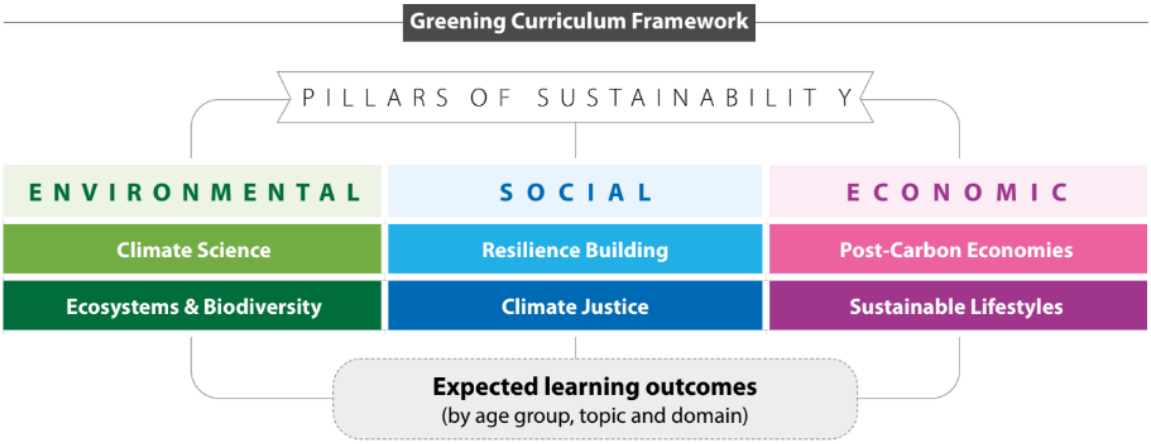
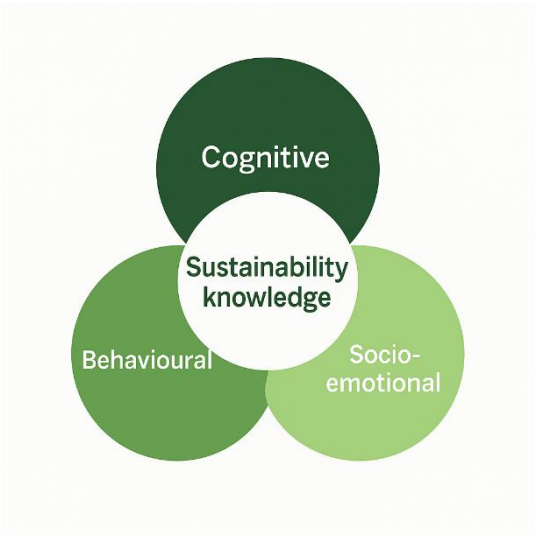
GUIDELINES FOR CREATING A LESSON PLAN

#GreeningEducation

"Healthy people on a healthy planet: Transforming food behaviours for sustainability"

This document provides teachers with guidelines on developing a lesson plan on ***Healthy People on a healthy planet: Transforming food behaviours for sustainability***. To improve your chances of winning the Lesson Plan Competition, please include as many details as possible and bear in mind that your lesson plan needs to address one of the following pillars of sustainability and teach more than just cognitive knowledge:





We thank you in advance for your participation and will do our best to share it with our network.

- Foundation for Environmental Education

1. AUTHOR DETAILS

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2. LESSON DETAILS

1. Lesson Title	**Escape the Cafeteria: Rethinking Food Choices for People and Planet**
2. Age Group	18+ / Undergraduate nursing students (2nd year; adaptable to other health and social care programmes)
3. Time Required	120 minutes in class + 20-30 minutes remote preparation + optional follow-up action task
4. Remote Preparation (if any)	Students complete a short food diary (3 days), photograph or note one typical lunch or campus-canteen option, read two short teacher-selected resources on sustainable diets and food waste, and answer a 5-item diagnostic poll.
5. Planning Considerations	– Class size: 20-36 students organised in teams of 4-5. – Main sustainability pillar addressed: Economic – Sustainable Lifestyles. – Integrated secondary pillars: Environmental – Climate Science; Environmental – Ecosystems & Biodiversity; Social – Climate Justice; Social – Resilience Building. – Expected sustainability learning domains intentionally targeted: Cognitive, Socio-emotional and Behavioural. – Use a psychologically safe prebriefing and avoid moralising food choices. – Acknowledge affordability, culture, religion, allergies, time pressure and food access. – Prepare printed and digital versions of all clues for accessibility. – Whenever possible, use the real campus menu, local seasonal produce calendars and waste examples from the institution. – Teacher acts as facilitator, not lecturer; feedback is immediate and formative.
6. Lesson tested in the classroom	**X No** The lesson has not yet been piloted; however, it is pilot-ready and already includes planned student outputs, reflection prompts, and teacher-use pilot-preparation appendices (see Appendices 1–4 and Tables 3–10), allowing authentic classroom artefacts to be incorporated after the first implementation without revising the lesson design.

