Assessment of 21st Century Skills

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PISA 2003 Problem Solving Study

- **Policy oriented**

- **What can 15 year old do with their knowledge?**

- **PISA- Reading, math, science**

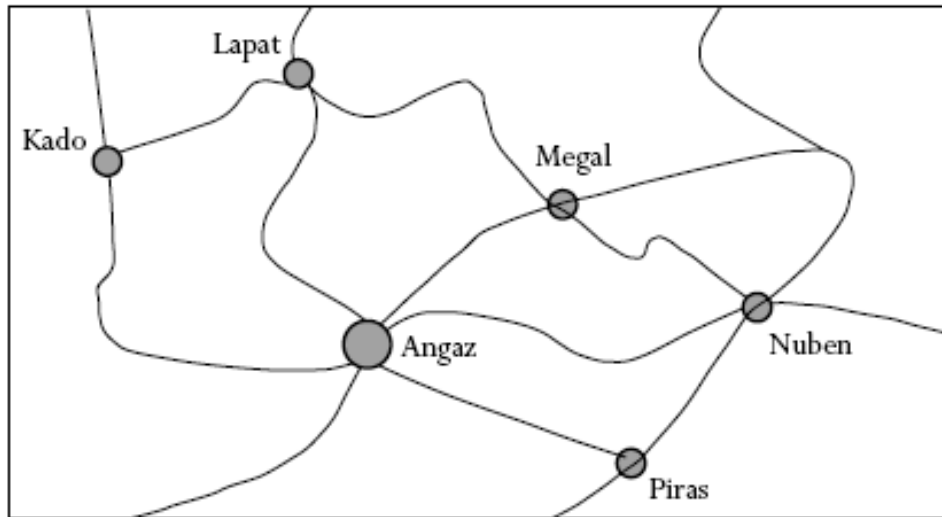# Problem Solving Example

Figure 1. Map of roads between towns

Figure 2. Shortest road distance of towns from each other in kilometres.

	Angaz	Kado	Lapat	Megal	Nuben	Piras
Angaz						
Kado	550					
Lapat	500	300				
Megal	300	850	550			
Nuben	500		1000	450		
Piras	300	850	800	600	250	

HOLIDAY – Question 1

Calculate the shortest distance by road between Nuben and Kado.

Distance: .... kilometres.

HOLIDAY – Question 2

Zoe lives in Angaz. She wants to visit Kado and Lapat. She can only travel **up to 300 kilometres** in any one day, but can break her journey by camping overnight anywhere between towns.

