A Present Day Trip Back in Time:
A Travel Guide of Medieval Castles, Churches, and Roads in Between

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INTRODUCTION

In my curriculum unit, I hope to follow in the spirit of John Steinbeck when he said, "people don't take trips, trips take people." My students will explore the roads that laid the foundations for many modern European countries by traveling to the destinations of medieval landmarks. The student will journey along an enticing path of sights, smells, and sounds while visiting the antiquities of a previous age. A virtual road map will guide us to each location providing a majestic view of the European landscape. Our destinations will include the castles, cathedrals, fortified towns, and commercial centers that were prominent during the Middle Ages and exist in varying degrees of preservation today. Each architectural marvel will unravel the mysteries of the medieval period as students travel back in time to study the life of people who lived in such fairytale settings.

As a child, I dreamed of going to faraway places. As an adult, I have been fortunate to visit many faraway places. As a teacher, I hope to spark an interest in my students to go out and see a part of the world that is different from their own. I hope to widen their perspective of the world. I teach at the middle school level when students begin to develop and explore new interests. Although I teach a culturally diverse population, I find that my students do not possess a very broad perspective on the world in which they live. However, they are naturally inquisitive at this age and start to assimilate what they hear with what they know. It is a great time to begin formulating the relationships between past and present and sharing the global cultures of our neighbors.

UNIT BACKGROUND

Part of the adventure of traveling is to stumble down a path of uneven, weathered stones and be mindful of real and imaginary destinations traveled in a previous era. Before I set out on a journey, I inundate myself with as much information about the place to which I am about to embark. I study a map and envision the layout of a town--is there a pattern, or do lanes intertwine haphazardly? Will the expected turns turn into unexpected turns? As I stroll down a narrow lane lined with geranium-filled window boxes, I brush my fingertips across the blossoms ever so slightly and release a memorable fragrance that will last a lifetime. I might know where I plan to turn, but if I make a wrong turn, what does it matter? I just absorb the moment.

The open doorways I pass reveal the inner workings of a community. I listen and hear a mother calling to her young, a merchant barking in his stall, a rooster announcing the arrival of morning, or overhear whispers of a clandestine meeting yet to be determined. I meander down a narrow passageway with escalating walls, feeling claustrophobic, when all of a sudden it opens onto a magnificent square where gentile elders are walking arm in arm. In an evening stroll as the sun is setting, a gentle breeze touches my cheek and sweeps me off my feet. Will that breeze point me to yet another distant place? Spontaneity fuels my every step.

I strive to put a face on a place. History echoes over hill and dale. I absorb the majestic buildings that are adorned with artistic expressions of the time. A hushed sensation captures the moment when I escape into the past. In order to take my students back to the Middle Ages, I must lay the groundwork. With a thorough examination of the two dominant structures that frame life in the Middle Ages, the cathedral and castle, we will begin our journey. For one to understand the present, one must understand the past. The physical geography stays the same through generations, but it is the technological advancements and the ideas of men that change and shape history.

Over the course of three weeks, the students will engage in a variety of instructional activities that will culminate in a project that reflects a true understanding and appreciation of life during the Middle Ages. More importantly, students will become active participants in medieval thinking through travel. As we travel, many questions must be answered. What does each historical sight reveal about life during this period? For example, is there a connection between the extravagance of the cathedral and the importance of religion during this time? Why were castles built as fortresses? What was daily life like for the people who lived inside and outside the walls of the castle? What technological advances were contributed during this innovative period? How did the people reflect on their lives and the lives of others in this feudal society?

A complete understanding of life in the Middle Ages is depicted within the talking walls of the cathedrals and castles that literally dot the landscape of Europe. It is with these two architectural wonders that we begin our journey. I am the tour guide−the students are the travelers.

Cathedrals

Origin of "cathedral"

The origin of the word cathedral comes from the Latin "cathedra," a throne-like seat for the pontiff, which is a symbol of both the bishop's teaching role and pastorate. A cathedral, regardless of country or age, is the seat of a bishop or archbishop, and of the clergy attached to this church, the chapter, which is made up of canons (Schutz 13). A cathedral exists in a city setting. Never before or after the medieval period has the vision of sacredness so magically affected the mind. It is more than a holy place to which reverence is due. The height of the cathedral crusade, between 1050-1350, proved to be a period of dynamic ascent for a Christian Europe. It sought to symbolize the entire universe in its structure and art.

That a cathedral might take about 100 years to build was a fact, a nearly unfathomable notion in today's overnight-delivery mindset. The medieval builder did not expect to see the fruits of his labor. Nevertheless, cathedral builders knew what they were expressing could never die. Their creative genius was fueled by a deep uplifting faith. Expressions of piety and the growth of the cult of the Virgin Mary provided the psychological elements that fueled the economic and technological advances that coincided with this era. In the cult of the Virgin that began in the 12th century, Mary was the saint among saints, divine mediator and importantly "blessed among women" at a time when few of her sex were exalted (Dupre 35).