3. THE LESSON PLAN

A. Wider Sequence of the topic –

Sequence within a wider higher-education nursing topic:

1. Determinants of health, sustainability and planetary health.
2. Food systems, dietary patterns and health literacy.
3. Food waste, local/seasonal food systems and environmental justice, sustainable lifestyles.
4. Submitted lesson: Escape the Cafeteria (students solve a food-behaviour challenge through an escape room and design a nursing response).
5. Development of a brief health-education or advocacy intervention for the campus/community.
6. Follow-up reflection on behaviour change, feasibility, barriers and professional transfer.

This lesson therefore sits at the point where theoretical understanding becomes professional action: students move from learning about sustainable food systems to making evidence-based healthy choices, communicating with others, and proposing feasible nursing and campus interventions.

This sequence is pedagogically scaffolded, moving from foundational concepts to applied decision-making and action, in line with action-oriented and transformative approaches to sustainability education.

B. Objectives or Learning Outcomes for the presented Lesson Plan

Main sustainability pillar addressed: Economic – Sustainable Lifestyles.

Integrated secondary pillars: Environmental – Climate Science; Environmental – Ecosystems & Biodiversity; Social – Climate Justice; Social – Resilience Building; Economic- Sustainable lifestyles.

Expected sustainability learning domains made explicit in this lesson: Cognitive, Socio-emotional, Behavioural.

1. Objective (O1): Analyse the relationship between food choices, human health, climate, biodiversity, food waste and equity in a concrete campus/community context - Cognitive outcome.
2. Objective (O2): Demonstrate empathy, ethical reflection and sensitivity to the cultural, social and economic determinants of food behaviour when discussing sustainable diets - Socio-emotional outcome.
3. Objective (O3): Apply sustainable food principles through menu redesign, food-waste reduction and local/seasonal decision-making in the escape-room tasks - Behavioural outcome.
4. Objective (O4): Co-design a brief, culturally sensitive nursing action (health education, peer campaign, advocacy recommendation or community micro-intervention) that promotes healthier and more sustainable food behaviours - Professional collaborative outcome.
5. Objective (O5): Commit to one realistic personal and one professional action that can be implemented in the university or community setting and identify one barrier and one support factor for implementation - Transfer outcome.

Objective numbers used in the lesson outline: O1, O2, O3, O4, O5

C. **LESSON OUTLINE** from the submitted lesson

Lesson Phase	Learning Objectives	Teacher Activity	Pupil/Student Activity	Method/Social Form	Material needed	**Didactic Intention** (incl. pillars of sustainability, cross-cutting + SDG competencies)
Introduction (10 min)	O1	Shows two contrasting lunch scenarios (healthy/sustainable vs. unhealthy/high-waste), launches the driving question and briefly links the lesson to nursing, health promotion and sustainability. Establishes an inclusive climate.	Observe, compare, react to the prompt, share initial assumptions and identify what makes a meal healthy, affordable and sustainable.	Visual prompt + guided plenary discussion	Slides with contrasting meals; board; sticky notes / digital poll	Activates prior knowledge and surfaces misconceptions. Introduces the whole-systems lens of the lesson and makes explicit that food choices connect health, environment, equity and everyday lifestyles. Main pillar foregrounded across the lesson: Economic – Sustainable Lifestyles. Integrated pillars: Environmental + Social.
Lesson's Objective / Hypothesis (5min)	O1, O2	Presents the mission: 'The campus canteen wants to improve one lunch offer and reduce waste. Can you unlock a solution that is healthy, feasible and sustainable?' Explain success criteria, rules, roles and timing.	Listen to the mission, take rotating roles (timekeeper, evidence checker, recorder, spokesperson, equity watcher), and state a group hypothesis.	Prebriefing; team formation	Mission card; role badges; timer; success-criteria slide	Builds psychological safety, role clarity and purposeful participation. Reinforces that the activity values reasoning, collaboration and revision rather than perfect first answers. Competencies: collaboration, agency, responsibility.
Development Phase 1 (35 min)	O1, O2, O3	Facilitates Escape Room Part A: 1) 'Decode the Plate' - students rebuild a lunch aligned with planetary health diet principles within a budget. 2) 'Waste Audit' - students identify avoidable food waste and redesign serving/consumption practices. Provides clues only when teams justify their thinking.	Analyse menu cards, nutrition/sustainability clues and a short case profile; build a meal; classify waste sources; decide what to reduce, reuse or recycle; submit answers to unlock the next envelope/QR code.	Small-group escape room; problem-based learning; gamified inquiry	Food/menu cards; plate template; budget card; waste audit sheet; QR codes or envelopes; local menu examples	Moves beyond theoretical recall toward decision-making and trade-off analysis. Students must weigh health, affordability, preferences and ecological impact. Competencies: systems thinking, problem framing, evidence-based reasoning, teamwork.
Securing Learning (Phase 1) (10 min)	O1, O2, O3	Stops the room briefly for a structured mini-debrief. Clarifies misconceptions	Compare solutions across teams, explain reasoning, revise earlier	Mini-debrief; peer comparison;	Board / shared slide; feedback cards	Ensures conceptual accuracy and supports learning from error. Keeps the lesson scientifically