Zoe will stay for two nights in each town, so that she can spend one whole day sightseeing in each town.
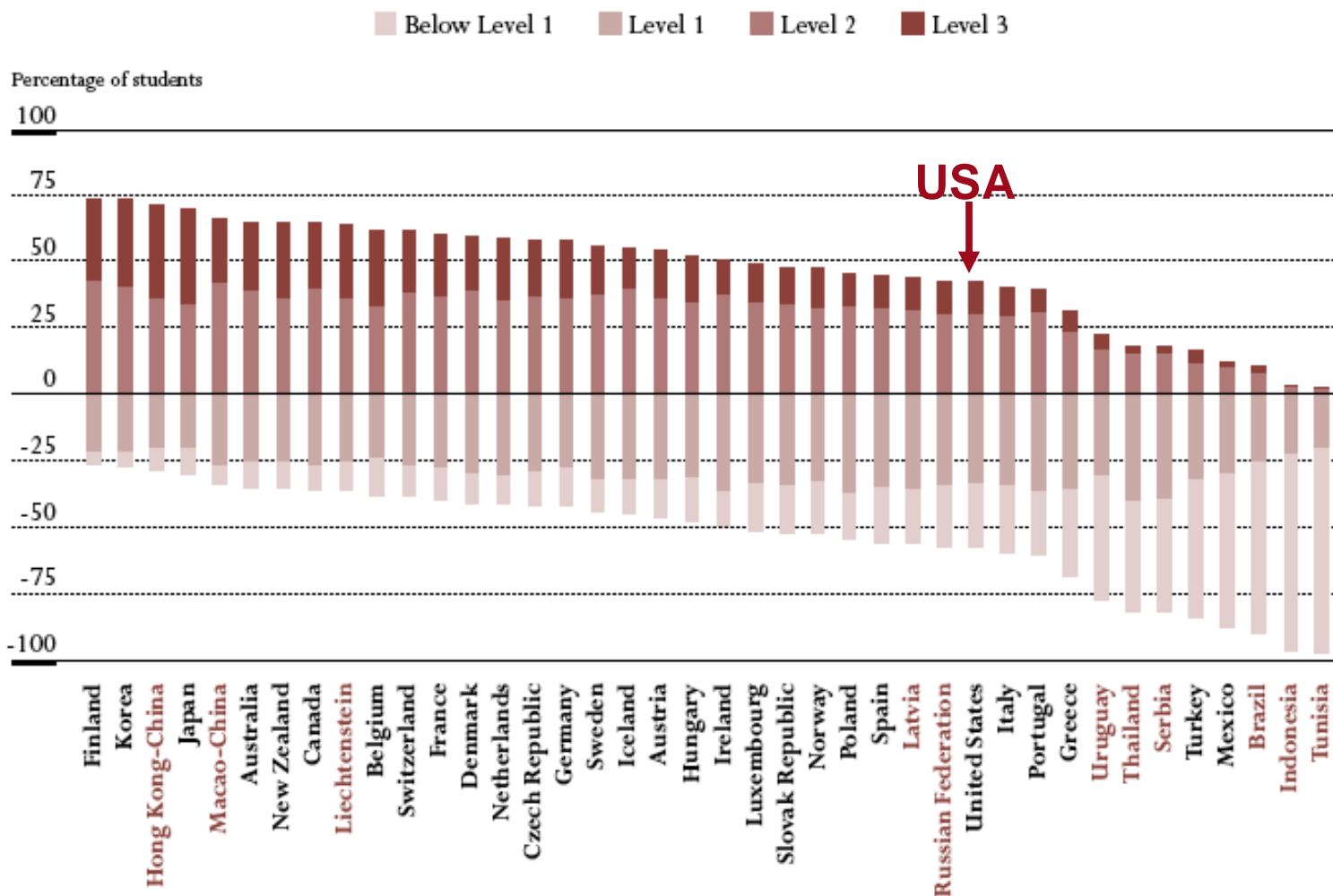
Show Zoe's itinerary by completing the following table to indicate where she stays each night.