Spirit of Competitive Building

A city's cathedral towered over the ephemeral huts and cottages of the peasants and dwarfed the castles of the nobility. Hundreds of thousands of medieval devout and all those whose business it was to furnish their spiritual and physical needs came to cathedral cities and returned home with wondrous stories of what they had seen, heard, sold, or acquired. Seeds of ideas about art, architecture, commerce, and politics were thus disseminated across Europe. As impressive displays of civic and religious aspirations, the cathedrals were built not just to impress visitors but also to show God in a concrete way how much a particular congregation was prepared to do in

His service. From city to city, cathedral building was competitive, the size and height of which was startling. A strong connection existed between the commercial strength of a city and its civic independence, to the size of its cathedral. Gripped by the world record fever, the naves were built closer to heaven, from Notre-Dame de Paris in 1163, whose vault reached 32.8 meters, to the choir of Beauvais in 1225, whose vault was 48 meters high.

Beauvais is famous for being the tallest cathedral in France, with a nave height of 157 feet. So high was the choir of Beauvais that a fourteen-floor building could have been erected within and never reach the vaulting. Much has been written about the ill-fated life of Beauvais. The original 10th century cathedral was a low, modest building but was damaged by fire in 1180 and again in 1225. The second of these fires provided the opportunity for a new building, the foundation stone of which was laid in the same year, five years after Amiens and 31 years after Chartres. Much social unrest interrupted the building process and construction was confined to the choir. It was not until 1255, three centuries after the initial construction, that the side aisles and the ambulatory were added. It was not until 1272, that the choir was actually completed. It was in 1284 that an unfathomable disaster occurred. The vault of the upper choir and part of the clerestory collapsed. Even today, the cause of the collapse has not been clearly established. The restorer, Voillet-le-Duc, suspected bad mortar but most of all negligent work on the upper parts of the building. Construction errors were also considered. This theory has been supported by an advanced engineering process called photo plasticity that analyzes plastic molded models with light to detect flaws in structural components of a building. However, no study has been conclusive, and the simple explanation that the foundation consisting of a gumbo type soil caused the structure to crumble to the ground remains a viable and widely accepted explanation (Dupré 34)

Design and Construction

The basis for the architects' plans was geometry, not just for the floor plan and building shapes, but also for the graphic art. We know this not only from the proportions that exist, but also from the sketchbook of Villard of Honnecourt who was a thirteenth century architect. His sketchbook contains a mass of drawings with explanatory notes on every aspect of the building crafts, technical procedure, and artistic composition. Geometry is the guiding spirit and principle of the whole book, whether the author is concerned with the responsibilities of the master or his craftsmen, with the calculation of proportions, with stone-cutting and the best building stones, with the measurement of angles and the height of buildings, with the making of roof trusses, "engines" of all kinds, the construction of piers, towers and cloisters, or with drawings of figures, all according to proportions determined by geometry. The geometry is most noticeable when the fundamentals of building are under discussion. According to Honnecourt, the halved, or bisected, square was the "true basis of art" (Jantzen 86).

When reviewing the drawings of assembled squares in the sketchbook, it is clear that by using proportional squares and diagonal placement of the squares, the plan was accomplished for the elevation of these great cathedrals. The builders preferred simple ratios: double and half; treble and a third; or 1 to 2. The impeccable logic that resulted from the use of simple geometric principles produced harmonious proportions (Gimpel 108).

A truly great addition to Villard's sketchbook is his vivid reflection on life as a master at the cathedral sites and his fascinations with nature and inventions. Included are sketches of things that interested him. He was a close observer of nature and drew animals and insects. He drew holy figures that in turn were used by sculptors who worked for him, for as master he had to supervise the sculpture and the architecture. He wrote and sketched details about inventions from hand-warmers that kept the stove inside straight, which later became the basis for keeping naval compasses horizontal and barometers vertical, to hydraulic toys and the movement of clocks. As

an engineer, he focused on inventions that would provide solutions to the difficult problems of building such massive buildings. Machines for lifting weights and large treadmills, humanly propelled by walking within the framework, enabled materials to be raised to the tops of buildings. Although we marvel at the accomplishments made from what we consider rudimentary tools, the cathedrals that were built at the end of the thirteenth century were a result of hundreds of innovations and improvements created by the builders' spirit of discovery.

Hoisting heavy materials was essential since the centerings, the wooden frames, were built on the ground before being lifted into place so that the vaults or flying buttresses could be completed. Even the roof, which was made in a series of triangular frames, or trusses, was made on the ground, hoisted up, and then covered with sheets of lead. The simplest way of getting rid of water on the roof was to affix projecting spouts to gutters so that the water would fall clear from the walls. The downspouts terminated in carved stone gargoyles, frightening creatures with gaping mouths that would spit water on the ground when it rained. The gargoyle form evolved into a veritable bestiary of horrific carvings that were intended to scare the faithful into moral submission.