		(e.g., sustainable does not mean expensive; 'local' does not automatically mean healthy; zero waste requires planning).	assumptions and record one insight and one question.	teacher feedback		accurate and reflective rather than purely game driven. Competencies: reflection, metacognition, communication.
Development Phase 2 (35 min)	O2, O3, O4	Facilitates Escape Room Part B: 3) 'Seasonal Basket' - teams choose local/seasonal ingredients for a realistic menu. 4) 'Nursing Action Lab' - teams design a brief intervention for one of three contexts: campus canteen advocacy, student health literacy message, or community/primary-care brief advice.	Select seasonal/local foods from a mixed set of cards; justify exclusions; build a plain-language nursing message or advocacy note; prepare a 90-second pitch and one measurable action proposal.	Small-group design sprint; role-based collaboration; micro-simulation	Seasonal calendar; ingredient cards; action-planning template; advocacy brief template; plain-language checklist	Deepens transfer to nursing practice and community action. Students experience themselves as educators, advocates and change agents, not only learners. Competencies: agency, futures thinking, communication for change, civic responsibility.
Securing Learning (Phase 2) (10min)	O2, O3, O4	Uses a rapid feedback protocol: 'Keep - Improve - Scale'. Highlights feasibility, clarity, health literacy and sustainability coherence.	Pitch their solution, receive peer feedback and refine the proposed action before final submission.	Peer review; micro-presentations	Rapid rubric; timer; action wall	Supports quality improvement and strengthens action orientation. Students refine solutions so they become more realistic, context-sensitive and implementable. Competencies: communication, peer learning, adaptation.
Reflection on Hypothesis/ Revisiting Lesson's Objectives (10 min)	O1, O2, O4, O5	Returns to the initial hypothesis and asks: 'What changed in your reasoning when health, sustainability, cost, culture and waste were considered together?'	Revisit objectives, identify trade-offs, and explain how their final solution better integrates health and sustainability than their first idea.	Guided reflection; whole-class dialogue	Reflection prompts; board; student notes	It makes systems thinking explicit and links behaviour change with justice and feasibility. Encourages nuanced rather than simplistic answers. Competencies: critical reflection, ethical awareness, integrative thinking.
Transfer (10 min)	O4, O5	Asks each team to select one transfer pathway: (a) proposal to the cafeteria/bar, (b) poster or digital information card for peers, (c) one-minute brief advice script for a student/patient, (d) mini peer campaign, or (e) a one-	Choose one transfer pathway, complete a short action card and produce a concrete output that could realistically be used within the next 2 weeks (poster draft, script, recommendation	Action planning; small-group commitment	Transfer action card; template for poster/script/recommendation; mini-campaign template; one-week challenge tracker; action wall	This is the action core of the lesson. It shifts the outcome from classroom performance to real-world implementation and makes the behavioural domain visible. Competencies: agency, planning, responsibility, community engagement, advocacy.

		week food-waste reduction challenge for the campus/community. Requires each action to name audience, setting, message, feasibility steps and one simple indicator of success.	memo, campaign card or challenge tracker). Identify who, where, when and how the action could be implemented.			
Final Reflection & Outlook (5 min)	O5	Collects an exit ticket and frames the next step in the wider sequence (implementation, observation and follow-up reflection).	Write one personal change and one professional/nursing action they will test; identify one barrier and one support factor; optionally sign up to upload a photo, screenshot or short follow-up note after one week.	Exit ticket; individual reflection	Exit slip / digital form	Promotes lifelong learning, self-regulation and continuity beyond the single lesson. Makes transfer measurable and prepares evidence for future piloting/submission documentation.

