

Teacher Manual

Innovation and Diffusion Systems

The Internet

Any new technology such as a VCR or DVD or CDs

The microwave

A new sustainable agricultural system

A new vaccine

Examples of Diffusion

Diffusion is simply “how an innovation is communicated through certain channels over time among members of a social system” (Rogers, 1995, p. 10). Diffusion is how people learn about new innovations and how the developers of the innovation tell about their new innovation. An example would be how a pharmaceutical representative would inform people of a new vaccine available to animals that vaccinated against a certain disease.

Examples of Adoption

Adoption is the “decision to make full use of an innovation” (Rogers, 1995, p. 21). Adoption is the point in time when a person decides to use an innovation. An example would be when a person decided to buy a DVD player. When that person bought a DVD player they had just adopted the innovation.

Diffusion/Adoption Example

Modified form Rogers’ 1995 “Water Boiling in a Peruvian Village”

The public health service in Peru attempts to introduce

innovations to villagers to improve their lives. This change agency encourages people to install latrines, to burn garbage, to control house flies, to report causes of infectious diseases, and to boil drinking water. These innovations involve major changes in thinking and behavior of Peruvian villagers, who do not understand the relationship of sanitation to illness. Water boiling is an especially important health practice for the villagers in Peru. Unless they boil their drinking water patients who are cured often return within a month to be treated again for the same disease.

A two-year water boiling campaign was conducted in Las Monlinas, a peasant village of 200 families in the coastal region of Peru. From the viewpoint of the public health agency, the local health worker, Neldia, had a simple task: to persuade the housewives of Los Molinas to add water boiling to their pattern of daily behavior.

What was the innovation?

Answer is: *Boiling Water*

What was the target population the innovation was aimed at?

Answer is: *Housewives in the Peruvian Village*

Who was the person marketing the innovation?

Answer is: *The local health worker, Neldia*

Who were the key people in the diffusion process?

Answer is: *The public health service, housewives*

Think back to the Texas Tech research project and answer the following questions.

What is the innovation?

Answer is: *The integrated crop/livestock system*

Who is the innovation being marketed to?

Answer is: *Cotton producers in the Southern High Plains*

Who is marketing the innovation?

Answer is: *Texas Tech University and its partners*

Who are the key people in the diffusion process?

Answer is:
Texas Tech University and its partners, cotton producers, scientists working on the project, Extension agents, water conservation districts, lawmakers.

Five Levels of the innovation decision process:

1. Knowledge
2. Persuasion
3. Decision
4. Implementation
5. Confirmation

Knowledge: This is the stage which “occurs when an individual is exposed to an innovation’s existence

and gains some understanding of how it functions” (Rogers, 1995, p. 162). It is the stage where you find out what innovation is and how it works.

Persuasion: “At the persuasion stage in the innovation-decision process, the individual forms a favorable or unfavorable attitude toward the innovation” (Rogers, 1995, p. 167). This is the stage where attitudes about the innovation are formed and you decide whether you like the innovation.

Decision: This stage “occurs when an individual engages in activities that lead to a choice to adopt or reject an innovation” (Rogers, 1995, p. 171). This is the stage when you decide if you will use the innovation or not.

Implementation: This occurs when “an individual puts an innovation in use” (Rogers, 1995, p. 172). This is the stage where you actually use the innovation.

Confirmation: This is the stage where the “individual seeks reinforcement of the innovation-decision already made or reserves a previous decision to adopt or reject the innovation if exposed to conflicting messages about the innovation” (Rogers, 1995, p. 181). This is where the stage three differing decisions can happen. First, decide if you really like the innovation and want to continue using it. Second, decide that you do not want to continue using it or third decide that you do not want to continue using the innovation

because of conflicting information about the innovation.

In reference to the Texas Tech integrated crop/livestock system, please answer the questions below about gathering information for each innovation-decision step:

Where could information be gathered in the knowledge stage?

Possible answers:

Field days

News articles

Other producers

Extension publications

Where could information be gathered in the persuasion stage?

Possible answers:

Field days

News articles

Watching other producers

Listening to other producers

Extension

Where would information be gathered in the implantation stage?

Possible answers:

Trial and error form testing and innovation

Watching other producers

Where could information be gathered in the confirmation stage?

Possible answers:

Trial and error

Seeing if it was a more profitable system

Asking yourself if you liked the new system or not