



# Activities

## Activity 1

### *Israeli Innovation and Humanitarian Programs*

**Preparation:**

**Estimated Time:** 1 class period • **Materials:** DVD *Israel: Small Country, Big Ideas!*

**Background:** This DVD, which includes some video footage, is an absorbing introduction to Israel's many innovations and humanitarian programs, some of which are also described in *Israel 101*.

**Activity:**

Show slides 3 through 34 (including the video footage on some slides) of the DVD *Israel: Small Country, Big Ideas!* Have students keep notes of the innovations and programs they find most interesting.

**Discussion:** Have students discuss their reactions to the presentation, raise questions, and select a topic they found most interesting for further research.

**Wrap-up:** Despite its limited natural resources and defense needs, Israel has created an environment where innovation and creativity flourish. It has invested in its people and in education and encouraged startup companies. These innovations have served Israelis, helped Israel develop a booming economy, and enabled Israel to improve the lives of people around the world.



# Activities

## Activity 2

### *Israeli Innovations and Humanitarian Program Snapshots*

#### **Preparation:**

**Estimated Time:** 1-2 class periods • **Materials:** *Israel 101*, DVD *Israel: Small Country, Big Ideas!*, copies of “Israeli Innovation Snapshot” (attached).

**Background:** As the DVD and *Israel 101* point out, Israel is at the forefront of innovations in hi-tech and humanitarian programs. The following activity gives students the opportunity to investigate this phenomenon up close by developing “snapshots” for selected innovations.

#### **Activity:**

- 1. Introduction:** Tell students that despite its need to devote considerable energy and resources on its self-defense, Israel has developed innovations in many different fields. The purpose of this activity is to have students develop “snapshots” of these innovations.
- 2. Investigation:** Divide the class into groups of 2-3 students. Each group should develop an “Israeli innovation snapshot” using a common template:
  - (a) Field of innovation: Each group should choose one field of innovation, such as Internet technology, homeland security and counterterrorism, agriculture, bio-medical applications or humanitarian programs.
  - (b) Name of company or program: Each group should choose an innovation, i.e., a hi-tech company, nonprofit organization or educational program. Students can choose these innovations based on pp. 16-17 in *Israel 101*, an Internet search, or by consulting the Web site [Israel21.com](http://Israel21.com) (enter the field of innovation in the search engine and review the results).
  - (c) Description of product or program.
  - (d) Description of what makes the product or program innovative.
  - (e) History and key individuals: How did the product/program develop? Who are the key leaders?
  - (f) Interesting facts or comments.
  - (g) Web sites and related links.
- 3. Presentation:** Each group presents its “innovation snapshot” to the class.

**Wrap-Up:** Israeli hi-tech and humanitarian programs go far beyond the Arab-Israeli conflict. Israel has made significant contributions to the world and could be a model for other developing countries.

*Israeli Innovation Snapshot*

Instructions: Use the categories below to create your “Israeli Innovation Snapshot.”

(a) Field of innovation (e.g., Internet technology, homeland security and counterterrorism, agriculture, bio-medical applications or humanitarian programs):

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(b) Name of company or program: (See pp. 16-17 in *Israel 101*, conduct an Internet search, or go to the Web site Israel21.com—enter the field of innovation in the search engine and review the results).

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(c) Description of product or program.:

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(d) What makes the product or program innovative? What makes it a valuable contribution?

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(e) History and key individuals: How did the product/program develop? Who are the key leaders?

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(f) Interesting facts or comments:

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(g) Web site and related links:

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# Activities

## Activity 3

### *Humanitarian Programs: What Countries and Whom Could Israel Help?*

#### **Preparation:**

**Estimated Time:** 1-2 class periods • **Materials:** Background information from *Israel: Small Country, Big Ideas!*, *Israel 101*, and Internet access. (Students can also look at the resources listed in the Resource guide below.)