D. Photos and Material

No classroom photographs or authentic pilot evidence are included at this stage, as the lesson remains in the pilot-preparation phase. To support a stronger future post-pilot submission, the plan includes planned student outputs, reflection prompts for pilot implementation, and teacher-use appendices for pilot preparation and evidence collection. Appendix 1 (Tables 3–5) presents illustrative student products; Appendix 2 (Tables 6–8) provides reflection prompts for pilot implementation; Appendix 3 (Table 9) contains the evidence-collection checklist; and Appendix 4 (Table 10) provides the observation grid. Following the first implementation of the lesson, these illustrative and preparatory materials may be complemented or replaced by authentic student artefacts, anonymised reflection excerpts, and classroom photographs, where consent procedures and institutional regulations allow.

Materials and evidence-ready supports:

- Mission card and prebriefing slide
- Role badges (timekeeper, evidence checker, recorder, spokesperson, equity watcher)
- Menu and ingredient cards based on the real campus or local context
- Planetary health plate template
- Local/seasonal calendar
- Food-waste audit sheet
- Action-planning card and rapid feedback rubric
- Illustrative student outputs for pilot-ready lesson implementation (see Appendix 1 and Tables 3–5)
- Reflection prompts, pilot-preparation guidance, and observation tools to support implementation and evidence collection (see Appendices 2–4 and Tables 6–10)

E. Evaluation and Assessment

Assessment is aligned with the action-oriented purpose of the lesson and combines diagnostic, formative, performance and transfer evidence. It is informed by constructive alignment, authentic assessment and assessment-for-learning principles: students are assessed through the same kinds of evidence-based, collaborative and action-oriented performances they are expected to learn to carry out in real educational, community and nursing contexts. The lesson is primarily formative, but it can also be graded using the institutional 0–20 scale. Domain-aligned evidence is summarised in Table 2, and the real-time observation criteria are operationalised in Appendix 4 / Table 10.

1. Diagnostic assessment before and at the start of the lesson

- Before class, students complete a brief 5-item poll exploring current food behaviours, food-waste habits, understanding of sustainable diets and perceived barriers to healthier and more sustainable food choices.
- At the start of the lesson, students respond to one retrieval prompt and one misconception-check question related to health, climate, food waste or local/seasonal food systems.

- These initial responses are not graded; they are used to identify prior knowledge, misconceptions and behavioural starting points and to adjust facilitation during the lesson.

2. Formative assessment during the escape room
- The teacher uses a structured observation grid (see Appendix 4) to monitor each group's participation, role fulfilment, use of evidence, sustainability reasoning, collaboration and revision of decisions when new information appears.

- Each group completes four challenge artefacts: a reconstructed healthy and sustainable plate, a food-waste decision sheet, a local/seasonal food selection task and a draft health-education or advocacy action.

- A short mini-debrief after Phase 1 checks whether groups can correctly explain at least one link between food choices and health and at least one link between food choices and environmental sustainability.

3. Summative assessment structure (0-20 points)
- A. Group performance during the escape room - 8 points: use of evidence and scientific accuracy (0-2); systems thinking and integration of sustainability principles (0-2); collaboration, role fulfilment and collective problem-solving (0-2); quality and completion of challenge artefacts (0-2).
- B. Final 90-second group pitch - 8 points: clarity and coherence of the proposed solution (0-2); relevance to healthy and sustainable food behaviours (0-2); sensitivity to justice, feasibility and real-life barriers (0-2); actionability and transfer to campus/community contexts (0-2).
- C. Individual reflection and transfer task - 4 points: one personal commitment clearly stated (0-1); one professional or campus-related commitment clearly stated (0-1); one realistic barrier and one support factor identified (0-1); evidence of critical reflection on feasibility and change (0-1).

- Total: 20 points. Suggested interpretation: 0-9 insufficient; 10-13 sufficient; 14-17 good; 18-20 very good/excellent.

