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Introduction to the Content and Context of the Ratio Studiorum: Notes, Quotes and Commentaries on the Jesuit Educational Ideal

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**SACRED HEART UNIVERSITY
OFFICE OF MISSION AND CATHOLIC IDENTITY**

**Presidential Seminar
on the Catholic Intellectual Tradition**



**Introduction to the Content and Context of the
Ratio Studiorum**

Notes, Quotes and Commentaries on the Jesuit Educational Ideal

KARL LORENZ

2019

Introduction to the Content and Context
of the Ratio Studiorum

Notes, Quotes and Commentaries on the
Jesuit Educational Ideal

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EXPLANATORY NOTES

1 - Seminar Project. This compendium was presented as the final project for the Presidential Seminar on the Catholic Intellectual Tradition, scheduled during the 2016-2017 academic year at Sacred Heart University, Fairfield, CT. The seminar is organized annually for twelve faculty members by the Office of Mission and Catholic Identity under the guidance of Father Tony Ciorra.

The topic I chose for my project was Jesuit Education in Colonial Brazil as outlined in the *Ratio Studiorum* of 1599. The *Ratio atque Institutio Studiorum Societatis Iesu* (*Method and System of the Studies of the Society of Jesus*) defined the organization, operation and teaching methodology of Jesuit secondary and higher education institutions during the greater part of the colonial period, which extended from April 1500 when the first Portuguese explorers set foot on the Brazilian shore to July 1822 when Brazil declared its independence from Portugal. The Jesuitic Period encompassed the years between 1549 when the Brazilian Province of the Society of Jesus was established to 1757 when the Order was expelled from Brazil and its colleges closed by edict of the Portuguese Crown. During this period, the Society's colleges dominated the educational landscape.

The *Ratio Studiorum* was a document of broad intent and universal application. Its rules applied to all Jesuit institutions in European countries and their colonies. The expectation of the Society was that its teaching members would faithfully follow the rules prescribed by the document and carry on instruction by its established methods. Farrell (1970) notes that "the *Ratio* was in good part a manual for teachers, who were expected to follow carefully the rules of their respective classes" (p. 132). The expectation of fidelity to the *Ratio* also applied to Brazilian Jesuits. This obligation suggests that its pedagogical guidelines were implemented in Brazil.

The goal of the project was to organize and present information about the content and context of the *Ratio Studiorum*. The content consists of the origin, policies and procedures of the curricula and pedagogy of the tiered Jesuit educational system as expounded in the *Ratio*. The context refers to authors, publications and intellectual traditions that directly or indirectly influenced the Jesuit Ideal of Education.

Given the vast amount of information and diversity of opinions about the history of the Society of Jesus and its educational activities, this compendium is offered as a modest introduction to the *Ratio Studiorum*. A relatively small number of items of information (i.e. entries) are presented in this work. While more material could have been included, I selected information that was useful in pursuing my research interests and in satisfying my curiosity.

2 - Literature on the Society of Jesus. The literature on the Society of Jesus is diverse and seemingly limitless. Publications of all types have described, scrutinized and commented on the Order from every possible vantage point: historical, economic, political, sociological, ecclesiastical and so on. An example is Dauril Alden's *The making of an Enterprise* (1996), which examines from multiple perspectives the activities of the Jesuits in Portugal and its colonies from 1540 to 1750. The Jesuits also have been characterized as spiritual directors, liberationists, writers, wordsmiths, educators, scholars and savants. A significant contribution in this sense is *The Jesuit Mystique* (1965) by Douglas Letson and Michael Higgins; a work that explores the history of the Order and highlights its members' literary, spiritual, political, and educational accomplishments, both in the past and in contemporary society. With respect to education, Edward B. Rooney, President of the Jesuit Educational Association, comments on the many works on Jesuit schooling by referring to Father John Donohue's remarks that "a good-sized shelf of books' would be necessary to satisfactorily treat the long and evolving history of Jesuit education" (1963,

p. x). Included in this collection would be works on the history of the Jesuits in Brazil. Well-known texts include those of Leonel Franca (1952) and Serafim Leite (1965).¹

There is also a prodigious volume of literature produced by the early Jesuits after the foundation of the Society in 1540. Grendler (2016) reports that “there are nearly seven hundred pages of documents discussing and debating the organization of schools, curriculum, pedagogical practice, textbooks, and so on, in the 1540s, 1550s and 1560s in the magnificent and indispensable *Monumenta paedagogica* edited by Ladislaus Lukác” (p. 21).

3 – Entries and Chapters. The compendium consists of entries that are distinct or stand-alone items of information on the *Ratio Studiorum* of 1599. The entries consist of quotes and commentaries by reputable authors and sources, as well as my notes.

The entries are grouped into fourteen chapters, each of which addresses a broad topic. The entries in a chapter are not sequentially arranged to advance an argument or defend a proposition, although at times they are conceptually related. The chapters are identified by Roman numerals and the entries by Arabic numerals.

While the topics of the compendium do not develop an overall theme, they are connected in the sense that they contribute to an understanding of the content and context of the *Ratio Studiorum*. Chapter XI addresses the life of Ignatius of Loyola and the educational contributions of the Society of Jesus. This is followed by chapters that discuss the *Ratio*: its development and organization (XII), curricula (XIII) and pedagogy (XIV). Chapter V examines the University of Paris and its influence on the development of the *Ratio* and Chapter VI discusses Scholasticism, which characterized instruction at the University. Information on the nature of schooling in the Middle Ages (IV) provides additional context.

