students of college age are in the universities of Latin America. (In the United States the number is 35 out of 100.)

Most students avoid subjects such as agriculture, industrial arts, and the commercial subjects, yet these subjects teach the skills most necessary in Latin America. In the universities, too few specialize in natural sciences, mathematics, agriculture, and teaching. Too many—four of five—take up engineering, law, the social sciences, and the humanities. (Suppose you were a Latin American student. Why might you want to study one of those subjects?)

Why is the educational situation in such trouble? First, there is the great growth of population. The cities are growing so fast that new housing, new roads, new hospitals, and other necessary services are more important than new schools. At the same time, there is little money left to improve older schools.

Second, textbooks and teaching materials, such as desks, blackboards, and chalk, are not always available. Where the people use one of the Native American languages, textbooks in Spanish and Portuguese are of little use.

Third, teachers are scarce, partly because salaries are very low. Few teachers educated in city schools are willing to go to the rural areas. As a result, poorly trained teachers have to be used there.

The attitude of many poverty-stricken parents provides a fourth reason. They are uneducated, distrust the teachers, and feel that a child should help out at home.

Finally, at the root of all these reasons, is the shortage of money.

Pre-Columbian Latin America

The Earliest Native American Groups

When Columbus came to the New World in 1492, he thought he had landed off the coast of India, in Asia. Therefore he gave the name "Indian" to all the people living in Latin America. They were not Indians, so who were these people?

There are many different ideas about the origins (beginnings) of the Native American. Probably the best explanation is that at some time, on a date far back in the past, before written history, a group of hunting tribes crossed the Bering Strait from Asia to North America (at that time there may have been a land bridge). These nomad hunters moved southeastward. Their journeys, which took thousands of years to complete, did not stop until all of North and South America had been crossed and settled.

The various groups developed different physical characteristics, different languages and customs, and different handmade articles (artifacts). Thus, when the Europeans arrived, they were met by many different Native American peoples.

The Maya

The Maya built their civilization in present-day Guatemala and on the Yucatán Peninsula in Mexico. Their civilization was at its peak between the 4th and 10th centuries; after that time, the Maya civilization began to slowly fade away.
The Maya mainly lived in cities that were separate from one another; these are called city-states. The city-states were often at war with one another. Wars were fought to obtain tribute (payment for submission) and to acquire prisoners for religious sacrifice. Wars were considered the duty of the king and the ruling class of the military-priestly nobility.

The Maya built an advanced culture in Guatemala. Then suddenly, late in the 10th century, they left all they had created and moved to the Yucatán Peninsula to begin all over again. Although no one knows why they moved, historians have suggested many theories (ideas). Some believe that the Maya lost a war and were forced to leave. However, there is no evidence now available that supports this theory. Others believe that the soil became so poor that the Maya could not produce enough food for their people. Another theory is that some disease swept through the area and forced the Maya to move. Finally, some think a great earthquake or volcanic eruption caused the movement. Whatever it was, the Maya moved in A.D. 987 to the Yucatán, where they remained until the Spanish arrived. Today, the remains of the Mayan cities and temples can be seen in the dense jungles and highlands of Guatemala, British Honduras, and the Yucatán Peninsula.

The Maya were the only Native American people who successfully developed a writing system. It was, in some ways, similar to the hieroglyphic system of the Egyptians. Unfortunately, the Spaniards destroyed most of the Mayan carved or written records. Today, it is still difficult to translate completely the records that remain.

The Maya carved symbols on large stone shafts called stelae. A stela was often placed in front of a large building, and the exact date on which the building was completed was carved on it. Hundreds of stelae are left today, and archaeologists have found them to be important in their study of the Maya. (If you were an archaeologist, how would the stelae help you?) In addition, the Maya sculpted in cement, clay, and wood.

The Maya built temples on top of great terraced pyramids. The sculptured work that decorated the temples and cities is still looked at with wonder. They also made pottery and developed textile weaving, mat-making, basket-weaving, and jade carving.

The Maya were also fine mathematicians. They understood the idea of zero and developed a counting system using bars and dots. A bar stood for 5 and a dot for 1; thus .. was 2; = was 8; and $\frac{1}{2}$ was 16. The Maya used their ability in mathematics to study astronomy. They developed a 365-day year calendar, which was more accurate than the European calendars of the same time.

The largest group of Maya farmed their fields of maize. Corn was their main food, and its planting and harvesting were important parts of their economic and religious life.