4. Domain-aligned assessment indicators
- Cognitive indicator: students correctly explain at least three connections between diet, health, climate, biodiversity, food waste and/or equity, using appropriate concepts from the lesson.
- Socio-emotional indicator: students identify at least one social, cultural or economic determinant affecting food behaviour and propose at least one inclusive or realistic response to that barrier.
- Behavioural indicator: students produce one feasible action output (poster, script, recommendation memo, mini-campaign or one-week challenge tracker) that includes a clear audience, one specific action, one implementation step and one simple indicator of success.
5. Reflection and transfer assessment
- Each student completes an individual exit ticket including one personal action commitment, one professional or campus-related commitment, one anticipated barrier and one support factor.
- In the optional 1-week follow-up, students submit one brief piece of transfer evidence, such as a reflection note, a photo, a poster draft, a short script, a recommendation memo or another micro-advocacy output.
6. Evidence that learning outcomes were achieved

- O1: Students justify meal choices using at least two health criteria and two sustainability criteria.

- O2: Students identify at least one social, cultural or economic determinant influencing food behaviour and propose at least one respectful and feasible response.
- O3: Students complete the challenge tasks and apply sustainable food principles accurately in their group solution.

- O4: Students produce a feasible health-education or advocacy output that identifies audience, purpose and one clear action step.

- O5: Students state realistic transfer actions and identify at least one likely barrier and one enabling factor.

F. Adaptations for stretch and challenges

Stretch / extension for advanced students

- Compare two menus and produce a short evidence-based recommendation memo for the canteen manager.
- Add a nutritional/behavioural complexity layer (e.g., vegetarian athlete, student with iron-deficiency risk, tight budget, limited cooking skills).
- Estimate which parts of the intervention could be scaled to a campus-wide campaign.
- Link the proposal explicitly to SDGs 2, 3, 12 and 13 and to GreenComp / sustainability competences.

Support / accessibility adaptations

- Provide simplified clue cards, colour coding, glossary and visual icons.
- Offer fewer options in the menu challenge for students needing reduced cognitive load.
- Provide both printed and digital materials; ensure large font, good contrast and plain language.
- Use mixed-ability groups with rotating roles so all students can contribute meaningfully.
- Allow oral instead of written justification where appropriate.
- Avoid shame-based language around food, body size or personal habits.
- Respect cultural food traditions, religious practices, economic constraints, sensory needs and dietary restrictions.

These adaptations preserve challenges while keeping the task inclusive, fair and professionally relevant.

G. Background information for teachers

Teacher background notes

1. Why this lesson matters

This lesson responds directly to the current FEE theme by helping students understand that healthier food behaviours are not only a matter of individual choice; they are shaped by food environments, institutional practices, culture, time, income and access. It explicitly foregrounds the main pillar Economic – Sustainable Lifestyles while integrating Environmental – Climate Science; Environmental – Ecosystems & Biodiversity; Social – Climate Justice; and Social – Resilience Building. It also aligns with the UNESCO greening curriculum approach by combining cognitive, socio-emotional and behavioural learning.

2. Theoretical grounding for the rationale and lesson design

The lesson is grounded in action-oriented sustainability education, which emphasises agency, participation, critical reflection and movement from understanding to action (UNESCO, 2024). Its internal coherence follows constructive alignment (Ali, 2018; Deibl et al., 2018): intended learning outcomes, learning tasks and assessment evidence are deliberately aligned. The escape-room structure draws on contemporary experiential learning literature (Kolb & Kolb, 2017), because students learn through concrete tasks, reflection, conceptual clarification and re-application. Recent literature in healthcare and nursing education also supports educational escape rooms as engaging strategies that can strengthen motivation, teamwork, communication and applied problem-solving when carefully facilitated and debriefed (Quek et al., 2024; González-de la Torre et al., 2024; Fagundo-Rivera et al., 2024). The debrief and transfer components are also informed by

contemporary transformative learning literature (Hoggan & Kloubert, 2020; Hoggan & Finnegan, 2023), as students are invited to question assumptions, examine trade-offs and reconsider habitual food behaviours and professional roles.

3. Key content principles to clarify before teaching

- The Planetary Health Diet is a flexible, culturally adaptable, plant-rich dietary pattern; it is not a rigid one-size-fits-all menu.
- A sustainable food choice must be considered together with health, affordability, access, culture and feasibility.
- Reducing food waste is one of the most immediate and actionable ways to lower environmental impact.
- Local and seasonal food systems are pedagogically valuable because they reconnect learners with production cycles, food identity and community resilience.
- Nursing action in this field includes assessment, health literacy, brief advice, motivational communication, advocacy and community partnership.

4. Common misconceptions to address

- 'Healthy food is always expensive.'
- 'Sustainable food is only about banning food.'
- 'Food waste only happens in restaurants or industry.'
- 'Nurses have no role in sustainability.'
- 'Local food is automatically sustainable in every circumstance.'

The teacher should guide students toward nuanced reasoning rather than absolute statements.