The *Ratio* outlines two divisions of study. The first, *studia inferiora*, consists of humanist studies, which equates to a secondary education. Chapters discuss Humanism (IX) and the Liberal Arts (VIII), which preceded the humanist movement. Chapter VII examines the influence of Saint Augustine on the liberal arts tradition. The second division, *studia superiora*, comprises two areas of higher education. The first encompasses the Arts (Philosophy), which focuses on the ideas of Aristotle (III); and the second is Theology, which is heavily based on the *Summa Theologiae* of Thomas Aquinas (X). Chapter I discusses the concept of an “Ideal” as it was embraced by the Greeks and by the Jesuits; and Chapter II examines the importance of books and their contribution to classical, medieval and Jesuit education.

4 – The Ideal as a Theme. This volume compiles information about the content and context of the *Ratio Studiorum*. Even though the scope of the compendium’s objectives is limited, there is a recurring concept that surfaces in various chapters: the Ideal. At different moments and in different movements the arguments of great thinkers were often based on idealized systems of thought that guided others in their speculations and actions.

Numerous ideals stand out in the history of Jesuit education. These are prefaced in Chapter I by a discussion of the concept of “ideals” as understood by the Greeks and by the Jesuits in their educational system. Other Idealizations are addressed in the remaining chapters: the Renaissance Ideal, the Quintilian Ideal, the Ciceronian Ideal, the Ideal University, the Scholastic Ideal, the Humanist Ideal, the Liberal Arts

¹ Among other prominent Portuguese-speaking authors who discuss the history of Brazilian and Jesuit education, particularly in the colonial period are Mattos (1958), Teixeira Soares (1961), Azevedo (1976), Vasconcelos (1977), Cardim (1978), Serrão (1980, 1982), Holanda (1989), Neves (1993), Romanelli (1993), Raymundo (1998), Ribeiro (1998) and Almeida (2000).

Ideal, and so forth. These and other mental formulations are great individual and collective accomplishments that pervade both the history and rationale of early Jesuit schooling.

5 - Citations and References. The compendium cites sources that vary in terms of their scholarly contribution. The sources provide (1) *substantive information* from recognized authorities in their fields, and (2) *introductory information* appropriate for follow-up inquiries. Learned works by authorities are cited along with encyclopedias, dictionaries, study guides, syllabi, blogs, opinion pieces, and the like. Many of the sources are available on line.

The in-text citations generally follow the APA format: author name, date of publication, page number. When citing the same author's work in subsequent paragraphs of the entry, only the author's name and page or paragraph number are referenced. Subtitled parts of an article, usually from an encyclopedia, are identified as a section, i.e. "sec." When pagination is absent, the number of the paragraph in which the information can be found is indicated by "para." For example, information contained in paragraph one of the section titled "Historical Sources" in Sweeney's 2015 article on literary forms of medieval philosophy is presented as follows: (Sweeney, 2015, sec. Historical Sources, para.1). Some references to authors and their works are presented in footnotes. The publications listed in the Reference section of the compendium follow the APA format, with the exception that the surnames of authors are presented.

I - THE IDEAL

1 - Definition. Dictionary.com (2018) gives the following definitions for “ideal:” (1) a person or thing that is “a standard of perfection or excellence,” and (2) that which “conforms to such a standard, and taken as a model for imitation” (“Ideal”). Common to both definitions is the concept of perfection. The *Collins English Dictionary* (2012) similarly defines an “ideal” as a “conception of something that is perfect, esp. that which one seeks to attain.” It also includes the following definitions: “a person or thing considered representing perfection” and “something existing only as an idea.” These and other dictionaries are in agreement that an ideal refers to a person, object or condition that represents perfection and that is a standard of excellence.

Greek Ideal

2 - Definition of Paideia. The *Encyclopedia Britannica* (n.d.) defines *paideia* (in Greek, equivalent to “education” or “learning”) as

a system of education and training in classical Greek and Hellenistic (Greco-Roman) cultures that included such subjects as gymnastics, grammar, rhetoric, music, mathematics, geography, natural history, and philosophy. In the early Christian era the Greek *paideia*, called *humanitas* in Latin, served as a model for Christian institutions of higher learning, such as the Christian school of Alexandria in Egypt, which offered theology as the culminating science of their curricula. The term was combined with *enkyklios* (“complete system,” or “circle”) to identify a large compendium of general education, hence “encyclopaedia” (“Paideia”).

3 - Paideia and the Ideal Man. The classical Greeks proposed the concept of “Educational Ideal.” Perfection, as an ideal, was at the core of an educational system designed for and by the aristocracy, i.e. those predestined to rule others in the polis. *Paideia* was a term introduced by the Greeks to refer to this educative process. As a starting point in the training of the boy to manhood, *paideia* embraced the ideal of the Perfect Human Being. The Ideal Man achieves excellence in his physical, intellectual and moral selves. As the German philosopher Werner Jaeger (1945) notes, through *paideia* “the Greeks sought to become the most perfect possible human form, they also sought to be admirable men” (Vol. I, p. 15). *Paideia* thus embodied an educational philosophy as well as a curriculum and pedagogy:

It incorporated both practical, subject-based schooling and a focus upon the socialization of individuals within the aristocratic order of the polis. The practical aspects of this education included subjects subsumed under the modern designation of the liberal arts (rhetoric, grammar and philosophy are examples), as well as scientific disciplines like arithmetic and medicine. An ideal and successful member of the polis would possess intellectual, moral and physical refinement, so training in gymnastics and wrestling was valued for its effect on the body alongside the moral education which the Greeks believed was imparted by the study of music, poetry and philosophy. (“Paideia,” *Wikipedia*).