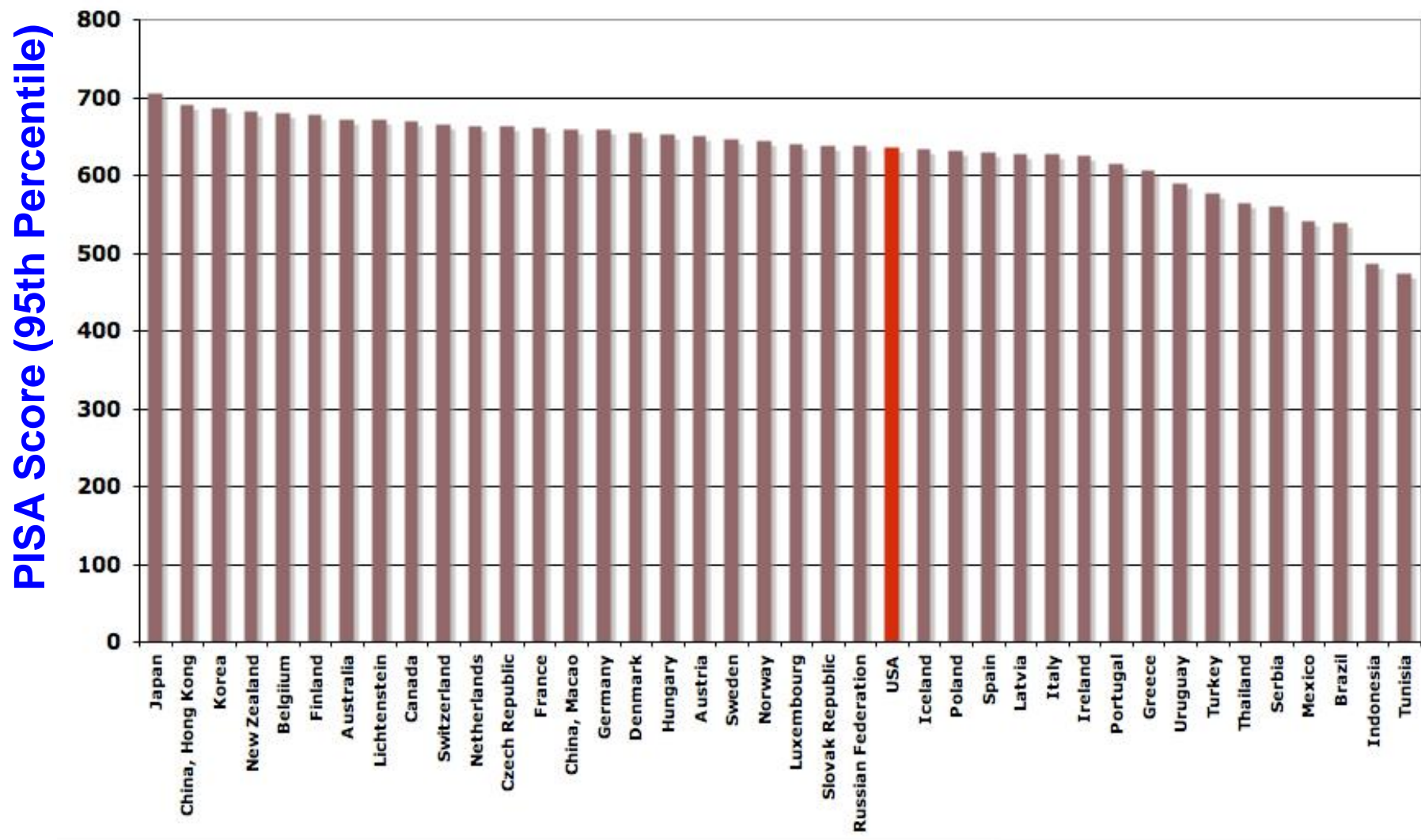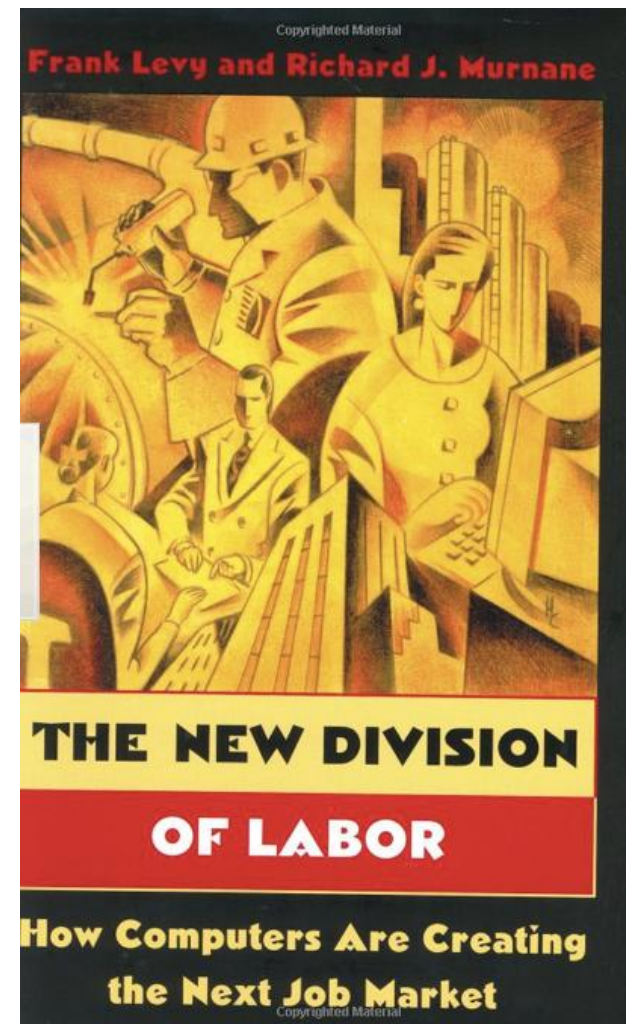