5. Pedagogical note

The escape-room format must remain educational rather than competitive-only. The aim is not to finish first; the aim is to justify choices, collaborate ethically, learn from revision and move toward action beyond the classroom. In methodological terms, the lesson combines problem-based learning, collaborative inquiry and experiential learning, while the debrief functions as the key reflective bridge between activity and meaning-making.

6. Assessment note

Assessment is designed as authentic and educative rather than purely summative. In line with constructive alignment and assessment-for-learning principles (Ali, 2018; Deibl et al., 2018), students are asked to produce the kinds of outputs that matter in real nursing and community settings: justified choices, practical recommendations, clear messages and realistic transfer actions. Reflection is included to support sustainable assessment and self-regulation beyond the single lesson.

Useful teacher resources

- UNESCO Greening Curriculum Guidance.
- FEE Lesson Plan Competition page and template.
- Eco-Schools / PLAN'EAT Curriculum Framework and fact sheets.
- Institutional or local menu examples, seasonal calendars and waste data whenever available.

Suggested teacher-created local resources

- Campus or institutional menu cards
- Local seasonal produce calendar

- Food-waste observations or anonymised cafeteria data
- Short nursing communication scripts for health education and advocacy

H. References

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APPENDICES FOR LESSON PILOT PREPARATION AND FUTURE EVIDENCE COLLECTION

The following appendices are designed to support pilot implementation of the lesson and any subsequent post-pilot submission. They include clearly labelled illustrative student products, reflection prompts, and teacher-use tools for pilot preparation and evidence collection. They do not present authentic pilot evidence already collected. Table 1 summarises the escape-room challenge sequence and expected evidence; Table 2 summarises the domain-aligned assessment logic; Tables 3–5 present illustrative student products; Tables 6–8 present pilot reflection prompts; Table 9 presents the evidence-collection checklist; and Table 10 presents the observation grid.

Table 1. Escape room challenge overview and expected evidence

Challenge	Timing & task	Student product / evidence	Sustainability focus	Nursing translation
Challenge 1 - Decode the Plate	10-12 min. Teams receive menu/ingredient cards, a case profile and a budget limit. They must assemble a lunch that is nutritionally adequate, realistic and aligned with planetary health principles.	Completed plate template + 3-part justification: health, sustainability, affordability.	Plant-rich choices; moderation of animal-source foods; balance rather than restriction.	Students practise evidence-based food guidance and learn to communicate without moralising.
Challenge 2 - Waste Audit	10-12 min. Teams review a mock tray-return station or waste log and identify avoidable waste, portioning problems and behavioural triggers.	Waste-audit sheet + 3 priority actions at student/service level.	Reduction of food waste; responsible consumption; practical action with immediate impact.	Students identify brief advice and institutional actions nurses can support in schools, campuses and communities.
Challenge 3 - Seasonal Basket	10-12 min. Teams choose ingredients for a weekly lunch option using a local seasonal calendar and a mixed set of food cards, some intentionally out of season.	Seasonal basket + short rationale + one substitution strategy.	Support for local and seasonal food systems; community resilience; shorter supply chains where appropriate.	Students link food literacy with community contexts and recognise the role of local partnerships.
Challenge 4 - Nursing Action Lab	12-15 min. Teams choose one action pathway: patient/student education, canteen advocacy,	90-second pitch + action card + one selected transfer output (poster/social media card, canteen recommendation memo, brief advice script, mini-	Behaviour change, participation, sustainable lifestyles and institutional transformation.	Students act as health promoters, communicators and advocates. They link dietary counselling to environmental

	community message or mini-campaign.	campaign plan or one-week waste challenge tracker).		literacy, service improvement and community engagement.

Table 2. Assessment rubric by sustainability learning domain

Criterion	What strong evidence looks like	Assessment tool
Cognitive indicator: scientific accuracy and food-system reasoning	Uses correct concepts; explains links between diet, health, climate, biodiversity, food waste and equity; avoids simplistic or misleading claims.	Teacher observation + pitch
Socio-emotional indicator: empathy, justice and ethical reflection	Recognises cultural, social and economic determinants of food behaviour; avoids blame; proposes fair, inclusive and respectful solutions.	Challenge artefacts + debrief
Behavioural indicator: action orientation and transfer	Produces a specific, realistic and feasible action beyond the lesson, with a named audience, clear message, implementation step and simple indicator.	Observation grid
Collaboration and role fulfilment	All members participate; roles are visible; disagreement is handled constructively; evidence is used before asking for clues.	Action card + exit ticket
Nursing relevance and advocacy	The message/intervention fits the nurse's role in education, prevention, advocacy or community engagement and is suitable for the selected audience.	Pitch + action card
Reflective quality and barrier awareness	Student identifies trade-offs, barriers, supports and next steps, not only ideal solutions.	Debrief + exit ticket

Appendix 1 - Illustrative student products

These illustrative outputs show the kinds of artefacts students may produce during or immediately after the lesson. They are provided as examples only and can later be replaced by authentic student work from a pilot implementation.