3.1 - Richard Tarnas in *The Passion of the Western Mind* (1991) discusses *paideia* in the following passage:

Rational acuity, grammatical precision, and oratorical prowess were the prime virtues in the new ideal man. The proper molding of a man’s character for successful participation in polis required a sound education in the various arts and sciences, and thus was established the *paideia* -- the

classical Greek system of education and training, which came to include gymnastics, grammar, rhetoric, poetry, music, mathematics, geography, natural history, astronomy and the physical sciences, history of society and ethics, and philosophy—the complete pedagogical course of study necessary to produce a well-rounded, fully educated citizen. (pp. 29-30)

3.2. - D. Naugle (n.d.) puts it this way: “*Paideia* starts from an ideal, not from an individual. The ideal of MAN was the pattern and model toward which all Greek educators and poets, artists and philosophers always looked. It was this universal ideal, the model of humanity which all individuals were to imitate. As this ideal was to be embodied in the community, and the goal of education was to make each person in the image of the community” (para. 5).

4 - Arete as an Ideal. Werner Jaeger (1945), a philologist and towering figure in the study of the classics in the early 20th century, states that “*Arete* was the central ideal of all Greek culture” (vol I, p. 15). The term *arete* referred to perfection in one’s personhood. In a larger sense it meant “excellence of any kind” as well as “moral virtue,” since human perfection is associated with virtuous behavior (Liddell & Scott, 1940). For the early Greeks, excellence was understood as the “fulfillment of purpose or function: the act of living up to one’s full potential.” It meant that the individual strives to be the best that he can be. Hence, *arete* is demonstrated in many ways:

In the *Odyssey*, Penelope has *arete*, because she is the best wife that a woman can be. But Achilles in the *Iliad* also has *arete*, because he is the best warrior that a man can be. Odysseus has *arete* because he is so clever, and thinks up effective plots. Athletes have *arete* when they win the foot-race. Being very good at something good is the definition of *arete*; Medea’s witchcraft, for example, isn’t *arete* because it’s a bad thing. . . . Not only people could have *arete* – a well-built house, a beautiful piece of pottery, and a strong horse all had *arete* too. (Carr, 2017, para. 2)

To achieve excellence, *arete* requires physical training; mental training through the mastery of oratory, rhetoric, and the basic sciences; and spiritual training through the study of music and philosophy in the search for virtue. Plato acknowledged these imperatives when he focused

on the strenuous development of the intellect, the will, and the body, motivated by a ceaseless desire to regain the lost union with the eternal, for the recollection of the IDEALS is both the means and the goal of true knowledge. Education, therefore, for Plato is in the service of the soul and the divine. Under Plato, the classical *paideia* assumed a deeper and metaphysical dimension in his Academy, holding forth the ideal of inner perfection realized through disciplined education. (Tarnas, 1991, pp. 42-43)

5 - Plato’s Ideal Forms. One of Plato’s memorable constructs was his Theory of Forms. The theory posits two types of reality. The first refers to the world that we experience with our senses. All the objects and phenomena that we perceive through the five senses are imperfect and changing and fall within this physical level of reality. The empirical realm also embraces concepts related to sense perceptions. The second is a spiritual world, or supernatural level, that consists of Forms that are immutable and inaccessible to the senses. They can only be intuited. Plato defines Forms as

perfect exemplars, or ideal types, of the properties and kinds that are found in the [physical] world. Corresponding to every such property or kind is a Form that is its perfect exemplar or ideal type. Thus the properties ‘beautiful’ and “black” correspond to the [ideal] Forms the Beautiful

and the Black; the kinds "horse" and "triangle" correspond to the [ideal] Forms the Horse and the Triangle; and so on" For Plato, Forms are abstract objects, existing completely outside space and time. Thus, they are knowable only through the mind, not through sense experience. Moreover, because they are changeless, the Forms possess a higher degree of reality than do things in the world, which are changeable and always coming into or going out of existence. The task of philosophy, for Plato, is to discover through reason ("dialectic") the nature of the Forms, the only true reality, and their interrelations, culminating in an understanding of the most fundamental Form, the Good or the One. (Duignan, n.d., sec. Forms, paras. 1, 3)

Even though the ideal Forms are beyond our senses, their existence can be apprehended by our conscious minds. We access them through our memory, because each of our souls experienced the eternal world of Forms before they became incarnate in our physical bodies. Plato reasoned that

long before our bodies ever existed, our souls existed and inhabited heaven, where they became directly acquainted with the forms themselves. Real knowledge, to him, was knowledge of the forms. Yet, knowledge of the Forms cannot be gained through sensory experience because the Forms are not in the physical world. Therefore, our real knowledge of Forms must be the memory of our initial acquaintance with them in heaven. What we seem to learn is in fact just remembering. ("Theory of Forms," sec. Human Perception, para. 3. *Wikipedia*)

5.1 - The *Internet Encyclopedia of Philosophy* raises the following questions about Forms:

Why is it that one can recognize that a maple is a tree, an oak is a tree, and a Japanese fir is a tree? What is it that unites all of our concepts of various trees under a unitary category of Tree? It is the form of "tree" that allows us to understand anything about each and every tree, but Plato does not stop there. . . . The forms can be interpreted not only as purely theoretical entities, but also as immaterial entities that give being to material entities. Each tree, for example, is what it is insofar as it participates in the form of Tree. Each human being, for example, is different from the next, but each human being is human to the extent that he/she participates in the form of Human Being. This material-immaterial emphasis seems directed ultimately towards Plato's epistemology. That is, if anything can be known, it is the forms. Since things in the world are changing and temporal, we cannot know them; therefore, forms are unchanging and eternal beings that give being to all changing and temporal beings in the world, if knowledge is to be certain and clear. In other words, we cannot know something that is different from one moment to the next. The forms are therefore pure ideas that unify and stabilize the multiplicity of changing beings in the material world. (Graham, n.d., sec. Metaphysics, paras. 1-2)

