MODELS AND THEORIES OF NUTRITION EDUCATION

A QUICK CANTER OVER THE MAIN APPROACHES
with a little education theory
and some illustrations from the floor
NUTRITION EDUCATION APPROACHES

What are the elements?

THE BASELINE

1 The people, what they do and think
2 Their environment and circumstances

THE TARGET LEARNING

Knowledge, attitudes, skills, behaviour

THE APPROACH - HOW THEY COME TOGETHER

What is the main focus? What is the balance?
If you are......

• A rural mother with two young children
• A small farmer
• An urban teenager
• An urban professional
• A school child aged 9
• A slum dweller – any age
+ Other players
+ Experts
What is your main concern in life? Where do you want your life to go? How do you see your dietary needs? What food do you want? Who and what influences you in what you eat, and how? What nutritional needs do the experts perceive? What practices reflect them? What knowledge do the nutrition professionals have to give?
Elements and issues: the checklist

The people (e.g. family, community, vendors, government, advertisers, media, legislators, health workers, agriculturists) + their interactions and influences

Some issues: women’s control, influence of HH members, capacity of local services, loss of parents, food talk (the food soap)

The environment & settings (e.g. home, shops, garden, clinic, school, resources, laws) + trends (urbanisation, commercialisation, prices)

Some issues: street food, school-home liaison, loss of skills, junk food, control of advertising, food security, linking home gardens and diet, school food

The learning field: knowledge, concepts, skills, practices, attitudes + unlearning & protection from misinformation + recognizing what’s already learned – where learning starts

A lot is known

Some issues: ideas of good food and good feeding, myths and misconceptions ancient and modern, prioritisation, link between knowledge and practice, link between message and audience, self-help, aiming at knowledge OR specific practices OR awareness+motivation? *****
SCENARIO

HEALTH

WEALTH

FORTUNE

WHICH WAY?
How does a child learn good eating?

Picture a child who has been brought up to
- know and enjoy good food
- choose good food (when there is a choice)
- defend choices if necessary
- prepare food well
- know how to buy it (spend money well)
- know how to grow it
- notice what others eat
- talk about food with knowledge and interest
- recognize misleading information

How does s/he learn these things?
## Three Overlapping Trends

### Approach

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**FOCUSING ON ...**

- Behaviour Change (BC / BCC / CBC / SBC / SBCC)
- Specific Practices
- Measurable Change
- Rapid Results
- The Whole Person
- The Community
- The Environment & Context
- Self-Determination
Different approaches focus on different parts of the process

**FRONT END**
- Supply Side
  - Formative research
  - Message
  - Medium
  - “Motivational stage”

**TAIL END**
- Consumer Side
  - Practice
  - Follow-up
  - Maintenance
  - “Action stage”
SCENARIO

Information delivery (PIOT)

You are exposed to the following information:

Food contains all the nutrients we need to live, for example proteins, carbohydrates, fats, sugars and micronutrients. To be healthy you need a good diet which contains all these nutrients, i.e. a variety of foods.

How does it come to you?
How will it affect your attitudes & practices?
INFORMATION DELIVERY

1. Knowing and telling

- **Aim**: to make information available (long-term?)
- **Examples**: posters, labels, talks, PPP, websites, TV, radio
- **Learning model & roles**: One-way communication: all supply side. Educator tells, explains, illustrates; audience receives, and is expected to understand (?) and to apply (?)
- **Language**: “one-way vector metaphors” - *deliver, disseminate, impart, convey, transmit, transfer, provide, equip, even communicate*
- **Evaluated** as knowledge, Q&A, usually verbally
- **Evolution**: language adapted, content relevant, well illustrated, different modalities, entertaining, visual, video; from information to advice (FBDGLs, codes of practice), picturing action (drama, stories)

BRIDGE TO BEHAVIOUR CHANGE
Information delivery (contd)

2. Education theory

• Concept of understanding /comprehension
  – Bucket theory (Locke) vs interaction (e.g. schema theory)
  – Knowledge before understanding before application (Bloom’s tx)
  – Retention from pure “telling” very low (Knowles)
  – Source matters – who says it (social learning theory - Bandura)

• Relationship of knowledge and action: separate kinds of learning: knowledge does not necessarily lead to action
  – Declarative vs procedural knowledge (Anderson)
  – Most performance without knowledge (Skinner/commonsense)
  – Plenty of learning without performance (Bandura)
  – Big question: role of knowledge in performance?
We know it doesn’t work

LISTEN TO THE WORDS

• Telling doesn’t work
  “If I’ve told you once, I’ve told you 1000 times”
  “It just doesn’t sink in”
  “In one ear and out of the other”

LOOK AT THE EXAMPLES

Knowledge does not lead to practice for
- All those who haven’t given up smoking
- Those who strive and fail to eat five fruit and vegetables every day.
- The overweight dietician who suffers from diabetes and takes no exercise
- The Australian doctors who don’t wash their hands between patients.
Information delivery (contd.)