In order to accomplish such heights, cathedral foundations were deep, in some instances thirty feet or more into the earth. Wall piers supported the vault, an arched ceiling or roof. The basic task for the architect lay in how best to adjust the pressure of the vault on the nave walls to the increasing height of the interior. How, in other words, was it possible to erect such a wall, towering, weightless, parchment-thin, without the risk of its collapse from the effects of thrust and compression? The Gothic solution consists in placing all the points of support for the wall on the outside. For this purpose a technical system was developed, known as buttressing. These buttresses, erected on foundations next to the piers, would later be connected to the piers themselves by stone arches known as flying buttresses. The pressure of the vault was transferred through the flying buttress to the buttress itself and then down to the foundation. In this way, the main piers could remain quite thin in proportion to their height, allowing more space for the windows between them. "To want a Gothic church without flying buttresses," said E.E. Voillet-le-Duc, the great architectural theorist, "is to want a boat without a rudder." How else was it possible to attain heights closer to God?

Significance of Light

Employing the new construction techniques of the ribbed vault and flying buttresses introduced the metaphoric possibilities inherent in vast expanses of glass. Abbot Suger of Saint Denis was infatuated with light; according to him, its radiance embodied the divinity of God. The window openings of medieval churches are largely judged by the amount of light which they allowed inside. The real significance of the church interior rested with the light as a spiritual power, capable of exercising an influence as inspiring as the architectural form. The manipulation of light in large expanses of stained glass, emerging first at Suger's Abbey Church of St. Denis, determined the translucence, pointed arches, and soaring interiors most commonly associated with the Gothic style.

The luminous space evolved into pictorial pageantry that provides a valuable insight into the mentality of the thirteenth century. By this time, the glassmakers had started working on beautiful colored glass. Glass was colored by adding different metals to the molten mixture. Glass was then cut to an exact size and shape and joined by strips of lead. It is in the pattern of the glass that many stories were told that reflected medieval life and beliefs. Episodes of the church, with Christ, the Virgin Mary and the Saints, with their deeds, legends and miracles, with everything in fact, which men needed to know and believe, emerge in a schematic plan. Biblical stories from the Old and New Testament, stories from the lives of saints, and legends in the merit of pictures were told and seen, and the vivid narrative possibilities of thirteenth-century stained glass brought

into immediate visual experience a sense of translation to a higher world. The power of allegory brilliantly applied in Gothic stained glass allows the essence of the lesson to be conveyed (Jantzen 157).

The stained glass of Chartres makes the most important contribution to our knowledge of the art because most of the original work has been preserved. Of 186 window designs, 152 can be seen today, while records survive of those destroyed between the eleventh and eighteenth centuries. All the windows were endowed individually, and since the benefactors are identifiable by inscriptions and other indications, we are able to trace the part played by the whole population in the adornment of a great cathedral. The participants included members of the royal house and the guilds of tradesmen that included every walk of life. As all these guilds are recorded as benefactors by the portrayal of their professional activities on the lowest window panels, we also discover what was considered typical of the crafts and trades during this time.

Chartres represents the apogee in the art of stained glass. The large stained-glass windows give the interior its overall impression of weightlessness. The windows are no mere openings, but self-illuminating walls. The light breaks through a mysterious deep-blue or violet darkness, and lets the brighter colors, such as the reds and yellows, shine even more clearly. It was the groundbreaking innovation at Chartres, of the clerestory windows, the topmost part of the church building. These windows illuminated the central portion of the interior space that previously had been very small and now became as large as the dividing arcades. This quantum leap in cathedral architecture showed that what matters most in cathedrals is the light.

Architectural Sculpture

Although not every cathedral provided imagery in the form of sculpture, when it did, it was magnificent and in abundance. Chartres alone has some 1,800 works of sculpture and it is much the same at Reims and Amiens. The sculpture was not so much to enrich the architectural effect by decoration, although this requirement was also fulfilled, but to bear visible witness to the canons of Christian belief and to reflect the intellectual climate in which medieval men felt at home. The scope was nothing less than a general history of humanity with Our Lord as the central figure, man's beginning and end as the twin poles of the story of his salvation, and a panoramic exposition of the entire religious and secular life of the thirteenth century. The sculpture in the portal architecture provided the entrance to the holy places with an introduction to the world of religious symbolism and pageantry. Its purpose was to teach as well as preach. The technical and artistic mastery of many sculptors provided carved figures of theological import that looked as though they were capable of stepping down and conversing. Picture the multitude of the faithful at Chartres, joined together with nearly ten thousand carved and glazed saints, gathered below in the nave in the darkness of the mythic forest created by the upwardly reaching piers. Above them all, filtered through immense fields of brilliant stained glass, was the presence of God (Dupre 37).

Symbolic Expression

The style of a Gothic cathedral embraced the religious zeal and symbolized the beliefs and aspirations of pilgrims to the faith. At first glance the floor plan appeared simple, only to reveal the design in the form of a cross with the placement of the altar in the east. The cathedral became the theatre where the believer witnessed the faith in a tangible, visible form. The church, as a building, represents the City of God. The question arises as to whether the medieval theologians applied their allegorical-symbolical methods of interpretation to the church as a building. The answer is most definitely "yes." The ground form of a cross transformed into a human being with the altar and choir representing the head, the transepts were the two arms and the nave signified the body with the legs and feet. On the other hand, it equally represented the enduring nature of the Christian community. The church portal symbolized the entrance to heaven, and is

symbolically expressed in the sculpture whose context, in the case of St. Denis, portrayed the Last Judgment. The variety of symbolic interpretation explains medieval thinking.