6 - Philosophy and the Forms. Plato believed that Forms were "abstract objects" that exist outside space and time. They are changeless and "possess a higher degree of reality than do things in the world, which are changeable and always coming into or going out of existence." Given their immutable and transcendent nature, they are not accessible to the senses. They can, however, be known by the mind. Thus, it is the task of the philosopher "to discover through reason ('dialectic') the nature of the Forms, the only true reality, and their interrelations, culminating in an understanding of the most fundamental Form, the Good or the One." (Duignan, n.d., sec. Forms, para. 3)

Jesuit Ideals

7 – Jesuit Educational Ideal. Richard Tierney (1914) conveys his understanding of the Jesuit perspective purpose of schooling. The author vigorously conveys the Society's approach to education as articulated in the *Ratio Studiorum*. In his portrayal of the Jesuit Educational Ideal he portrays the educative process as a single-minded devotion to the spiritual development of the student: "Real education is a process of guiding a human being from a state of imperfection to a state of perfection. It is the development of man according to the highest attainable standards, the discipline of soul and body into the best that can be had. Such a process concerns itself with every part of the pupil; with the body and the senses, with the soul and all its powers" (p. 15). Jesuit education envisions its end product as an individual who has achieved wisdom and eloquence in thought and speech and who is committed to a quest for excellence in himself and in others.

8 - Multiplicity of Ideals. Tierney (1914) states on the first page of his book on teachers and teaching that "[t]he primary aim of all true education is the formation of character." He follows this with the statement that "[t]he ambition of every true teacher is to accomplish this aim" (p. 18). These assertions define the ideal nature of education and the teacher-student relationship. All that supports this relationship is derived from this ideal. One can therefore posit that the educative process envisions an Ideal Curriculum, an Ideal Pedagogy, an Ideal Teacher, an Ideal Student, and so forth. These constituent ideals are themselves exemplars of perfection and evidenced in the *Ratio Studiorum*.

The vision of the Jesuit educational system incorporated the thoughts articulated in the writings of Aristotle, Cicero, Quintilian, Aquinas and other luminaries of the past. Their idealizations interfaced and combined to define the nature of the Educational Ideal of the Society from the 16th to the 18th century. The subordinate ideals addressing the curriculum, course content, pedagogy, administrative responsibilities and teacher and student behaviors were grounded in the writings of antiquity and of the decades preceding the publication of the *Ratio Studiorum*. The Jesuit Ideal incorporated in one form or another and to different degrees the Liberal Arts Ideal, the Scholastic Ideal, the Humanist Ideal, the Rhetorical Ideal, the Developmental Ideal, the Ideal of Personhood (teacher and student), etc.

9 – Ratio Studiorum and the Ideal. The educational system developed by the Society of Jesus was codified in the *Ratio Studiorum* of 1599. The rules of the *Ratio* reflected the best thinking of the Society at the time. It dictated the curricula and pedagogy of Jesuit schools, the responsibilities of administrators and teachers and the obligations of the students. Its guidelines and regulations were explicit in their expectations, yet pragmatic and practical in their implementation. The *Ratio* served as a guide for members of the Society on their educational journey towards intellectual and spiritual perfection.

The Jesuit Educational Ideal in the 16th century was a product of the confluence of two streams of thought: scholasticism and humanism. Each of these intellectual movements was influenced by the ideas of great thinkers, both past and contemporary. The *Ratio* was a repository of ideals, many aspirational and spiritual in nature, expressed by a myriad of great thinkers who spanned the ages predating its publication.

9.1 - The *Ratio Studiorum* described a tiered educational system that sought to develop the intellect and religious spirit of the scholastics. The system was grounded in great intellectual traditions. Educational Catholic doctrine embraced the concept of a student who achieves knowledge and a personal relationship with God. The humanist canon idealized the acquisition of *eloquência perfecta* as a *sine qua non* of the

educative process. The scholastic perspective advocated disciplined reason as the prime faculty of the educated man. The insights and the writing style of Cicero and the pedagogy of Quintilian focused on desirable behaviors and dispositions. The dialectical method of Aristotle and the theological deductions of Thomas Aquinas exemplified perfect processes and substance.

10 – The Rhetorical Ideal. Father James Donohue (1963) writes that although the *Ratio Studiorum* was written in the late 1500s, it presents “certain key-categories or master themes, rudimentary perhaps or barely implicit, which constitute a portion of Christian educational theory: even though persons, places and time have changed since 1599” (p. 69). He states that there are certain 16th century educational principles that apply to 19th and 20th century schools, but of course taking into account the changes that the school-going populace has undergone.

A core principle of Jesuit education is based on the Rhetorical Ideal. Donohue points out that the ideal of “Ciceronian verbal grace,” or *eloquência perfecta*, presupposes that one should possess both wisdom, i.e. knowing a thing, and mastery in communicating that which is known. This perspective decisively governed Jesuit education in the period prior to the suppression of the Society in 1773. According to Donohue, when the Ideal is viewed today one may conclude that “developing the arts of communication and *eloquência perfecta* are still essential tasks of the secondary school even though the form and content of eloquence changes from epoch to epoch and nation to nation” (p. 121).