3. Application to nutrition education

• **Mistaken assumptions**
  – Telling = understanding
  – Verbal expression = understanding
  – Understanding = application in real life (KAB)

• **Effect for NE**  Little effect on practices, repeatedly recognized for NE, confirmed by major review by Contento et al. 1994. A critical factor in bringing about BC” is “having BC as the clear aim of the programme”.

• **Spread**  ID is the default approach in most settings
SCENARIO

Behaviour change

- Experts talk to you at length
- They find out what you need, what you do and think and why
- They identify difficulties and constraints.
- They develop clear simple action messages tailored to needs & perceptions
- They spread the messages through various channels.

POSTERS
EAT MORE FRUIT AND VEGETABLES
THEY KEEP YOU HEALTHY

TV SPOTS about VIPs who eat fruit & vegetables

A DRAMA SKETCH presented by a local NGO

A VISIT to your community by a health expert

HOW DO THESE AFFECT YOUR ATTITUDES AND PRACTICES?
BEHAVIOUR CHANGE

1. Message & Medium

- **Inspired by** failure of ID/CAB
- **Aim:** To improve key nutrition-related practices urgently
- **Learning model/roles** (social marketing and early BC): Systematic and elaborated extension of ID
  - formative audience research
  - small, manageable, measurable behavioural objectives
  - comprehensible, convincing, consistent, pre-tested messages
  - appropriate media & channels
  - implementation/dissemination

Roles: researchers, media experts + monitored targets

- **Language** of logframe & marketing: audience research, baselines, SMART objectives, measurable targets, pretesting

- **Evaluated** by “reach” or by impact on practices
- **Cost** Expensive, usually based on campaigns or projects
- **Mostly front-end**
Social and Behaviour Change Approach (USAID 2010)

- Researching “the full range of factors (incl. social and environmental influences) at multiple levels to promote change, incl. behavioral change, effectively”
- Implementation now has
  - More interpersonal communication
  - Community participation, consultation, mobilisation
  - Many features of social learning, e.g. demonstrations, role-modelling, exploring obstacles, group feedback, mutual support, self-monitoring
  - Roles: also managers and facilitators; active participants

Examples
- Negotiated change through group counselling sessions (Linkages 2003)
- Care Group approach (e.g. Food for Hungry Annual Results Report 2009)
- SUN IYCF activities
- TOPS training course in BC which also deals with nutrition
- Alive and Thrive TV spots

BRIDGE TO SOCIAL LEARNING
3. Education theory

- **Behaviour change theories** - supported by own movement, e.g.
  - Stages of change model (P&D 1986)(most popular)
  - Health belief model (Janz et al 2002)
  - Theory of planned behaviour (Fishbein 2000)

*Very useful as checklists of motivations and influences*

*Recognized limitations and challenges*
  - Deal more with “motivation end” than with change mechanisms
  - Need attention to social/environmental influences, affective factors
  - Some doubts about validity and applicability (e.g. very individual)
  - Still largely receptive

- **Other behaviourist theory**, called on more or less
  - Social learning theory (Bandura et al.) in later BC interventions.
  - Mastery learning – gives much more attention to “realistic practice”
4. Application to nutrition education

- **Behaviour focus** Essential for shifting the focus to action, defining what needs doing and developing clear messages.
- **Extensive formative research** highly desirable. Possibility of sharing more with actors?
- **Methodology still evolving** Needs a theory for designing the “tail” (activities, socialisation, participation, follow-up etc.).
- **Long-term maintenance** of new practices has been difficult to assess in project environments. Effects of media campaigns?
- **Role of knowledge** Not much room for knowledge. Baby with bathwater? How much knowledge is needed e.g. to maintain and perpetuate good handwashing practices?
- **Situated learning** Narrow focus. Sometimes lacking wider context, social action, and other environmental influences and actions.
- **Ownership** Believes in programming behaviour, hence doesn’t adapt easily to social ownership.
SCENARIO