The church in all its omnipotence was woven into the very fabric of medieval life. Unlike 20th century churches that embrace quiet and reverence, the medieval church was not only the place of worship but also the home of the people. Quite literally, people ate and slept along with their dogs and sparrow hawks in the aisles. Cathedrals served as theatres, administrative centers, and marketplaces. It has been said that wine merchants, selling their wares inside Chartres, were induced to move only when a portion of the crypt was set up for their exclusive use (Dupre 32). This conjures up an entirely different picture of this heavenly building.

Cathedral Builders

With millions of tons of stone quarried, more than during the entire history of ancient Egypt (Gimpel 1), the shear number of participants to achieve this feat was extraordinary. Regardless of whether you start with the ingenuity of the engineers or the brute force of the laborers required to move the stone, the distinctions that evolved to mold this unique workforce painted a fascinating picture of medieval life. The examination of those laborers involved in working the stone provides an extensive list of specialized skills, quarrymen, plasterers, stonecutters, and masons to mention just a few. Although a distinction was not made between those who cut the stone and those who carved the stone, a distinction was made about the quality of stone used. "Hard hewers" worked on hard stone and "freestone masons" carved a chalky stone, which lent itself to a more delicate sculpture. The stonecutters lived in lodges that were built specifically for them and became the origin of Masonic lodges. Like clubs, chapters were organized to regulate life in the lodges. Out of concern for the town's commercial reputation, states organized professions into what later came to be called corporations. The creation of corporations and guilds to safeguard the political and economic needs of the people also served as a voice for the bourgeois (Gimpel 77). Medieval society progressed and flourished during this time of technological advancements and innovative spirit.

Cities and Towns

Where there was a cathedral there was a city. A vibrant city in the shadows of the cathedral that had a life of its own. The cathedral builders constituted a large portion of the population as great commercial centers emerged. From the radius of Paris, cathedral towns emanated as the obsession of God compelled great buildings to be erected in neighboring towns. However, cathedral towns were not unique to France but were represented throughout Europe, especially Great Britain, Germany, Spain, and present day Belgium. The towns were a fascinating mixture of entrepreneurial spirit guided by regimental rules and regulations of guilds. The guilds many times determined the layout of a city, as shops were organized and positioned according to prestige and craft.

A cathedral city and a manor town adjacent to a castle were different urban settings, each representing a vibrant and unique lifestyle. A cathedral city could also be a university city, for the church was a great instrument for the transmission of knowledge. Paris, as seen through the eyes of Alexander Neckham walking the streets on his way to class, provides a vivid account of the intricate working of the guilds. He states that he is obliged to rise for the street cries are so loud that no one could sleep (Holmes 133).   He is very meticulous in his descriptions and categorization of the occupations he encounters as he strolls by the tradesmen of the city. The reader cannot help but feel he or she is on the street with him.

Another scene of urban activity is vividly depicted by Chretien de Troys, who says:

> He [Gawain] looks at the entire town peopled by many fine people, at the changers of
> gold and silver and moneys, all under cover: he sees the open places, the streets

completely filled with good workmen who are practicing their different trades. This man is making helmets, this one mailed coats; another makes saddles, and another shields. One man manufactures bridles, another spurs. Some polish sword blades, other full cloth and some are dyers. Some prick the fabrics and others clip them and these here are melting gold and silver. They make rich and lovely pieces: cups, drinking vessels, and eating bowls and jewels worked in with enamels; also rings, belts, and pins. One could certainly believe that in that town there was a fair every day, it was so full of wealth. It was filled with wax, pepper, cochineal dye, and with vair and ris [fine furs], and with every kind of merchandise. (Holmes 133-134)

To imagine rows of tradesmen actively plying their wares but following strict rules imposed by the guilds must have been a sight. Distinctions between the trades were very specific. For example, the difference was very clear between a cobbler and a shoemaker. John of Garland refers to the cobblers as being "low" and "vile"; they repaired old shoes. The shoemakers manufactured new footwear, with their "sharp knife, and leather blackened with dye. They sew together their shoes with an *awl*, a turned-up tool, and pigs' bristles [for thread]" (Holmes 151). A complete list of trades can be reviewed by consulting the *Livre des mestiers* of Estienne Boileau, which was prepared in Paris in the thirteenth century (Holmes 134). All tradesmen were expected to follow a strict code of business practices. This very much molded the lifestyle, for life revolved around their businesses, the hours of operation, and designated feast days and religious observances.