The Aztecs

In the highlands of central Mexico, the Aztecs rose to power. They started out as nomads, who moved about northern Mexico looking for a place to settle. At the beginning they were not very good in war and lost almost every battle with their neighbors. As a result, they moved constantly. However, in the 13th century, they came into the central valley of Anahuac, and settled near a chain of lakes. Again they were involved in wars, which they lost, and then fled to the islands of Lake Texcoco. There, in 1325, they built the city of Tenochtitlán (where the modern Mexico City is now). At first the city was made up of huts, elevated on poles to keep them above the swampy earth. Later the Aztecs drained the area and filled it with dirt. They built a beautiful city with large public buildings. Since no
Mayan hieroglyphic writing and other symbols decorate this 30-foot-high stelae in Quirigua, Guatemala, a site of many Mayan ruins.

Closeup of Mayan hieroglyphics.
A Mayan temple.

one wanted this once-swampy area, the Aztecs were left in peace, but they were still among the weakest of the Native American tribes.

Slowly, through marriages and alliances (cooperative joining) with their neighbors, the Aztecs began to build their power. In time, they started to conquer their neighbors. Within 50 years they had defeated most of the other Native American nations and become the rulers of Mexico.

Military Interest

The Aztecs became a military people. Training for war took on importance, and rewards were great for military performances. All the leaders of the Aztecs were soldiers.

Aztec merchants traveled through Mexico, trading products and acting as spies and map makers for the army. The king was a soldier-priest.

Religion

As with the Maya, religion had a central place in Aztec life. The god of war—Huitzilopochtli (the "hummingbird")—was one of the most important of the Aztec deities (gods). The power of the gods was so great, the Aztecs believed, that all success and failure was due to their actions. A large group of priests was needed for religious ceremonies.

The Aztecs believed in human sacrifice. A victim (usually an enemy captured in battle) was killed, and the blood and heart were offered to the gods. The custom of human sacrifice came about because of an Aztec legend. The Aztecs believed that at one time in the past all Aztecs were killed in a great war. Quetzalcoatl, an important Aztec god, took his own blood and sprinkled it on the bones of the dead Aztecs to create a new Aztec nation. Therefore, the Aztecs believed, they had to give human blood to Quetzalcoatl in repayment. The Aztecs often waged war to get more victims for sacrifice to the gods.

Farming

The Aztecs were also farmers. Because the army was considered so important and the rulers wanted to be sure there was a food supply for it, farming was placed under the strict control of the government. The government owned all land and gave each family a number of acres to farm. The amount of land could be increased as the family grew, or reduced
when family members married or died. The land stayed with the family as long as male heirs existed. If no sons survived, the land went back to the government to be given to others. Part of the crops were given to the government as taxes and for support of the army. The main crops were corn, beans, squash, and peppers. The Aztecs also raised cotton, tobacco, and the maguey plant. (*Pulque*, a liquor used in religious ceremonies and for celebrations, was obtained from the maguey.) Turkeys captured for special celebrations were a favorite delicacy.

The Aztecs spoke a language called *Nàhuatl*. The same language is spoken today in the backcountry by Mexicans of Native American ancestry. The Aztecs had a large oral (spoken) literature and made picture books on parchment and on paper made from the leaves of the maguey plant.

Although war was the most important activity in the lives of the Aztecs, they were also creative in the arts. Artisans worked in gold. Unfortunately, very little of this work remains because the Spaniards melted the gold objects into bars, which could be shipped back to Spain more easily.

Aztec artists created beautiful feather mosaics that were worn as capes or used to decorate shields. They also made fine pottery and gold and silver jewelry.

The Aztecs must have been skilled engineers and architects. A complicated system of bridges, dikes, and canals was built to protect the city of Tenochtitlán. Many houses several stories high were built of stone. The pyramids used for religious ceremonies remain as an example of Aztec abilities.

The Aztecs probably borrowed the idea of the calendar from the Maya. The calendar was carved on a large, round disk, the calendar stone. The Aztecs also had a rough method of counting and arithmetic, not as advanced as that of the Maya.

The Aztecs did not use wheels for transportation or for lifting weights. Having no work animals, they used human muscles for all labor and transportation.

**The Incas**

In the highlands of the Andes, the *Quechua*, or Incas, set up a large empire. From southern Colombia to northern Argentina (Tucumán) and Chile, the Inca Empire stretched nearly 3,000 miles along the high plateaus of the Andes.

The true history of the Incas is still not fully known, and we do not know their original name. We call them by the name they themselves gave only to their ruler, the Inca. Quechua is the name given to the language spoken by these plateau people. We are not sure who the Incas were or where they came from.

