Diffusion

Author: Michael Libbee

Lesson Overview: Students will discuss how the principles of diffusion influence the movement of ideas, using products as examples. The principles are then applied to the spread of culture.

Essential Question:
• How do ideas spread?

Objectives: Students will be able to:
• Describe basic principles of diffusion.
• Explain how businesses have used principles of diffusion to disseminate products.

Subject/Grade Level: Social Studies, grades 6-12

Duration: 1-2 Class periods

Student Materials: Characteristics of Diffusion (student resource); Diffusion Rubric; Student Reading

Teacher Materials: Diffusion Rubric; Diffusion Plan (Extension activity)

Michigan Grade Level Content Expectations:
• 6-G4.1.1: Identify and explain examples of cultural diffusion within the Americas (e.g., baseball, soccer, music, architecture, television, languages, health care, Internet, consumer brands, currency, restaurants, international migration).
• 7-G4.1.1: Identify and explain examples of cultural diffusion within the Eastern Hemisphere (e.g., the spread of sports, music, architecture, television, Internet, Bantu languages in Africa, Islam in Western Europe).

National Geography Standards:
• Standard 11: The patterns and networks of economic interdependence on Earth’s surface
• Standard 17: How to apply geography to interpret the past
• Standard 18: How to apply geography to interpret the present and plan for the future.

Diffusion PowerPoint
Procedures

1. **Define diffusion** as the spread of an idea, innovation, cultural trait or product. Differentiate diffusion from invention and discovery. *(Slides 3-7)*

2. **Present Content:** Pass out **Characteristics of Diffusion** student resource and discuss major sub-concepts and generalizations about diffusion, asking for examples. *(Slides 8-12)*

3. **Group Discussion:** Discuss the question “How did shoe manufacturers use the principles of diffusion to market expensive athletic shoes?” Use the questions from rubric detailed below to facilitate class discussion. Challenge the students to consider different needs for different audiences (e.g., middle aged fitness buffs vs. youth), the context of increased disposable income for teenagers; changes in perceived quality, peer group vs. media channels of communication, consequences with respect to sponsorships, trends in athletic gear, and teenage crime. *(Slides 13-17)*

   - **Innovation:** What were the characteristics of the innovation that either helped or hindered its diffusion?
     *Nike used lighter material and better padding to provide a new style athletic shoe, originally for track, and used off-shore manufacturing to keep costs down.*
   - **Diffusers:** Who were the people who had the most influence on the adoption decision? How were they effective?
     *Originally sold at track meets, Nike developed a strategy of a range of sports endorsements, most famously the Air Jordan model.*
   - **Adopters:** Who were the prime audience? Who were the subsequent adopters?
     *Nike started with athletes, and the “Let’s do it” advertising campaign was an initial success. Competitors, however, carved out different niches – New Balance for an older and less athletic audience, and Adidas, especially by styling for women and fitness workouts.*
   - **Communication Channels/Barriers:** Which communication channels were used? Why were they effective for the product and the audience?
     *What kind of barriers were there? In addition to television advertising, especially on sports events, Nike worked to get contracts with many college teams so that the products were used by college athletes on television. Nike experienced negative publicity in the 1980’s for off-shore manufacturing and use of sweatshop labor.*
   - **Consequences:** What were some of the intended and unintended consequences of the innovation?
     *The sports attire industry could possibly be said to evolve from the development of the original Nike athletic shoe.*
4. **Group Work:** Have students use the Diffusion of _______ (Product or idea) worksheet to evaluate the diffusion of a recent innovation. Possibilities include the women’s movement, term limits, DVDs, M-TV, oldies radio, lap top computers, the internet, Napster, DVDs, email, bottled water, cell phones, fitness centers, airbags, iPods, Facebook, Google, tablets, energy drinks, kindles, online sales, ATMs, hybrid cars, texting, GPS  *(Slide 18)*

5. **World Geography and History:** Have students apply the principles of diffusion to the spread of a religion or a disease. *(Slide 19)*

**Assessment:**
- Participation in discussion
- The Diffusion of (Product) worksheet can be used for assessment
- Extension activity