11 - The Developmental Ideal. Donohue (1963) maintains that Ignatius of Loyola believed that a goal of formal education was the development of a student’s “Christian understanding of the world and of humanity’s place in it.” In his view, a prime objective of the educative process is the “full and ideal development” of the man (as cited by Williams, 1989, p. 2).

The Developmental Ideal pervading Ignatius’s thinking reflects Aristotle’s concept of progression in nature. Ignatius writes that one can see the hand of God “in plants, giving them life, in animals, giving them consciousness, in humans, giving them intelligence.” Man is thus characterized by “existence, life, consciousness, intelligence” (Corbishley, 1963, p. 80). After the acquisition of intelligence, the next step in man’s evolution is a spiritual awakening. Ignatius believed that with proper guidance a man could achieve an understanding of his purpose and relationship with the Divine. Williams (1989) elaborates on this concept when he notes that “all of life is ordered towards an absolute and transcendent value,” and this ordering is progressive and evolving. Spiritual development leads to an intuitive or reasoned understanding of man’s relationship with God and that “all other things assume a necessarily instrumental character in light of this, including education” (p. 3).

Ignatius’ developmental view embraced the conviction that education could elevate Man from a condition of ignorance to a state of enlightenment that would ultimately lead to salvation. In this ascension, man acquires knowledge about the role that Christ and the sacraments play in his relationship with God. The educative process is essential to this spiritual unfolding as explained by Williams (1989) in the following passage: “It is into such a view of reality that education is placed as a means to develop students’ consciousness of the end for which they were created. Studies are for Ignatius instrumental to a spiritual aim He understood and valued education . . . as [a pathway] to a Christian understanding of the world and of humanity’s place in it” (p. 2).

12 - The Ideal Teacher. The Jesuit Educational Ideal addresses the qualities that a teacher should possess. Pietro Perpinjá, an admired young teacher at the Roman College, sketched his model of the ideal Christian teacher in his work *De Perfecta Doctoris Christiani Forma* (1552). He believed an educator should “combine a vast knowledge of things human by personal virtues of exemplary value: a rephrasing of the ‘vir bonus dicendi peritus,’ with the specified addition of knowledge of all *res*” (as cited in Scaglione, 1986, pp. 95-96).

12.1 - Farrell (1938) summarizes the characteristics of an ideal Jesuit teacher by representing them as three personas:

The idea held up to the Jesuit teacher comprised three qualities: the quality of apostle, by the very fact of his religious vocation; the quality of scholar, understanding by that term one who could command intellectual respect by his mastery of his own branch of learning, and his concern and appreciation for things of the mind in general; and the quality of the gentleman, a man, namely, not only free from any affection of rudeness, but distinguished by courtesy, tact and kindliness. (p. 424)

From Farrell’s perspective, the Jesuit teacher as Apostle is committed to fostering and fortifying the faith of the students in his charge. The teacher as Gentleman demonstrates the finer qualities associated with enlightened civility and serves as an example that “inspires his students with high intellectual, moral and cultural ideals.” As a scholar, the teacher demonstrates complete mastery of his subject matter. Above all, he is an advocate for his faith who demonstrates disciplined curiosity and nobility (p. 425).

12.2 - Father Richard Tierney in his work *Teachers and Teaching* (1914) contemplates the educative process from the Jesuit perspective. He lists the ideal characteristics of a “real teacher” in chapter four of his text. He enumerates traits that encompass noble behaviors that a novice educator should aspire to. Committed to an ideal that echoes the Greek concept of *paideia*, Tierney’s teacher is a good Christian person. He is a “great heart” who generates great hearts and a “hero” who begets heroes. In achieving these ends, ideal teachers exhibit a broad range of admirable qualities:

[They] must have unswerving faith in the essential goodness of their pupils; they must be men of sympathy and broad view, patient, free from prejudice, forgiving, gentle yet firm, humble but confident, generous, bounteous, cordial, dignified but not stilted, enthusiastic, totally in earnest with an earnestness that comes from the conviction that their vocation is a gift from God for which they cannot be too grateful. (pp. 8-9)

12.3 - Michael McMahon (2008) assumes a different vantage point regarding the importance of the Ideal Teacher when he exhorts schools to seek out individuals who exhibit the disposition of a Christian educator: “We must make sure we staff our faculties with the right kind of teacher, not just someone who knows math or history, but a Catholic man in the state of grace and striving for sanctity so that religion permeates his class, whatever the subject. This is critical, because religion is not just a class at a certain time; religion is everything” (p. 4).

13 - The Ideal Student. Pope Pius XI expressed his view of the ideal result of the educative process in his encyclical *Christian Education of Youth* (1929). He writes that the end product of a Christian education should be “the supernatural man who thinks, judges and acts constantly and consistently in

accordance with right reason illuminated by the supernatural light of the example and teaching of Christ;" in other words, "the true finished man of character" (as cited in Farrell, 1938, p. 421). Farrell advances a markedly classical interpretation of the Ideal Student by quoting Marygrove College of Detroit, Michigan:

Education means the full and harmonious development and artistically effective expression of all the seven faculties or powers of man (senses, imagination, mechanical and intellectual memory, intellect, emotions, and will), to be achieved by the pupil's own personal practice or conscious exercise of each specific power, under the guidance of teachers and the help of divine grace, in preparation for the highest and happiest life, here and thereafter. (p. 421)

Contemporary educators view the pupil as the focus of the teaching-learning process. They speak of the knowledge, dispositions, and personal and academic skills that a student should possess at the conclusion of the educative process. These considerations weigh heavily upon educators when developing the curriculum, adopting teaching practices, defining forms of social and professional interactions between teacher and students, evaluating the efficacy of instruction and adjusting procedures and practices that do not meet expectations.

