and performance indicators to make informed business strategy choices.

7. My ability to consider multiple alternative solutions before making a final decision has improved due to the simulation.
8. The simulation helped me balance short-term gains with long-term business sustainability when making decisions.

Subconstruct: Risk Management and Decision Consequences

9. I am now more aware of the potential risks and consequences of my business decisions.
10. The simulation improved my ability to make decisions under uncertainty with incomplete information.
11. After participating in the simulation, I feel more confident in handling high-pressure decision-making scenarios.
12. I learned to anticipate possible trade-offs and unintended consequences before making key business decisions.

Subconstruct: Adaptive and Iterative Decision-Making

13. The simulation experience taught me to adapt my decisions based on changing market conditions.
14. I have improved in adjusting my strategies based on feedback and performance outcomes from previous decisions.
15. I am now more open to re-evaluating and adjusting my decisions if new information becomes available.
16. The simulation showed me the importance of continuous learning and iteration in business decision-making.

Open-Ended Question:

- *In what ways did the business simulation impact your approach to decision-making?*

Survey Section: Teamwork Skill Development

Subconstruct: Communication and Collaboration

1. The business simulation improved my ability to communicate effectively with team members.
2. I became more confident in expressing my ideas and contributing to team discussions.
3. The simulation helped me understand the importance of actively listening to others' perspectives in a team setting.
4. I learned how to collaborate effectively with peers to achieve common goals during the simulation.

Subconstruct: Team Coordination and Role Adaptation

5. The simulation experience enhanced my ability to coordinate tasks efficiently within a team.

6. I gained experience in adapting to different team roles and responsibilities as needed.
7. The simulation helped me understand how to work in a team where members have diverse skills and backgrounds.
8. I improved in balancing individual contributions with team goals to ensure overall success.

Subconstruct: Conflict Resolution and Problem-Solving in Teams

9. I developed better strategies for resolving conflicts and disagreements within a team.
10. The simulation experience enhanced my ability to negotiate and compromise when working in a team.
11. I feel more confident in handling teamwork-related challenges, such as managing different opinions and working styles.
12. The simulation taught me how to address miscommunication and misunderstandings in a team environment.

Subconstruct: Leadership and Accountability within a Team

13. I became more comfortable taking initiative in a team setting.
14. The simulation experience helped me understand how to support and motivate team members.
15. I improved in being accountable for my contributions and taking responsibility for my decisions in a team.
16. The simulation reinforced the importance of trust and dependability in successful teamwork.

Open-Ended Question:

- *How did the business simulation impact your ability to work in a team setting?*

Survey Section: Leadership Skill Development

Subconstruct: Initiative and Decision-Making in Leadership

1. The business simulation improved my ability to take initiative in leadership roles.
2. I became more confident in guiding my team's strategy and making executive decisions.
3. The experience helped me develop a proactive approach to identifying and solving problems.
4. I learned how to make timely and well-informed decisions in a leadership role.

Subconstruct: Team Guidance and Motivation

5. The simulation enhanced my ability to motivate and inspire team members to achieve common goals.
6. I developed skills in providing constructive feedback to help my team improve performance.

7. I improved my ability to delegate tasks effectively to ensure a balanced workload.
8. I became better at resolving conflicts and fostering a positive team environment as a leader.

Subconstruct: Strategic Thinking and Vision

9. The business simulation strengthened my ability to develop and communicate a clear vision for my team.
10. I learned how to analyze complex situations and make strategic leadership decisions.
11. I improved my ability to adapt leadership strategies based on new challenges and changing conditions.
12. The simulation helped me understand the importance of long-term thinking in leadership roles.

Subconstruct: Accountability and Ethical Leadership

13. I became more aware of the responsibilities and ethical considerations of being a leader.
14. The simulation experience reinforced the importance of accountability for my decisions and actions.
15. I learned how to balance assertiveness with empathy when leading a team.
16. I improved in maintaining composure and confidence in high-pressure leadership situations.

Open-Ended Question:

- *How did the business simulation impact your leadership skills, and in what ways do you feel more prepared to lead in a professional setting?*

Survey Section: Job Market Preparedness

Subconstruct: Confidence in Handling Job Responsibilities

1. After completing the business simulation, I feel more prepared to handle real-world job challenges and responsibilities.
2. The simulation experience helped me understand the practical applications of business concepts in a professional setting.
3. I am now more confident in my ability to analyze business situations and make informed decisions in a job role.
4. The simulation helped me develop the ability to prioritize tasks and manage workload effectively in a business environment.

Subconstruct: Professional Communication and Workplace Collaboration

5. I feel more prepared to collaborate and communicate effectively with colleagues in a professional setting.
6. The business simulation helped me develop skills in negotiation and professional discussions that are useful for the workplace.

7. I improved my ability to work in diverse teams with different perspectives and backgrounds, which will help in my career.
8. The experience reinforced my understanding of the importance of networking and relationship-building in the workplace.

Subconstruct: Career Readiness and Employability

9. I feel more confident in my ability to transition from an academic setting to the professional world.
10. The simulation experience has enhanced my problem-solving skills, making me more employable.
11. I now have a better understanding of what employers expect from graduates in a business-related role.
12. The business simulation has given me examples of hands-on experience that I can discuss in job interviews.

Subconstruct: Adaptability and Lifelong Learning

13. The business simulation taught me how to adapt quickly to new challenges in a fast-changing work environment.
14. I feel more comfortable with learning from mistakes and adjusting my approach in a professional context.
15. The experience helped me develop a mindset of continuous learning and self-improvement for career growth.
16. I now have greater confidence in my ability to take on leadership or decision-making roles in my future career.

Open-Ended Question:

- *In what ways has the business simulation contributed to your job readiness and career confidence?*