A manor town possessed many of the same attributes of a city but on a much smaller scale. Serfs, who worked on the manor, and the tradesmen, who supported the needs of the castle, inhabited the town. As time progressed, the towns began to develop more into centers of commerce and manufacturing that eventually became less encumbered by feudal lords. At the focal point of the town's life was the market that was usually located in the center. Here farmers (and serfs with a surplus to sell) brought their produce. Other goods were displayed and the variety increased as trade was established. Taverns provided those away from home with a means of eating. In many, meat was cooked and sold to be eaten away from the premises. Inns provided a stopping place for merchants and other travelers. Fairs were held annually. Fairs were important for the trade they attracted, and the many merchants that attended. Later, fairs were marked more by the diversity of entertainment they offered and resembled more a modern day circus.

Throughout Europe, you can find remnants of medieval towns and cities with many characteristics intact. Bruges has reinvented itself as a tourist site reminiscent of the vibrant international trading center it was in the thirteenth century. The city was a thriving center of the cloth and textile trade until its harbor silted up in the 15th century. Today tourists can stroll to the sound of horse hoofs hitting the cobblestones. The sounds of bells ringing from the many different churches and towers across the rooftops offers a rich cacophonic experience. If a garrison setting is more to your liking, you can visit Carcassonne, a fortress atop a hill in the south of France. Carcassonne remains one of Europe's architectural marvels. Renovation has restored the double ring of ramparts and the 53 towers, and in 1997 was declared a UNESCO World Heritage Site.

Castles

When medieval people tried to describe themselves, they perceived themselves as "those who work, those who fight and those who pray." Who would dispute this notion with the landscape dotted with castles, the very fortification necessary to defend such vast empires? The castle, although strategically positioned and designed to defend and protect, remained romantically

enchanting on the inside. The castle was equipped with an elaborate stratum of working components, which served as a functioning, well-oiled machine.

In the Middle Ages, when strong national governments did not yet exist, and kings and lords, knights and nobles, natives and invaders vied for power and property all across Europe, a strong castle represented a measure of safety and security for its owner, as well as for serfs, servants, and nearby townspeople. When war broke out it inevitably revolved around the castle. In addition to its role as a defensive fortress, the castle also served as a residence for the local lord and his family.

The castle design reflected the very essence of defense features. Positioned on high ground, preferably with access to a waterway, the architectural features spoke for themselves. The castle's main line of resistance was the curtain wall with its projecting towers. If the approach was limited to one single direction, the defenses on the vulnerable side multiplied, with combinations of walls, moats, and towers masking the main curtain wall. The moats and drawbridges with gatehouses were protected with the *portcullis* or vertical sliding door, oak-plated and shod with iron, and operated from a chamber above with ropes or chains and pulleys. Arrow loops, narrow vertical slots, pierced the curtains at a level below the battlements. Flared to the inside, these gave the defending archer room to move laterally and to cover a broad field of fire while presenting only the narrow exterior slit as a target. A recess on the inner side sometimes provided the defender with a seat. If the enemy penetrated the wall, he would enter a booby-trapped passageway, "murder holes" where boiling water was poured or stones hurled upon the unwelcome intruders. Spiral staircases within the thick tower walls were constructed from interlocking steps. They were designed to allow defenders from above the greatest room to swing their swords, while giving less room to the attacker coming up the stairs (Gies 187).

Sometimes castles would store a year's supply of food or more, and for the relatively small size of a thirteenth-century garrison this often meant that in a prolonged siege the assailants rather than the besieged were confronted with a supply problem. A garrison of sixty men could hold out against an attacking force ten times its number. Feeding sixty men from a well-stocked granary supplemented by cattle, pigs, and chickens might be far easier than feeding 600 men from a war-ravaged countryside. A castle's water supply frequently offered a more vulnerable target than its food supply (Gies 188).

The castle had few vulnerable points, but what few it had were assiduously exploited by its enemies. A frequent structural weakness of castles lay in their subsoil. Unless a castle was founded wholly on solid rock, some part of its walls could be undermined by digging. The procedure was to drive a tunnel beneath the wall, preferably under a corner or tower, supporting the tunnel roof with heavy timbers as the *sappers* advanced. *Sapper* is derived from the French word *sappe,* which means to subvert, by digging and thus *sappers* were the engineering and military units assigned to this task. When they reached a point directly under the wall, the timbering was set ablaze, collapsing earth and masonry above.

If the castle was built on a solid rock foundation, then it had to be attacked with two other main devices inherited by medieval military engineers from ancient predecessors: the mobile assault tower and the siege engine or catapult artillery. The assault tower, usually called a cat, but sometimes a bear or other figurative term, was normally assembled from components brought to the site. The assault tower was to provide the storming party with cover and height, neutralizing the advantages of the defenders. The tower might be employed to seize a section of the rampart or to provide cover for sappers or a battering ram. Before this direct assault could begin the moat defense had to be dealt with by filling it with brush and earth so that the assault tower could be wheeled forward to the castle wall. Once in position the assault tower contained both archers and assault troops to engage the defenders in hand-to-hand combat (Gies 190-191).