Health promotion

- You are a community/work group/ cooperative/mothers group etc.
- You can request five sessions with a nutrition expert to improve your families’ health. The expert has IEC resources to hand.
- This opt-in initiative has the approval of government, three ministries, several NGOs, your organization and your church.
- With the expert you discuss the issues, the needs and the difficulties and work out a plan for improving diet and health.
- You try it out over a longish period
- You decide how to monitor progress
- You meet with other groups and share experiences.
- You pass on your experience to others

CAN THIS APPROACH WORK?
HOW WILL IT AFFECT ATTITUDES AND PRACTICES?
1. **DIY with a lot of help from your friends**

**Aims**  Healthy people in healthy communities (see icon), long- and short-term

**Scope**  The “ecological model”. Five mutually supportive action domains (Ottawa Charter 1986):
- build healthy public policy
- create supportive environments (now also FS initiatives?)
- strengthen community action
- develop personal skills (education) - *interacting and influencing*
- reorient health services (e.g. from curative to preventive).

**Learning model and roles**
- *Skills learning, practice and action*
- *Self-determination & participation*

“builds the capacity of individuals and communities to make their own good decisions relating to their nutrition” (Kent 2010).

“the process of enabling people to increase control over and to improve their health” (Ottawa C 1986)

“not something that is done on or to people; it is done by, with and for people” (WHO 1997)
EXAMPLES
Many multi-component interventions, community programs and well-known nutrition initiatives call on aspects of the HP model. E.g.

- *PD Hearth* has several kinds of modelling & practice (McNulty 2006))
- *Barrier analysis* (Dickins et al. 1997) systematizes participatory exploration of constraints.
- *TIPS* calls on direct experimentation & feedback in its formative research
- *Child-to-Child* works with peer teaching
- *Some school initiatives* embed activities in the school environment and community, e.g. Health-Promoting Schools (WHO 1997), the FRESH initiative (UNESCO 2000), the FAO manual for nutrition education curriculum development (FAO 2006))

FRONT END, TAIL END
and a lot of control
Health promotion (contd.)

2. Education theory

- Stresses the potential of self-determination in a supportive context
- Suggests the “ecological” field to explore
- Proposes a framework for activating learning

**Situated learning** (Lave and Wenger 1991) Learning practices is best done within its own context and community of practice “embedded in a particular social and physical environment”

**Social learning theory** (Bandura 1977) focuses on social dimensions and participants: constraints and social impact; prioritises participants’ experience, knowhow, concerns and motivations

**Learner-centred approaches** (based on constructivism (Vygotsky 1978) and long experience) aim to start where people are and help them to move forward under their own steam.

**Life skills** (e.g. self-awareness, self-management, helping others, making decisions) UNICEF and WHO stress their central importance in self-determination (as with HIV/AIDS)

**Skills acquisition and experiential learning** (e.g. Anderson 1982, Kolb 1984) identify core activities for changing practice -

- Observing, discussing and imitating practices, own and others
- Seeing and discussing examples and models (stories, role-models, demonstrations etc.)
- Repeated hands-on practice in real/realistic context
- Getting and giving feedback and encouragement, reflecting
- Building learning incrementally
- Discussing how to maintain it
- Self-monitoring and self-evaluation
- Passing it on
3. Application to nutrition education

RECIPIES FOR SUSTAINABILITY AND PUBLIC POLICY:

**Health promotion philosophy** endorses the “ecological” approach (policy, environment, community action, health service support) and the participatory approaches recommended for nutrition and NE.

**Skills learning, life skills and social learning** Together these approaches provide the action framework for building and sustaining dietary capacity.

**Long-term and short-term** Health promotion in public services /institutions has potential for raising popular nutrition awareness long term.

**Systematic health promotion** Health promotion can be built into systematic focused programs (e.g. baby-friendly hospitals, FRESH)

**Dangers**

- Can easily retreat to simple ID (“promotion” a dangerous word)
- Integration not yet very successful. On the one hand, NE is dealt with separately, on the other, not evaluated separately.
- Participatory and learner-centred approaches are still rare, perhaps felt to undermine established authority
- “Health promotion” packages traditionally neglect nutrition.
WHICH MODEL?

WHAT ARE OUR MAIN CRITERIA FOR CHOICE OF APPROACH?

- Demonstrably effective?
- Sustainable long-term effects?
- Inclusive of other approaches?
- Economical?
- Easy to handle?
- Human?
- Dialogic?
- Attractive to donors?
- Other?

Which approach is most suitable for national NE strategy?
THANK YOU!
Malcolm Knowles
The adult learner 1973, Rev1990

![Retention in Adult Learning graph](image-url)