Student Product A - Campus canteen menu redesign card

Table 3. Illustrative student product A - Campus canteen menu redesign card

Field	Exemplar student content
Challenge context	Redesign one campus lunch option so it supports both personal health and planetary health.
Original menu observed	Beef burger, fries, sugar-sweetened soft drink and packaged chocolate pudding.
Redesigned menu	Warm chickpea and vegetable bowl with brown rice, roasted seasonal vegetables, leafy salad, fruit for dessert and tap-water infusion.
Why it is healthier	Higher fibre and micronutrient intake; more legumes and vegetables; less processed meat, less added sugar and less excess saturated fat; promotes satiety and dietary balance.
Why it is more sustainable	Plant-rich composition lowers pressure on land and emissions; seasonal vegetables reduce reliance on highly resource-intensive options; fruit replaces heavily packaged dessert; water avoids single-use beverage packaging.
Waste-reduction move	Offer two portion sizes, allow fruit to be taken away if not eaten immediately, and display a 'take what you will finish' prompt near the serving area.
Nursing translation	As future nurses, we would explain that a healthy and sustainable lunch is not about perfection; it is about choosing practical meals that support energy, wellbeing and responsible resource use.

Student Product B - Peer mini-campaign poster / social media card

Table 4. Illustrative student product B - Peer mini-campaign poster / social media card

Field	Exemplar student content
Title	Eat well for yourself and the planet
Target audience	Undergraduate students use the campus cafeteria or bring food from home.
Core message	A sustainable meal can be affordable, realistic and culturally adaptable: build your plate with more plants, waste less food and choose local/seasonal options when possible.
Three student actions	1) Start with one plant-rich lunch each week. 2) Check portions before serving to reduce leftovers. 3) Swap one out-of-season highly packaged snack for a local or seasonal option.

Socio-emotional/justice note	Not everyone has the same budget, time, cooking space or food access. Sustainable change should be supportive rather than judgemental.
Call to action	Join the 7-day low-waste lunch challenge and share one realistic change with a friend or classmate.

Student Product C - Recommendation memo to the cafeteria/bar

Table 5. Illustrative student product C - Recommendation memo to the cafeteria/bar

Field	Exemplar student content
Problem identified	Students reported limited plant-rich options, oversized portions for some meals, and little visible information about seasonality or food waste.
Recommendation	Pilot one clearly labelled plant-rich daily option, create a seasonal special board, offer standard and lighter portions, and monitor avoidable plate waste for one week.
Why this matters	The recommendation supports healthy choices, reduces waste, and makes the sustainable option easier rather than more demanding.
Feasibility	The proposal starts with one meal line and one monitoring week; it does not require a full menu redesign.
Indicator of success	Number of students choosing the plant-rich option, amount of plate waste recorded, and brief student feedback on acceptability.
Nursing advocacy angle	Nursing students can contribute by co-designing plain-language health messages and collecting user feedback ethically.

Appendix 2 - Reflection Prompts for Pilot Implementation

This appendix provides sample prompts to support reflection during the pilot implementation of the lesson and any optional one-week follow-up activity. It is intended to foster reflective practice and guide future evidence collection; no authentic student reflections are included, as the lesson has not yet been piloted.

Reflection Prompt A - Personal behaviour change

Table 6. Reflection prompt A - Personal behaviour change

Field	Guiding prompt / teacher note
Prompt	What realistic personal change could you test after this lesson?
What to look for after pilot	References to one specific and feasible behaviour change, such as choosing a more plant-rich meal, reducing avoidable food waste, or checking seasonal/local options. Look for realism, self-awareness and an understanding of barriers.

Reflection Prompt B - Professional/nursing practice

Table 7. Reflection prompt B - Professional/nursing practice

Field	Guiding prompt / teacher note
Prompt	How does this lesson connect to your future role in nursing?
What to look for after pilot	Links between sustainable food choices and nursing practice, including health education, non-judgemental communication, culturally sensitive advice, advocacy in campus/community settings, or support for health literacy and prevention.