Medieval engineers used ancient tension and torsion engines in the form of a common catapult. A tightly wound horizontal skein, its axis parallel to the wall under attack, was wound still tighter by an upright timber arm fixed to its shaft at right angles, and drawn back to ground level. The timber arm or firing beam, now under great tension, was charged with a missile at its extreme end and released. At the upright position, a padded crossbar, causing the missile to fly on, halted the arm's leap forward. Catapults were able to cast stones or flaming balls of pitch over the castle walls. It is even said that catapults were used to throw the heads of slain enemies into the castle, instilling fear and horror in the occupants. Data on ranges are scarce but modern experiments have achieved a distance of 200 yards with 50-pound rocks (Gies 192-193).

Medieval engineers devised another form, a more powerful form of catapult, the *trebuchet.* The *trebuchet* originally was powered by human muscle but later was driven by a counterweight, an invention also used for castle drawbridges. The *trebuchet* was capable of throwing huge stones (up to 400 pounds) and other missiles. The firing beam was pivoted on a cross pole about a quarter of its length from its butt end, which was pointed at the enemy castle. The butt end was weighted with a number of measured weights calibrated for range, and the long end, pulled down by means of a winch, was loaded with the missile. When released, the beam sprang to the upright position, discharging the missile with power and accuracy. The effectiveness of the *trebuchet* in a siege was formidable, because of its capacity to hit the same target repeatedly with precision.

Later heavier walls had to be constructed to defend against this technologically advanced machine. Other siege weapons were also employed. A huge drill might be used to pry apart the seams of the castle walls, while a battering ram was continuously rammed against the gate until it gave way.

Although we often think of castles as places of warfare, in times of peace these great strongholds were simply the home of the resident king or lord and his family. Within the castle walls there was a kitchen, gardens, stables, a chapel for religious services, and a Great Hall, where meals were served and feasts took place, accompanied by such entertainment as music, acrobatics, and juggling. There was also a keep or *donjon*, which served as the living quarters for the resident family. Strongly built and heavily fortified, the keep was also the last place of refuge for the occupants if invading forces succeeded in forcing their way into the castle, unless an underground tunnel provided escape beyond the castle walls.

Like the decline of the vibrant cathedral, the castle experienced a decline as a useful defense fortress as cannons and gunpowder revolutionized warfare in the fifteenth century. Even the rudimentary designs of a residence became obsolete with advances to improve the level of comfort. Today their ruins still dot the European landscape as mute testimony to an era when castles symbolized safety and refuge in uncertain times, as well as the power and prestige of the king or local lord and the hierarchy of the feudal system.

Travel Component

It is fascinating to compare a traveler's description of places through the ages. I have provided two accounts of travelers walking down similar roads. Each traveler is experiencing the moment, but the moment is separated by time. Of course, they do not sound the same, for language and expression evolves with time, but the nuances and observations that capture the spirit are remarkably the same. I will read excerpts from each text to students as I begin laying the groundwork for our travel.

With the use of Urban Holmes's *Daily Living in the Twelfth Century,* a vivid account of medieval times is portrayed by Alexander Neckam, a schoolmaster who traveled from London to Paris during the years of 1150-1200.   Holmes incorporates source material from primary texts, archaeological evidence, and medieval iconography as Neckam presents medieval life through the

eyes of a medieval man. The reader goes on a journey with Neckam as he rides his mounts, lodges at hospices, walks the streets of London and Paris, and visit's the schools and baronial estates along the way. Such detail is given about the roads he traveled that the reader envisions life as it was.

In contrast to Holmes perspective from the eyes of a medieval traveler, *Roads to Santiago* by Gees Nooteboom uses a modern-day pilgrimage through Spain to capture the spirit of the age as he absorbs the architecture, art, and landscapes. He writes with the emotion that must have been felt by those who had previously arrived and departed the rich wonders found off the beaten path. The pilgrimage to Santiago he describes as:

> One of the arias of madness of European opera, a gigantic migratory flow, a movement of millions of extras, an unceasing stream of scallop-bearing pilgrims from all corners of Christendom, who found shelter and sustenance at Mont-Saint-Michel, Tours, Vezelay, Le Put and Arles on their way to the Pyrenees and beyond, until they reached the *camino* to Santiago. What massive adventure signified in terms of religious zeal, political, social, economic, and artistic influence is almost impossible to imagine. (200)

INSTRUCTIONAL STRATEGIES

It is to these ruins that students will travel and unravel the mysteries of the medieval age. I will be guided by the format of SHAPE, an acronym used in the 6th grade curriculum that provides a common thread linking the regional cultures we study throughout the year. Students will learn about the continent of Europe in a medieval setting. Having recently been introduced to a standards based instructional design that introduces a backward design process, I will be utilizing the steps as suggested in the model (McTighe 8-19). Stephen R. Covey in *The Seven Habits of Highly Effective People* says, "To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you're going so that you better understand where you are now, so that the steps you take are always in the right direction" (95).