14 - Monroe's Ideal. Paul Monroe in *The Educational Ideal* (1906) opines that what he characterizes as the "narrow pedantry" of the medieval schoolmen gradually evolved into a pedagogy sensitive to the development of the child, leading to what he calls "natural education" (pp. 1-2). Monroe's assertion lays part of the groundwork for his examination of the revolutionary thoughts on education of "great men." The Scottish writer Thomas Carlyle popularized The Great Man Theory in the 1840s by. He advanced a 19th-century concept that asserted that history can be largely explained by the impact of highly influential individuals who because of their charisma intelligence, wisdom, or political skill decisively impacted history.²

Monroe examined the pedagogical ideas of Rabelais, Bacon, Comenius, Montaigne, Locke, the Jansenists, Fenelon, Rousseau, Pestalozzi, Froebel and others. These creative thinkers contributed new perspectives on the purpose and nature of teaching and the role that the child plays in the educative process. Their deliberations tended to suggest a process that advocates the natural development of the student. Monroe explains his concept of the Ideal towards which the insights of renowned thinkers pointed in these terms:

The real "natural education" is that aimed at in the best endeavor of to-day, in which the child, from the moment of his birth, is steadily, rationally, and intelligently developed, by trained and sympathetic minds, towards the best manhood possible to him. Such an education is not simply mental; it is physical; above all, it is moral. In it, the child's individuality is preserved, but is pruned and guided; he himself furnishes the impulse towards his own development, but the channels in which this force acts, the ends towards which it directs itself, are determined for him. A natural education is one in which the subject taught is secondary to the manner of teaching; in which the task done is subsidiary to the effect of doing it; in which the question to be asked at the

² Quoting Carlisle, Monroe (1906, p. 3) acknowledges the role that great thinkers play in human progress: "In all epochs of the world's history, we shall find the Great Man to have been the indispensable saviors of his epoch; - the lightening without which the fuel would never have burnt. This History of the World, I said already, was the Biography of Great Men" (p. 3). See Carlyle, T. (1891) *Heroes, Hero Worship, and the Heroic in History*, Lecture 1, p. 21 (pp. 21-50). New Haven/London: Yale University Press.

completion of an educational step is not, What has the child learned? but, What has the child become? (p. 2)

Monroe highlights his concern for the student in this passage. He conceives of educational instruction that is child-centered, rather than content-centered; that is active and engaged in the world, rather than restricted to textbooks; that takes into account the development of the child -- his intellectual and physical capabilities and dispositions, rather than his insensate objectification. He sketches a portrait of what the ideal end product - the student - should be after having experienced a natural education.

14.1 – Monroe harbors little sympathy for Jesuit education. He views Jesuit curricula and pedagogy as impediments to achieving his Educational Ideal. He opines that even though the instruction offered by the Society of Jesus was effective in achieving its aims, its approach to education “totally suppressed the individual, robbing the child of his birthright of character” through a system imbued with the “spirit of the Jesuits” and teaching that was “wickedly casuistic” (pp. 134-135). Monroe easily embraces Quick’s assertion about the Jesuits’ educational method: “Originality and independence of mind, love of truth for its own sake, the power of reflecting, and of forming correct judgements were not merely neglected – they were suppressed in the Jesuits’ system” (as cited in Quick, 1894, pp. 50-51).

Quick, however, in his *Essays on Educational Reformers* (1894), does note “that in what [the Jesuits] attempted, they were eminently successful, and their success went a long way towards securing their popularity” (p. 51). Detractors could not ignore the encomiums heaped upon the Jesuit system. It had been said prior to the mid-18th century that a young person in a Jesuit school could learn in half a year what it would take two years to accomplish in any other school. This recognition led many Protestant parents to seek a Jesuit education for their children.

Nor could critics ignore the contributions of brilliant Jesuits in the formative years of the Society and the pantheon of luminaries that graduated from Jesuit colleges and universities. Many graduates of Jesuit institutions distinguished themselves as writers, scientists, mathematicians, historians, geographers, linguists, philosophers and other learned professionals. Gilbert Highet (1955) notes the success of Jesuit education:

[It] proved the worth of its principles by developing a large number of widely different Men of vast talent: Corneille the tragedian, Descartes the philosopher and mathematician, Bossuet and Bourdaloue the orators, Moliere the comedian, d’Urfé the romantic novelist, Montesquieu the political philosopher, Voltaire the philosopher and critic, who although he is regarded by the Jesuits as a bad pupil is still not an unworthy representative of their ability to train gifted minds. (as cited in Farrell, 1970, pp. iv-v)

Farrell (1970) extends the list to include, among many others, “Goldoni the creator of modern Italian comedy, Torquato Tasso the Italian poet and author of *Jerusalem Delivered*, and Calderon de la Barca, the Spanish dramatist and poet (p. v). The list of such luminaries is long and impressive.

II - BOOKS AND INQUIRY

Historical Periods

1 - Classical Antiquity. Historians divide Western history into three periods: Classical Antiquity, the Middle Period, and the Modern Period. Classical Antiquity refers to ancient Greece and Rome; the heyday of the Greco-Roman world. Its starting point is considered to have begun with the epic poems of Homer in Greece in the 8th and 7th centuries BC and continued with the founding of Rome in 27 BC and Rome's military and cultural expansion between 285 to about 480 AD.

The Barbarian invasions, the rise of Christianity and its challenge to traditional Roman religion, the founding of the Eastern Roman Empire by Constantine in 330 AD, and the internal disintegration of the economic and political structures of the Roman state and its conquered lands contributed to Rome's downfall. The deposition of the young emperor Romulus Augustus and the ascendancy of the first barbarian leader, the Germanic Odoacer in 476 AD, marks the collapse of the Western Roman Empire.