**Background:** Israel's humanitarian programs have helped developing countries, improved the health of people around the world, and brought aid and relief to victims of natural disasters. Israel has even tried to bring emergency aid to countries that do not recognize it. The purpose of this activity is to have students learn about Israel's various humanitarian programs and to have them choose a developing country, an illness, or a crisis situation where Israel's expertise could be of service. This activity will help students learn about other countries or human health problems that could benefit from Israel's programs or expertise. Inspired students might even try to facilitate the spread of such programs as part of their community service.

#### **Activity:**

1. Explain the background to students. Help them review Israel's humanitarian programs by referring to *Israel 101*, the *Israel: Small Country, Big Ideas!* DVD, and by skimming information about Israel's Mashav at [mashav.mfa.gov.il/mfm/web/main/missionhome.asp?LanguageID=0&Question2=&MissionID=16210&MissionID=](http://mashav.mfa.gov.il/mfm/web/main/missionhome.asp?LanguageID=0&Question2=&MissionID=16210&MissionID=) and IsraAID programs at [www.israaid.org.il](http://www.israaid.org.il) or [www.Israel21c](http://www.Israel21c).

After reviewing some of the humanitarian programs, have students choose which one interests them most. Divide the students into groups based on their interest. Have them choose a developing country that might benefit from Israel's expertise in desert farming, environmental innovations, desalination, etc., or have them choose an illness or disaster situation where Israel's expertise would be helpful.

2. The groups should then research the areas/countries/illness they have chosen, and examine how Israel could help. They should define the problem in some detail (the country or disease or disaster) and why and how Israel would be helpful—whether it has helped with such problems in the past or has the expertise to help. They should be specific.
3. Finally, the groups should present their findings to the class.

**Wrap-up:** Israel's know-how and expertise and its commitment to “repairing the world” has led it to make extraordinary efforts to provide humanitarian programs to the world.

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## Activity 4

### *Israeli Hi-Tech Quiz*

#### **Preparation:**

**Estimated Time:** 1-2 class periods • **Materials:** “Israeli Hi-Tech Guide” (attached), *Israel 101*.

**Background and Lesson Plan:** Most people don’t realize how many of the innovations and gadgets in their lives come from Israeli inventions and innovations. In this activity, students will divide into two teams. Each group will collectively design a quiz about these inventions and innovations and will give it to the other team.

#### **Activity:**

1. Divide the students into two groups. Each group will design a quiz on Israeli inventions and innovations, which it will give to the other group. Tell the students that they can create questions which can come from two sources: (a) *Israel 101* (pages 36-7) and (b) the Internet (see “Israeli hi-tech guide” below).
2. Have the students in each group create quiz questions by (a) reading *Israel 101* (pages 36-7) and (b) using the links in the “Israel Hi-Tech Guide.” The questions can be true/false, multiple choice or open-ended. Here are examples of each, taken from *Israel 101*:

**True/False:** While Israel has many hi-tech companies, it does not have as many of its own patents as most other countries. (Answer: *False*. “Israel ranks third in the world in per capita patents, behind only the US and Japan,” p. 36.)

**Multiple Choice:** The following Israeli agricultural invention has revolutionized modern agriculture.

- (a) the combine
- (b) a new kind of pest-resistant tobacco
- (c) drip irrigation
- (d) a new kind of tractor, based on the Merkava tank

(Answer: *c*. “Israelis developed drip irrigation systems that revolutionized agriculture,” p. 37.)

**Open-Ended:** Some people argue that while Israel has many scientific inventions, it doesn’t invest much effort in humanitarian programs. Others disagree. What do you think? Back up your answer with facts.

(Answer: *Israel conducts many development courses for emerging nations on a wide variety of topics, such as desert agriculture, water management, refugee absorption and employment programs. Israel’s missions have included assistance to Turkey and Greece after devastating earthquakes. Israel’s Save a Child’s Heart (SACH) is the largest program in the world for children from poor nations who need heart surgery. See blue box on bottom of page 37.*)

3. Give the students a limited amount of time to create their quizzes. Then have each team give its quiz to the other team. An alternative is to use a game format and to have each team alternatively ask the other team questions from the quiz it has created. Points are awarded for each correct answer. The team with the most points wins.