**Extensions/Enhancements/Adaptations**
- Assign individually or in groups Diffusion Plan
**Diffusion of __________________**

<table>
<thead>
<tr>
<th>Concept/Criteria</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation</strong> \nWhat were the characteristics of the innovation that either helped or hindered its diffusion?</td>
<td></td>
</tr>
<tr>
<td><strong>Diffusers</strong> \nWho were the people who had the most influence on the adoption decision? How were they effective?</td>
<td></td>
</tr>
<tr>
<td><strong>Adopters</strong> \nWho were the prime audience? Who were the subsequent adopters?</td>
<td></td>
</tr>
<tr>
<td><strong>Communication Channels/Barriers</strong> \nWhich communication channels were used? Why were they effective for the product and the audience? What kind of barriers were there?</td>
<td></td>
</tr>
<tr>
<td><strong>Consequences</strong> \nWhat were some of the intended and unintended consequences of the innovation?</td>
<td></td>
</tr>
</tbody>
</table>
Characteristics of Diffusion

1. Innovations.
   a. Simple innovations will diffuse faster than complex ones.
   b. Innovations that fit into the existing social and technological context will diffuse faster than those that do not.
   c. Innovations that can demonstrate a relative advantage will diffuse faster than those that do not.
   d. Innovations that can be tried on a small scale will diffuse faster than those that require a substantial initial commitment.
   e. Complex innovations often change as they diffuse.

2. Diffusers. (Change Agents?)
   a. Diffusion will be most successful from someone of greater or equal social status. (Opinion leaders)
   b. Diffusion is linked with the effort of the diffuser.
   c. Migrations can spread cultural traits such as language and natural phenomena such as diseases.

3. Adopters.
   a. Adopters must see the innovations as meeting their needs or wants better than alternatives.
   b. Adopters must have the resources to adopt the diffusion.
   c. Adoption is often linked with a previous positive adoption by a friend or acquaintance.
   d. The adoption decision will be evaluated from the perception of the adopter.

4. Communication Channels and Barriers
   a. Diffusion will, in general, be proportional to the frequency and strength of communication between diffusers and potential adopters.
   b. Diffusions will often diffuse to places that are close, before they diffuse to places that are distant, and to similar places before dissimilar places.
   c. Both physical and cultural barriers can halt or slow the spread of an innovation.

5. Consequences.
   a. Because culture is integrated, the diffusion of an innovation often has unanticipated consequences in the society.
## Diffusion Rubric

<table>
<thead>
<tr>
<th>Concept/Criteria</th>
<th>Example(s) are accurate, important, and described in depth</th>
<th>Examples are accurate, but either mundane for superficially described</th>
<th>Examples are not accurate with respect to the product or the concept</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What were the characteristics of the innovation that either helped or hindered its diffusion?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Diffusers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who were the people who had the most influence on the adoption decision? How were they effective?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Adopters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who were the prime audience? Who were the non-adopters?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication Channels/Barriers</strong></td>
<td>Which communication channels were used? Why were they effective for the product and the audience? What kind of barriers were there?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consequences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What were some of the intended and unintended consequences of the innovation?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diffusion Plan

You have been hired as a marketing director of a small firm. Your boss, the major stockholder and inventor of a new product, has hired you to help develop a plan to diffuse the product. Your product is:

Name

Function (what does it do?)

How much does it cost?

What are its important characteristics (size, shape, durability)?

Develop a diffusion plan for marketing the product. Your plan should include the following:

1. What are the relative advantages of the product over other items?

2. What are the characteristics of the most likely potential adopters (your target audience)?

3. How can people try the product on a small scale?

4. What kind of people should you hire as sales representatives (change agents), in order to best influence your prospective adopters?
5. You are not going to be able to develop a nationwide sales force initially, so you decide to focus on one region of the country. Where should you locate your headquarters, both with respect to availability of skilled labor, access to other computer companies and suppliers, and your market?

6. What are the most important barriers to adoption? How can they be overcome, minimized, or avoided?

7. What is the typical kind of location in which you would develop branch offices?

8. What communication channels should you use to get your message (advertising) to your target audience most effectively?