SEMINAR 7 Comparing and contrasting

Task 1 Meet Stan D. Ardman

<u>Before you listen</u>

Discuss the questions:
- How do you think medical and nursing students practise to perfect their techniques?
- Would you let a medical or nursing student practise on you?

Check the vocabulary:
Worst-case scenario; bodily functions and conditions; treatment; template; severe reaction; complaints; CPR; a bar code; syringe; adverse reaction; reboot; attached

Listening I
Listen to the talk and answer this question:
- Who is Stan D. Ardman and how does he help medical students?

Listen again and complete the information in the sections as given below:
Appearance and condition
-

-

What he is
-

-

Simulates
-

-

-

How he works
-

-

-

Pros for medical students
-

-

-

STRATEGIES

COMPARING	CONTRASTING
In the same way, …	While/ Whereas X…, Y…
In comparison, …	In contrast, …
X is similar to Y in that…	Y is different from X because …
Likewise, …	One difference between X and Y is…
Just as X …, Y also…	Unlike X, Y …
Similarly, …	X differs from Y in that…
Like X, Y …	

Listening II
- **Listen to eight statements about Stan D. Ardman and tick the expressions that you hear in the Strategies box.**

- **Now listen again and note down the similarities and differences that the speaker mentions.**

Similarities   Differences

After you listen
Choose the phrases from each list in the box above and compare Stan with a real patient.

Task 2 Can Robots Be Programmed to Learn from Their Own Experiences?
http://www.scientificamerican.com/article.cfm?id=robot-learning

By Julian Smith, March 23, 2009

Read the article and complete the text with parts of sentences given below.

A) based only on the sounds they made

B) could hold things

C) whether or not something was a container

D) how to learn

E) to learn on its own from interactions with the physical and social environment

F) as a two-year-old child

Image: © ALEXANDER STOYTCHEV

Researchers program robots to see if they can learn a very human trait: common sense

It took just a few decades for computers to evolve from room-size vacuum tube–based machines that cost as much as a house to cheap chip-powered desktop models with vastly more processing power. Similarly, the days of "personal robots"—inexpensive machines that can help out at home or the office—may be closer than we think. But first, says Alexander Stoytchev, an assistant professor of electrical and computer engineering at Iowa State University in Ames, robots have to be taught to do something we know instinctively: (1) _____.

"A truly useful personal robot must have the ability (2) _____," says Stoytchev, whose field of developmental robotics combines developmental psychology and neuroscience with artificial intelligence and robotic engineering. "It should not rely on a human programmer once it is purchased. It must be trainable."

Stoytchev and a team of grad students are developing software to teach robots to learn about as well (3) _____. Their platform is a humanoid robot of about 27 kilograms.

In one set of experiments, the robot was presented with 36 different objects, including hockey pucks and Tupperware. It could perform five different actions with each one—grasping, pushing, tapping, shaking and dropping—and had to identify and classify them (4) _____. After just one action the robot had a 72 percent success rate, but its accuracy soared with each successive action, reaching 99.2 percent after all five. The robot had learned to use a perceptual model to recognize and classify objects—and it could rely on this model to estimate how similar two objects were with only the sounds they made to guide it.

Another set of experiments showed the robot could learn to tell (5) _____. The team presented the machine, topped with a 3-D camera, with objects of different shapes. By dropping a small block on each one and then pushing it, the robot learned to classify objects either as containers—those that moved together with the block ["co-moved"] more often when pushed—or as noncontainers. The robot could then use this knowledge to judge whether unfamiliar objects (6) _____; in other words, it had learned, roughly, how to discern the unique characteristics of a container.

Task 3 Speaking

Compare and contrast two hobbies or sports you like.