We do know that people lived on the plateau of Peru and Bolivia before the Incas. During the building of the Pan-American Highway, in the 1930s and 1940s, buried cities were discovered. They contained fine linens (cloth) and pottery. They seemed to prove that groups of creative and advanced Native Americans lived on the plateau 5,000 years ago. When the Incas conquered the plateau, they found the accomplishments of these peoples. The conquered people took on the traditions of the Incas and forgot their own history, languages, and customs.

Ruins of pre-Inca times are slowly being uncovered even today near the shores of Lake Titicaca. These ruins belong to the Tiahuanaco culture, which reached its peak between.
A.D. 1000 and 1200. Tall stone pillars and beautifully carved stone doorways still stand on the Bolivian Altiplano. Although the Tiahuanacos were also conquered by the Incas, these people did not forget their language or their customs. The Aymara people of Bolivia are their descendants.

It is believed that the Incas came to the plateau near Cuzco, Peru, about A.D. 1200. Little by little, they conquered the peoples living near them and began to build their capital city, Cuzco, which is the oldest continuously lived-in city on the American continent. Cuzco was believed to be the center of the world. By 1500 the Incas had reached their Golden Age.

The Incas did not build their empire only by force or warfare. They were masters at getting other tribes to join with them. They built a society in which everyone was taken care of: the very young, the old, the sick, and the crippled. The Incas proved to many neighbors that they would be better off within the Inca Empire than outside it.

The government was headed by a powerful ruler called the Sapa Inca, or just the Inca. Thought of as a god, not just a man, he was assisted by his sons and other nobles. Each time a new tribe was conquered, its leaders were taken to Cuzco. They were treated like royalty and told of the greatness of the Incas. The conquered rulers soon became loyal to the Inca and then taught their people to show this same loyalty.
Machu Picchu was the last stronghold of the Incan people. It was built high in the mountains of Peru.

The descendants of Incans still live in areas of the original empire. The animal is a llama, a traditional beast of burden. The wall in the background is from an Incan temple.
The Incas worked out many ways to keep the peace. Conquered peoples were forced to move to lands near Cuzco, and loyal groups were moved to the conquered lands. Sometimes troublemakers were sent in small groups to distant parts of the empire, where they were surrounded by loyal Inca peoples.

To set up good communication and to be able to move soldiers quickly, the Incas built two parallel roads that ran the length of their empire, north to south. Several smaller roads, east to west, ran into the two main roads. Inca engineers built suspension bridges to span the rivers and canyons of the Andes. Some of those bridges still exist today.

Once a new area became part of the Inca Empire, a team of officials would go into the area and make a map of it in clay. They counted the people, buildings, equipment, and the amount of food stored. This information was all kept on a quipu.

The Incas never invented an alphabet. They had no books in which to keep records. Instead, they used the quipu, which was made with a long piece of wood or string. Smaller, colored strings were tied in knots at various points along the main string. Special people called amancas (wise men) were trained to read the meanings of the quipus.

Agriculture was very important to the Incas. Land was not owned by individuals, but was divided into four parts. One part was distributed to individual farmers, and another section was set aside for the sun. The crops grown here were given to the priests of the temples. The third part belonged to the emperor, who used the crops to feed himself, the royal family, the army, the engineers, nonfarming workers, and government workers. Some of those crops were set aside to help feed people in case of earthquakes, floods, or famine. The fourth section was farmed for the old and sick members of the village.

The Incas made many advancements in agriculture. They built an excellent irrigation system. Canals were built to carry water from streams and rivers to the farmers’ fields, where corn, barley, and wheat were raised. Since the Incas lived in the Andes, they had to build terraces, and they enriched the soil by adding nitrates as fertilizers.

In addition, they developed a new crop, the potato. (Europeans did not raise potatoes until after the Spanish conquest of Peru.) The Incas also tamed three animals related to the camel—the guanaco, the alpaca, and the llama. All three are surefooted and are excellent for use in moving people and goods through the Andes. The Incas and the Andean people today use the furs and hides of these animals for trade as well as for clothing and shelter.

The Incas were skilled architects. Evidence of their solid construction ability may be seen in the walls of the Inca temples and palaces that still stand today in Cuzco and at Machu Picchu, not far from Cuzco. The stones in these buildings, laid without cement, were fitted so closely that even today a knife blade cannot be run between them. Incan pottery, gold and silver work, and textiles were also of high quality. Of all the Native Americans, the Incas were the most advanced in the field of metalwork. They made beautiful jewelry and other ornaments from gold and silver, and axes, needles and pins, and weapons from copper and bronze.