The backward approach to curricular design departs from the common practice of thinking about assessment as something we do at the end, once teaching is completed. Backward design requires the teacher to operationalize the goals or standards in terms of assessment evidence as we begin to plan a unit. Teachers are encouraged to begin with the question, "What would we accept as evidence to indicate that students have attained the desired understandings and proficiencies before proceeding to plan teaching and learning experiences" (McTighe 8-19)? In step one, the standard is identified and prioritized into three categories. The three categories will be divided into those worth being familiar with, important to know and do, and enduring understanding. After identifying the desired results, evidence must be designed to determine if the student has attained the desired understandings. Only then can learning experiences and instruction be planned (McTighe 8-19).

With the backward approach I hope to shift my emphasis to what is most important, namely, the understandings and attitudes students should take away, beyond the dates and dead people that are sometimes synonymous with teaching history. The assessment will document evidence of real learning, not just provide a test grade. With that in mind, I am able to plan instructional activities and learning experiences that target my priorities. With imaginative and thought provoking lessons, students will become active participants in medieval thinking through travel.

Lesson plans for "A Present Day Trip Back in Time" will be formatted into three weekly units based on the backward design approach. I will present the lessons not in a chronological order but in a conceptual context. I first identify the enduring understanding I want my students to take away from the unit and then work backwards to find the appropriate instructional strategies to accomplish this goal. The curriculum meets the requirements as set forth by the

Texas Essential Knowledge Skills and will target three social studies standards for the sixth grade level. The first standard addresses the student's understanding of the relationship that exists between societies and their architecture and art. Secondly, the student will understand the relationships among science and technology and political, economic, and social issues and events. Finally, the student will apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.

LESSON PLANS

Concept: *"Enduring Understanding"*

The enduring understanding I want the student to retain is: that the true purpose of travel is to see, experience, feel, and understand distant places in order to gain a deeper knowledge of home, of one's culture, of oneself.   This understanding is clearly enduring, because it will provide a lifelong ability to connect with others and themselves. In designing an assessment, I want a performance task that reflects this understanding and attitude.

Assessment Design

The final assessment will be a product-based lesson that will be accomplished in the third week. In a voice of a medieval traveler, the student will design a brochure that entices pilgrims and wanderers alike to destinations that hold great promise. Components of a landmark will be detailed to illustrate the needs and wants of the medieval citizen. In so doing the student will reflect the spirit of the Middle Ages through their understanding of the significance of these landmarks. The brochure requirements will include an illustration of the landmark, location on a map, historical significance of the landmark, when it was built, what materials were used, how it was designed, its unique characteristics, and descriptive remarks to influence travelers to pay it a visit. The project will give the student an opportunity to engage in authentic yet disciplined work. The assessment challenge will be clearly defined in a rubric that specifies the difference in high and low quality products.   Samples will also be provided so that the student may understand exactly what standards are expected for the final product. In this final assessment, the student will capture an understanding of remnants of the past and gain an appreciation for distant places.

Concept: *"Worth Being Familiar With"*

The final assessment guides my selection of activities the students will complete during this unit and what resources and materials will be needed. During the first week, I plan to introduce foundation knowledge that will be categorized as "worth being familiar with." Sufficient knowledge must be introduced for the student to be successful in the next step of the unit. More importantly, this is the stage where curiosity and enthusiasm are generated to motivate the project. I find that visual materials are extremely beneficial for sixth grade students. I will show two excellent PBS videos narrated by David Macaulay on castle and cathedral construction. These videos show authentic landmarks and incorporate animated stories that accurately portray life in and around these unique structures during the Middle Ages. I will utilize power point presentations that show art and architecture of the period. To see a series of astonishing Gothic cathedrals mesmerizes students and leaves them wondering how the construction of these buildings could have been accomplished. Reference materials will be available in the classroom so that students can begin traveling within the pages of the book and imagining what life was like. The students will complete an interactive computer lesson that will take them to each room in a castle. Each room will introduce vocabulary words essential to understanding the nature of the castle as a fortress. Students will also take a series of virtual tours of castles as provided on Internet sites.

Concept: *"Important to Know and Do"*

During the second week, I will present material categorized as "important to know and do." I will introduce basic research skills and organizational strategies to guide the student in identifying key information. The travel and exploration portion of the unit will be formatted as a scavenger hunt to pinpoint historical, cultural, and religious details of the period. Students will be given a road map to research stations that will allow them to explore destinations that stretch to the edges of the European continent. Research stations will include a reading center equipped with books, magazines, and brochures, a computer center with a list of Internet sites that pinpoint landmarks throughout Europe, a map corner to analyze strategic geographical features and locations, and an audio corner to listen to the voice and music of the period.   The scavenger hunt will be designed to develop basic research skills. Guided questions and directives provided by outlines and graphic organizers will lead them to targeted answers that will strengthen basic reading and writing skills. The information gathered will be the basis for the final product.

We will travel to the distant city of Santiago de Compostela, located at the westernmost reaches of Spain and to the mountains of Austria where the monastery of Melk sits in splendor reigning over the Danube River. We will visit the romantic charm of Carcassonne perched high on a hill overlooking the vineyards of southern France and explore Bruges, once a thriving textile center and harbor in Belgium. Guided by the curriculum students will have an opportunity to catch a glimpse of the world through these extraordinary venues. It is my hope that they will gain a real curiosity and appreciation for the world in which they live, a curiosity that will last a lifetime.