## *Israel Hi-Tech Guide*

Below are some Web links that can help you find out more about Israeli inventions and innovations.

- *Forbes* called the Answers.com Web site “the most useful, smartest, coolest, easiest-to-use Web innovation to come around in years.” It is a “super-encyclopedia” application developed in Israel. See [Answers.com](http://Answers.com) and [israel21c.com/bin/en.jsp?enDispWho=Articles%5E1864&enSearchQueryID=52&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Profiles&](http://israel21c.com/bin/en.jsp?enDispWho=Articles%5E1864&enSearchQueryID=52&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Profiles&).
- Given Imaging is an Israeli company that uses “camera-in-a-capsule” technology for intestinal endoscopy. See [www.givenimaging.com](http://www.givenimaging.com).
- Copaxone is the first innovative drug to be developed in Israel. It was discovered by scientists at the Weizmann Institute of Science and developed by the large Israeli pharmaceutical company Teva. See [www.tevapharm.com/copaxone](http://www.tevapharm.com/copaxone).
- Checkpoint is a leader in securing the Internet. This Israeli company is a world leader in such security systems as firewall, personal firewall and data security. Gil Shwed is the company’s founder and CEO. See [checkpoint.com/corporate/corporate.html](http://checkpoint.com/corporate/corporate.html) and [checkpoint.com/corporate/gilshwed.html](http://checkpoint.com/corporate/gilshwed.html).
- Power Paper is the leading supplier of micro-electric patch solutions to the cosmetic and pharmaceutical industries. See [www.powerpaper.com](http://www.powerpaper.com).
- Israel’s “I Can Do It” Competition challenges middle school students to design useful inventions for the disabled. See [israel21c.com/bin/en.jsp?enDispWho=Articles%5E11345&enSearchQueryID=10&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Culture&](http://israel21c.com/bin/en.jsp?enDispWho=Articles%5E11345&enSearchQueryID=10&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Culture&)
- Go to the Web site [Israel21.com](http://Israel21.com) and enter different fields of innovation in the search engine (e.g., “Internet technology,” “homeland security,” “counterterrorism,” “agriculture,” “biomedical applications” or “humanitarian programs”). Scan the resulting articles for interesting leads.

# Resources

## **Internet**

“Five years of Israeli innovation and excellence” by Nicky Blackburn.

Israel 21c.com October 29, 2006

<http://israel21c.com/bin/en.jsp?enDispWho=Articles%5E11459&enSearchQueryID=48&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Technology&>

Israel21c.org: Extensive array of articles that profile various aspects of life in Israel, including technology, medicine, and culture.  
[www.israel21c.org/bin/en.jsp?enPage=HomePage](http://www.israel21c.org/bin/en.jsp?enPage=HomePage)

List of articles about Israeli contributions to the field of medicine.

[www.israel21c.org/bin/en.jsp?enDispWho=Health&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Health&](http://www.israel21c.org/bin/en.jsp?enDispWho=Health&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Health&)

List of articles about Israeli innovations in technology.

[www.israel21c.org/bin/en.jsp?enDispWho=Technology&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Technology&](http://www.israel21c.org/bin/en.jsp?enDispWho=Technology&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Technology&)

List of articles about Israeli efforts to promote democratic cooperation worldwide.

[www.israel21c.org/bin/en.jsp?enDispWho=Democracy&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Democracy&](http://www.israel21c.org/bin/en.jsp?enDispWho=Democracy&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Democracy&)

List of articles about culture in Israel.

[www.israel21c.org/bin/en.jsp?enDispWho=Culture&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Culture&](http://www.israel21c.org/bin/en.jsp?enDispWho=Culture&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enInfolet=moreArticle.jsp&enDispWhat=Zone&enZone=Culture&)

Profiles of some outstanding Israeli achievers and innovators.

[www.israel21c.org/bin/en.jsp?enSearchQueryID=97&enPage=ArticlePage&enDisplay=view&enDispWhat=Zone&enZone=Profiles&](http://www.israel21c.org/bin/en.jsp?enSearchQueryID=97&enPage=ArticlePage&enDisplay=view&enDispWhat=Zone&enZone=Profiles&)

Stories about Israel in the press; links to key Israeli media sources.