2 - Middle Ages. This period encompasses the collapse of the Roman Empire to the beginning of the Renaissance in the 15th century. Scholars traditionally divide this time span into the Early, High and Late Middle Ages.

The *Early Middle Ages* embraces European history from the 6th to the 10th century. It is often referred to as the Dark Ages and is characterized by a decline in urban populations and trade, an increase in immigration, and a scarcity of literary and cultural output, especially in Northwestern Europe. The Eastern Roman or Byzantine Empire was relatively unaffected.

The *High Middle Ages* spans the 10th to the mid-13th century. This period experienced a continuation of trends that began in late classical antiquity, such as a rapidly increasing population, rural exodus and urbanization, great social and political changes, and economic improvement.

The *Late Middle Ages* refers to the mid-13th to the 15th century. It was a turbulent time characterized by radical changes in social conventions and political structures, and by religious upheavals, most notably the Reformation and the Counter-Reformation. Calamities such as the Great Famine (1315-1317 AD) and the Black Death (1348 AD) assailed Europe and contributed to dramatic demographic shifts and the weakening of feudalistic traditions. During the 14th or 15th century the Italian Renaissance took root and by the 16th century its humanistic paradigm spread throughout Europe. This transformation signals the beginning of the Modern Period, which endured until the late 18th century and the beginning of the Industrial Revolution.

The Object of Inquiry

3 - Signature of Medieval Inquiry. A signature characteristic of medieval inquiry was the importance it ascribed to the written word. In the Middle Ages books were the source of knowledge, truth and wisdom. Books by acclaimed authorities were the objects of inquiry and their substance and form were the subject of analysis. Written words constituted the empirical world of medieval scholars. They inquired into their mysteries with the same dedication and enthusiasm that 18th and 19th century natural scientists investigated the physical world.

From the Patristic Period (100-800 AD) onwards, the authoritative works that predominated were the Bible, the *Dialogues* and *Republic* of Plato, the translations of Aristotle's logic and scientific texts, and the writings of classical authors. A constellation of august thinkers authored philosophical and

pedagogical works that contributed to movements in the liberal arts, scholasticism and humanism during the Middle Ages.

4 - Empirical World of Books. In the preface of Quick's 1897 edition of the *Essays on Educational Reformers*, W.T. Harris contends that books are as real as nature and that their contents can make known realities that are as tangible as physical phenomena. With the advent of the scientific culture, reformers argued that the study of literature was vastly less important than the study of minerals, plants, animals and the cosmos. Harris states, on the contrary, that books reveal the structure of human language and the organization of the human mind through figures of speech and syllogisms. Manners, social customs, usages and ethical principles that govern human life can be found in their pages, thus constituting an empirical reality that merits inquiry (p. xi).

5 - Traditional Book Culture. Ronald Witt in his acclaimed book, *The Two Latin Cultures* (2012), addresses the question of why Renaissance Humanism originated in Italy in the mid-13th century. As its title suggests, the humanist movement was founded on the "traditional book culture," which Witt defines as the study of grammar based on the works of ancient authors and of legal documents required for the practical affairs of notaries (p. 3).

The "book culture" first flourished in cathedral schools and monasteries that were committed to Latin culture. They prioritized the teaching of grammar, dialectics and rhetoric in the preparation of clergy and the laity. The "book-document culture," on the other hand, was committed to Latinity and a simplified rhetoric that was sensitive to secular and legal activities. Kircher (2013) in his review of Witt's book states: "What occurred over the course of four centuries, . . . was a melding of interests and influence, a cross-pollination between grammatical and legal study that created the conditions for Renaissance humanism: in other words, for reviving the reading and writing of classical Latin in response to the ethos of 13th-century northern Italian communes" (para. 2).

6 - Multiple Perspectives on Books. The literary phenomenon, and interest in classical works, shaped the perceptions and discussions of medieval scholars and Renaissance humanists as they strained to make sense of ancient texts and commentaries. Quick (1897) in his discussion of educational reformers offers an interesting perspective on the approaches taken by medieval scholars who delved into the mysteries of the works of antiquity. He notes that scholars revered the texts and examined them on multiple levels. They were interested in literary form, in arguments and insights, and in historical significance (pp. 34-36). A large number sought to understand the ancient world through the descriptions contained in classical works. Their inquiries revealed the customs, mores, wisdom and prescriptions that applied to religious and secular affairs of the medieval world. According to Quick, Erasmus of Rotterdam -- the Dutch Renaissance humanist and Catholic priest -- is the quintessential representative of this group. Erasmus was one of the first scholars to examine the wealth of knowledge contained in works of antiquity that stood apart from Aristotle. The poetry, drama, pathos in the works of Ovid, Sallust and especially Cicero were the subjects of his attention.

Regardless of the practical inclinations and focus of the scholars -- substance, style, language, erudition -- the object of study was always the book. Classical texts and commentaries predated natural phenomena and man as the subjects of analyses. Quick put it another way: "For some two centuries the literary spirit had supreme control over the intellect of Europe, and the literary spirit could then find satisfaction nowhere but in the study of the ancient classics" (p. 10). Throughout the medieval period,

books shed light on the worldviews of the classical authors. The objective study of animals, plants and cosmological phenomena were of little interest in this pre-Baconian world.