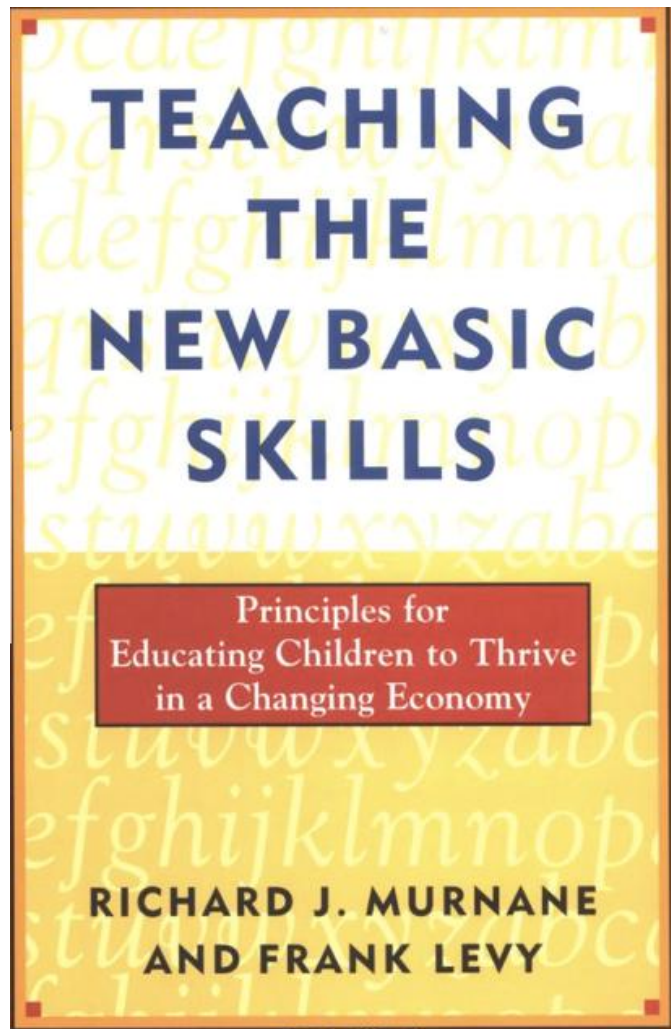| Day	Overnight Stay
1	Camp-site between Angaz and Kado.
2	
3	
4	
5	
6	
7	Angaz