Reflection Prompt C - Systems, barriers and equity

Table **8. Reflection prompt C - Systems, barriers and equity**

Field	Guiding prompt / teacher note
Prompt	What trade-off, structural barrier or justice issue became more visible during the lesson?
What to look for after pilot	Recognition that food behaviour is shaped not only by individual choice but also by price, time, availability, marketing, culture, institutional food environments and unequal access to healthy and sustainable options.

Appendix 3 - Pilot Preparation and Evidence Collection

This appendix is intended for teacher use in preparing the pilot implementation of the lesson and supporting subsequent documentation. It does not present evidence already collected during the pilot; instead, it outlines how authentic evidence may be gathered ethically and systematically after implementation. It should be read alongside Appendix 4 / Table 10, which operationalises the observation criteria used during the escape room.

Table 9. Pilot preparation and evidence collection checklist

Evidence to collect	When/how to collect it	Why it strengthens the submission
Photographs of challenge stations and action wall	During Development Phases 1 and 2; capture materials, teamwork and final displays without exposing sensitive personal data.	Shows the lesson is real, active, collaborative and action oriented.
Completed student artefacts	Collect one strong example from each challenge: plate template, waste sheet, seasonal basket and action card.	Provides concrete proof that students moved beyond theoretical knowledge.
Short pitch notes or transcripts	Take photos of action cards or note key points from the 90-second presentations.	Demonstrates feasibility, nursing relevance and communication for change.
Exit tickets and follow-up reflections	Collect at the end of class and again after one week, if possible, through a digital form.	Makes the behavioural and transfer dimensions visible.
Brief teacher reflection	Immediately after class, record what worked, what students found difficult and what you would refine.	Shows reflective practice and readiness for iteration.

Teacher preparation checklist

Before class

- Adapt menu cards to the local campus/community context.
- Prepare role badges, envelopes or QR codes, timer and feedback rubric.
- Select two short pre-class readings and launch the diagnostic poll.
- Check accessibility: print quality, font size, colour contrast and digital backup.
- Prepare seasonal calendar and waste examples relevant to the local context.
- Decide in advance which student outputs will be photographed or retained if the lesson is later piloted.

During class

- Run a short prebriefing and establish a non-judgemental tone.
- Keep time visible and move between teams as facilitators.
- Ask probing questions before giving clues.
- Capture examples of strong reasoning and misconceptions for debrief.
- Protect equal participation by checking group roles.
- Student work and the final action wall should be photographed only after the pilot implementation of the lesson, and only where consent procedures and institutional regulations permit.

After class

- Collect student artefacts and exit tickets after the pilot implementation of the lesson.
- Invite students to complete an optional one-week follow-up reflection.
- Replace illustrative outputs with authentic student products and anonymised reflection excerpts once the lesson has been piloted.
- Add 2–3 classroom photographs and 2–3 anonymised reflection excerpts to strengthen the final submission once authentic pilot evidence is available.

Appendix 4 - Observation Grid for the Escape Room

This appendix provides an observation grid for teacher use to support real-time monitoring of group work during the escape room. It may be used formatively during the pilot implementation of the lesson and, where appropriate, may also contribute to the 8-point group performance component of the 0–20 assessment structure. Its criteria are directly aligned with the Evaluation and Assessment section and with Table 2.

Table 10. Observation grid for the escape room

Criterion	Emerging (0)	Developing (1)	Consistent (2)	Notes / evidence
Participation and role fulfilment	One or more students remain passive, and roles are unclear or absent.	Most students participate, but role fulfilment is uneven or inconsistent.	All students participate actively and assigned roles are visible and purposeful.	
Use of evidence and scientific accuracy	Decisions are unsupported or include major inaccuracies.	Some evidence is used, but reasoning is partial, inconsistent or only partly accurate.	Decisions are clearly justified with accurate evidence from the challenge materials.	
Systems thinking and sustainability reasoning	Health and sustainability links are missing, simplistic or incorrect.	Some correct links are made, but trade-offs or wider food-system connections remain underdeveloped.	Health, sustainability, waste, feasibility and equity are integrated clearly in the group's reasoning.	
Collaboration and collective problem-solving	The group struggles to listen, negotiate or work towards a shared solution.	Collaboration is generally positive, but uneven participation or unresolved disagreement limits progress.	The group collaborates respectfully, negotiates decisions and works towards a shared evidence-based solution.	
Revision and challenge artefacts completion	The group does not revise decisions when new information appears and challenge artefacts are incomplete.	The group revises some decisions and completes most artefacts, but with limited justification.	The group revises decisions appropriately, explains why and completes all challenge artefacts to a good standard.	