ANNOTATED BIBLIOGRAPHY

Works Cited

Covey, Stephen R. *The Seven Habits of Highly Effective People*. New York: Fireside, 1989.
     A manual for performing better both personally and professionally.

Dupre′, Judith. *Churches.* Hong Kong: Harper Collins Pub., 2001.
     A chronological presentation of churches that reflects the impact of time, place and theology on their form. Contains over 200 color and black-and-white images.

Gies, Frances and Joseph. *Life in a Medieval Castle*. New York: Harper & Row Pub., 1974.
     Depicts the castle as the center of medieval life. Uses primary sources to bring alive the participants in and around the castle.

Gimpel, Jean. *The Cathedral Builders*. Trans. Teresa Waugh. New York: Harper, 1961.
     An excellent and complete history of medieval cathedral building.

Houston Independent School District. *Project CLEAR Curriculum*. Social Studies, Sixth Grade. Houston, Texas: HISD, 2003.
     A guide detailing teaching objectives and strategies.

Holmes, Urban Tigner. *Daily Living in the Twelfth Century*. Madison: U of Wisconsin P, 1952.
     Primary source material is used to give a detailed account of medieval life as seen through the eyes of a twelfth century traveler.

Jantzen, Hans. *High Gothic*. New Jersey: Princeton UP, 1957.
     A architectural detailed account of the Gothic cathedrals of Chartres, Reims, Amiens.

Mark, Robert. *High Gothic Structure*. Art Museum Princeton: Princeton, 1984.
     A technological reinterpretation of Gothic cathedrals.

McTighe, Jay and Grant Wiggins. *Understanding by Design*. Alexandria Virginia Association for Supervision and Curriculum Development, 1998.
     Professional development presentation by Insight Education Group detailing the backward design process.

Nooteboom, Gees. *Roads to Santiago*. Trans. Ina Rilke. New York: Harcourt Brace, Inc., 1997.
     Passionate travelogue of Spain's rich history, past and present as the author journeys along the road to Santiago de Compostela.

Schutz, Bernhard. *Great Cathedrals*. New York: Harry N. Abrams, Inc. Pub., 2002.
Collection of photographs and illustrations of the great Gothic cathedrals of Europe, detailing art history and providing a vivid pictorial chronicle.

Supplemental Resources

Brieu, Sylvie. "Mont-Saint Michel vs. Mud." *National Geographic*. April, 2003: 62+. History of the Monastery of St. Michel.

Evans, Joan. *Life in Medieval France*. London: Phaidon Press, 1925.
Details of medieval life in France between the death of Charlemagne to the reign of Louis XII, nicely illustrated.

Kleiner, Fred, and Christin Mamiya. *Gardner's Art through the Ages.* Wadsworth P. 2004.
A comprehensive art history with CD's for view medieval art and architecture.

Macaulay, David. *Castle*. Boston: Houghton Mifflin Co., 1973.
An accurate account of the castle building and life in the medieval period.

---. *Cathedral*. Boston: Houghton Mifflin Co., 1973.
An accurate account of cathedral building in the medieval period.

Mullins, Edwin. *The Pilgrimage to Santiago.* New York: Interlink Books, 1974.
Present day journey along the pilgrim route embraces the historical and religious symbolism.

Film Sources for Teachers

Castle. David Macaulay. PBS, *2000.*
A narrative account of that weaves footage of an authentic castle site with an animated story about castle building and life at the castle.

Cathedral. David Macaulay. PBS, 2000.
A narrative account f that weaves footage of an authentic cathedral site with an animated story about castle building.

Living in the Past: Life in Medieval Times. Dr. Martin Lowry, Dr. Robert Swanston, and Andrew Brown. Kultur, 2000.

Web Sources for Teachers

Carcassonne. *Columbia Encyclopedia online*. 6th Ed. 2005. Columbia Encyclopedia. February 13, 2005.
<http://www.encyclopedia.com/html/C/carcasso_asp>.

Carcassonne. *Nation Master online*. 2002. Nation Master. February 13, 2005.
<http://www.nationmaster.com/encyclopedia/Carcassonne>.

History of Brugge. February 13, 2005. <http://www.trabel.com/brugge/bruges-history.htm>.

Josephs, Jeremy. *Carcassonne History.* Aude Languedoc. February 13, 2005. <http://www.midi-life.com/carcassonne/history>.

Josephs, Jeremy. *Carcassonne Medieval Magnificence*. Aude Languedoc. February 13, 2005. <http://www.midi-life.com/carcassonne>.

National Geographic Explorer. Ghosts in the Castle. 2004. <http://wwwnationalgeographic.com/castles/enter.html>.

Salmon, Lynn. *UNESCO World Heritage List.* 2004. February 13, 2005.
<http://llfp.thesalmons.org/lynn/world.heritage.html>.

World Heritage Center, 2003. UNESCO. February 13, 2005. <http://whc.unesco.org/brief.htm>.