PISA 2003 Problem Solving

Figure 2.3 ■ Percentage of students at each level of proficiency on the problem-solving scale

Legend: Below Level 1, Level 1, Level 2, Level 3

Argument:
What About Our Top Students?

Richard Murnane & Frank Levy

TEACHING THE NEW BASIC SKILLS

Principles for Educating Children to Thrive in a Changing Economy

RICHARD J. MURNANE AND FRANK LEVY

Frank Levy and Richard J. Murnane

THE NEW DIVISION OF LABOR

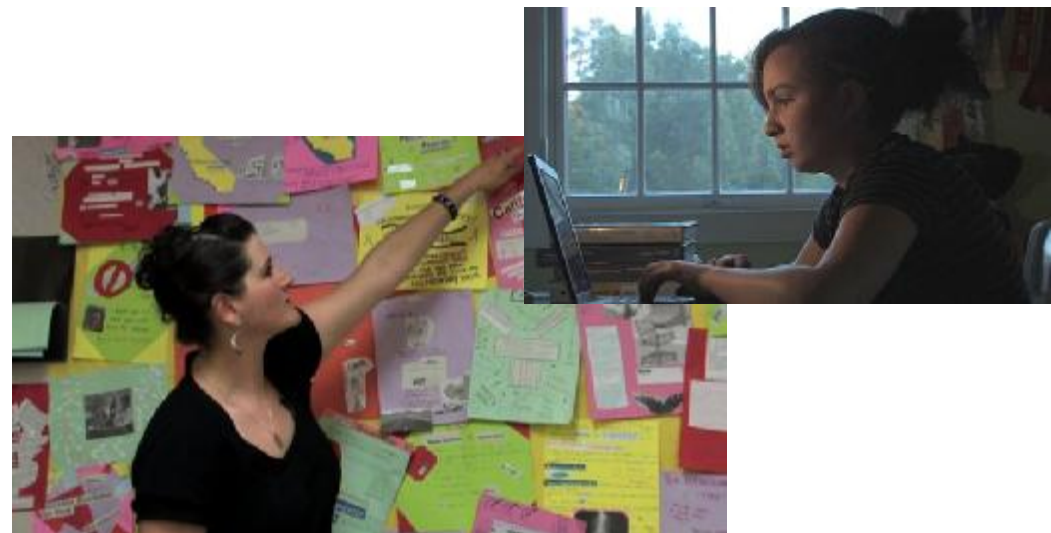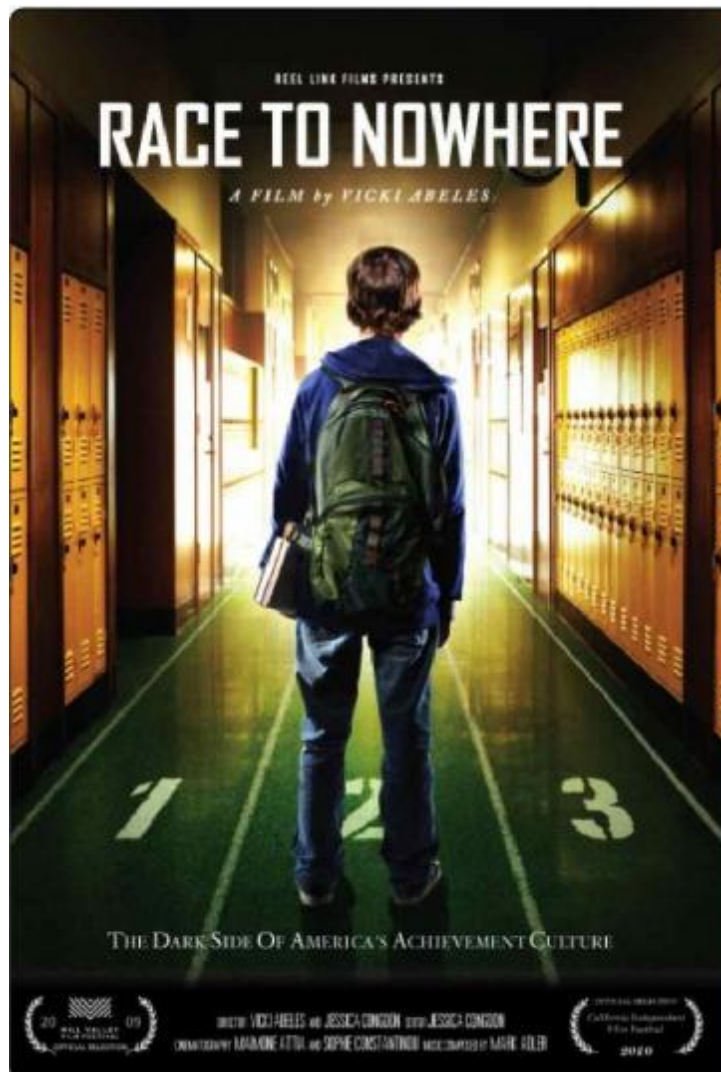How Computers Are Creating the Next Job Market

Waiting for Superman

Race to Nowhere

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