The religion of the Incas had many ceremonies that were closely related to food, harvesting, and curing diseases. Viracocha, the Creator, was the most important god. All other gods and supernatural powers were created by Viracocha. The sun god was given the job of protecting the crops. Following the sun god, in order of importance, came the thunder god of weather; the moon goddess, wife of the sun; the various gods of the stars; and the goddesses of the earth and sea.
The Inca were advanced in metalwork. Here we see intricate designs in gold.

The Incan religion was headed by the Emperor, who was thought to be the son of the sun god. A large group of priests led the ceremonies and took care of the temples. The Incas hoped that through their worship they would have good crops, keep the evil spirits of sickness away, and receive aid in healing the injured or sick. The favorite way to win the help of the gods was through sacrifice, usually of grain, food, animals, or valuable objects. Sometimes, but far less often than the Maya and Aztecs, the Incas sacrificed human beings—usually young women.

The Aztec religion included a belief in a future life, with a comfortable heaven. There was also a hell, which was very cold. Those sent to hell got no food.

Like the Aztecs, the Incas developed poetry and a religious, dramatic, and historical literature. The literature was passed by word of mouth from storytellers in one generation to storytellers in the next, a process called oral tradition. Today some Incan stories are still repeated. The best known are the dramatic story of Ollantatay, the hymns to Viracocha, and the tales of the Chosen Women (accla-cuna).

Fall of the Empire

The fall of the Incas came suddenly. Huayna Capac, the twelfth Inca, died in about 1527. He made the mistake of dividing his kingdom between two of his sons, Huascar and Atahualpa, with Huascar in Cuzco and Atahualpa in Quito. The two half-brothers fought a civil war for five years. In 1532 Atahualpa finally won and put Huascar in prison. Atahualpa was ready to unite the empire when he was murdered by Spaniards in the same year. Without a central ruler the empire could not function.

Other Native Americans

Other Native Americans were also important in Latin America before the arrival of the Spanish.
Toltec Groups

In Mexico, the Toltecs, a Nāhuatl-speaking tribe, began to move into Mayan lands in about A.D. 1000. The Toltecs reached their peak under their King Quetzalcoatl, who persuaded them to adopt Mayan culture. The Toltecs built roads and revived Mayan learning. The Mayan calendar was translated and later passed on to the Aztecs.

After King Quetzalcoatl died, he was made into the Feathered Serpent, god of the winds, peace, and industry. Today Quetzalcoatl’s memory is kept alive in the temple next to the Pyramids of the Sun and Moon, at San Juan Teotihuacán near Mexico City, and in a long poem that was part of the Toltec-Aztec religious literature. Part of the legend says that Quetzalcoatl sailed off to the east, promising that someday he would return from the direction in which he sailed. This belief explains why, when Cortés landed, the Aztecs thought that he was the returning god (see page 647). As a result Cortés was not attacked by the Aztecs when he landed. He was accepted as the god in the legend.

Other Native Americans in Mexico and the Caribbean

Besides the Toltecs, there were Chichimecs, Mixtecs, Tlaxcalans, and Zapotees living in Mexico. Almost all of these tribes were taken into the Aztec Empire, or else they paid the Aztecs for protection. On the islands of the Caribbean Sea lived a fierce, warlike group called the Caribs. Another group, the Arawaks, were peaceful farmers who were conquered by the Caribs.

Other Native Americans in South America

In South America, the Chibchas of Colombia had an organized government and were expert in their handicrafts. The Chibchas are often ranked next to the Aztecs, Maya, and Incas in terms of their cultural and political development. The Araucanians of Chile never developed a strong political or cultural life but survived the conquest by the Spanish; the Chibchas did not. The Guaraní in Argentina and Paraguay were another large Native American group.

Influence of Native Americans

The Native American groups of Latin America influenced the area greatly and left many traces of their cultures. Many of the foods still used in America came from these groups. Among the important plants of Native American origin are the following:

\begin{verbatim}
agave, or maguey (source of Mexican pulque and tequila)  maize (corn)  beans

cacao (chocolate)  papaya  rubber

maté (Paraguayan tea)  mushroom  elderberry

avocado (aguacate)  yam  strawberry

wild grapes  blackberry  vanilla

maple syrup  squash  pumpkin

sarsaparilla  peanut  pineapple

guava  white potato  sweet potato

quinoa (a cereal)  raspberry  blueberry

sunflower seeds  tobacco  wild plums

aji (chili pepper)  nuts: acorn, black walnut, cranberry

manioc, or cassava (tapioca)  chestnut, cashew, pecan tomato

vanilla
\end{verbatim}