[www.israel21c.org/bin/en.jsp?enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enDispWhat=Zone&enZone=Press&](http://www.israel21c.org/bin/en.jsp?enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enDispWhat=Zone&enZone=Press&)

Articles about Israelis who have provided humanitarian aid to other cultures and countries around the world.

(1) General list: [www.israel21c.org/bin/en.jsp](http://www.israel21c.org/bin/en.jsp)

(2) Save a Child's Heart

[www.israel21c.org/bin/en.jsp?enDispWho=Articles%5E11641&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Democracy&](http://www.israel21c.org/bin/en.jsp?enDispWho=Articles%5E11641&enSearchQueryID=97&enPage=BlankPage&enDisplay=view&enDispWhat=object&enVersion=0&enZone=Democracy&)

Israeli innovations in agriculture—[www.israel21c.org/bin/en.jsp](http://www.israel21c.org/bin/en.jsp)

Israeli contributions to counterterrorism—[www.israel21c.org/bin/en.jsp](http://www.israel21c.org/bin/en.jsp)

Articles on Israeli contributions to the field of biomedicine—[www.israel21c.org/bin/en.jsp](http://www.israel21c.org/bin/en.jsp)

Origins of Israeli Hi-Tech—[www.jewishvirtuallibrary.org/jsource/Economy/hitech.html](http://www.jewishvirtuallibrary.org/jsource/Economy/hitech.html)

Center for Strategic Futurist Thinking (See reference to Tsvi Bisk's book, *The Optimistic Jew*, below.)

[www.futurist-thinking.co.il](http://www.futurist-thinking.co.il)

## **Videos**

*Israel Up Close*: [www.israelupclose.com](http://www.israelupclose.com)

## **Books**

Tsvi Bisk (2007). *The Optimistic Jew: A Positive Vision for the Jewish People in the 21st Century*. Maxana Press.

Helen Davis & Douglas Davis (2004). *Israel and the World: Changing Lives Through Innovation*. UK: Weidenfield & Nicolson.

Donna Rosenthal (2003). *The Israelis: Ordinary People in an Extraordinary Land*. New York: Free Press.

## **Video & DVD**

*Heritage: Civilization and the Jews*. Volume 3: *Into the Future* (DVD).

(Also sections from HERITAGE Interactive (DVD-ROM.) (NY: WNET thirteen  
[www.thirteen.org/heritagedvd](http://www.thirteen.org/heritagedvd))

Each of the following videos is available at no charge (except for shipping) from:  
[www.israelupclose.org/stories.html](http://www.israelupclose.org/stories.html)

Volume 3: *Israel Reinvents the Wheel*—Israeli inventors design wheelchair that can climb stairs.

Volume 4: *Desert Agriculture*—Successful flower and crop farming in one of the hottest places on earth.

Volume 4: *Healing by Horseback Riding*

Pioneering research, conducted in Israel, in animal-assisted therapy, designed to help injured war veterans and children born with congenital problems.

Volume 4: *Boutique Wineries in Israel*—Hi-tech winemaking in the Judean Hills.

Volume 6: *Israel Education Aid to the World*

Focuses on a course in Jerusalem that is one of many Israeli efforts designed to share successes in health, education and democracy with the developing world.

Volume 10: *World's Largest Desalination Plant*

Israel's desalination plant, located near Ashkelon, now supplies roughly 15 percent of all household water used in Israel.

Volume 10: *Cinematix High-Tech Cinema*

Provides viewers a multi-sensory film-viewing experience, including aromas, sound, moving seats, etc.

Volume 11: *The 2,000 Year Old Judean Date*

Agricultural revival of the Judean date palm, which has been extinct for nearly 2,000 years.

Volume 16: *Combating Global Warming*

Scientists from five continents come to Israel to learn how to deal with desertification.

Volume 17: *Hi-Tech Convention in Tel Aviv*

Annual "Telecomm" Israel convention, which brings together companies specializing in the latest in communication and information technology.