7 - Realists. A different inclination led medieval scholars to examine the works of antiquity for insights into nature. Accepting the veracity of statements from the past, they took note of the world around them to better understand classical authors' formulations about the natural world. Unlike the scientific observers and systematists of the 18th and 19th centuries who described, cataloged and organized natural phenomena, some medieval scholars exhibited the spirit of "literary realism." They examined natural occurrences in order to elucidate and validate statements of classical authors about the physical world. Nature was not, in the Baconian sense, studied for its own sake but rather consulted to confirm the assertions of celebrated authors.

Quick (1897) gives two examples of this mind-set. On the one hand, there was a predilection towards "limited realism," and thus "we read of doctors who recommended their pupils to look at actual cases of disease as the best commentary on the works of Hippocrates and Galen." Physical ailments were perceived through the interpretative lens of medieval nosology. Quick reminds us of Galileo, who in defending the idea of the shared nature of celestial bodies failed to convince his inquisitors to look at the heavens with the aid of instruments, because "the ancients had not telescopes, and the Scholars wished to see nothing that had not been seen by their favorite authors" (p. 24). He summarizes these miscues in the following passage: "those who in the sixteenth century prized the knowledge of things, allowed books to come between the learner and the object of his study, if they regarded Nature as a far-off country of which we could know nothing but what great authors reported to us" (p. 25). Quick concludes by noting that the great German historian Friedrich von Raumer (1781-1873) referred to this group as "verbal realists," best represented by François Rabelais, the French Renaissance humanist (p. 25).

8 - Rabelais. François Rabelais (1494-1553) was a French writer, physician, monk and Greek scholar who earned a reputation as an enthusiastic advocate of humanism in the early 1500s. His fame and the concern expressed by ecclesiastical authorities and the Franciscan and Benedictine Orders to which he was affiliated was due to his penchant for "religious satire" and "scatological humour." He achieved notoriety through his written masterpiece: a pentalogy of satirical novels titled *Gargantua and Pantagruel*. The description of Rabelais as a verbal realist is most likely due to his study of medicine at the University of Montpellier, where he "placed great reliance on classical authority, siding with the Platonic school of Hippocrates but also following Galen and Avicenna." Upon graduating, Rabelais lectured on ancient Greek physicians and in 1532 he published works on Hippocrates' *Aphorisms* and Galen's *Ars Parva*, i.e. *The Art of Raising Children* (Cohen & Screech, 2002, sec. Life, para. 4).

9 - Stylists. Quick's third group consists of the *Stylists*. Unlike the Scholars who focused on the substance of the classical texts to obtain knowledge about the ancient world, or the Realists who searched for understanding by comparing their observations of nature to classical arguments, the Stylists attended to the manner in which the classic texts were written. Substance, always of interest, took a back seat to the examination of syntax and literary form. This emphasis on stylistic analysis influenced generations of students who studied not only Latin and Greek grammar but also the organization, presentation and meaning of classical texts. Quick (1897) points out that while many scholars exhibited these different inclinations when analyzing classical texts, individual predilections drove some to focus more on one or the other (p. 26).

10 - Importance of Latin and Greek. The implication for Scholars, Realists and Stylists was significant from an educational standpoint. Regardless of the focus of analysis of classical literature, insights were beyond the inquirer unless he mastered the Latin and Greek languages. Knowledge of their grammar, syntax and literary conventions were essential when examining the works of the ancients. Work could not advance without mastery of the mechanics of the two languages and exposure to their literature. The book may be the object of analysis but the tools required were knowledge of the Latin and Greek languages and skills to decipher the meaning from the texts. The importance attributed to the classical languages was evidenced in the early monastic and cathedral schools, and later in the colleges and medieval universities.

11 - Value of the Classics. The Jesuit Ideal viewed the learned and virtuous man as the end product of the educative process. It envisioned the development of the higher faculties of mind and spirit so that the individual might achieve his “supernatural destiny.” The Jesuits believed that the faculties, especially intellect and will, could be properly trained through inspirational literature (Farrell, 1938, p. 403). McMahon (2008) elaborates this idea in the following passage

For the high school level, the Jesuits considered the humanities — literature, language, and history — to be the most important thing. The emphasis on these subjects, without absolutely excluding others, of course, contributed to the balanced formation of the human being, making him a fit receptacle for the grace of God. The humanities offer abiding and universal values for human formation. Why have the great classics, the great works, the great authors, been studied? — Quite simply, they provide what it takes to form a soul, to form a personality. (p. 7)

The *Ratio Studiorum* attributed great importance to the Latin and Greek classics because of their exaltation of universal values. If one agrees that classical texts contain moral and ethical messages in accounts of heroes and adventures, conflicts and accommodations, and reflections on man and nature, then the educator can extract lessons on proper living from their narratives and make these accessible to his students. Furthermore, the texts can reveal classical culture and its standards of excellence in art and literature, and its enlightened political and social theories.

11.1 - Fr. John Donohue (1963) notes in his extended essay on Jesuit education that “[t]he Jesuits aimed to teach the classics in such a way as to make them, in a famous phrase of Jouvency, the ‘Heralds of Christ – *Christi praecones*,’ whose words would instill salutary sentiments in youthful hearts” (p. 140). The educational mission of Jesuit colleges then became highly important through its books because, as Castille, muses, “[if] youth should be Christianized, they must first be made human, made spiritual. And an intimate contact with the classical culture, when carried out under Christian auspices, does give a true, inward, almost experimental knowledge of that which is spiritual” (as cited in Farrell, 1938, p. 403).

12 - Lessons from the Classics. Michael McMahon (2008) states: “Literature aims not merely at words and phrases and figures. We should look below these for the chief instrument by which we are to accomplish the end in view. We shall have praise for all that is noble, scorn for all that is base” (p. 7). If, indeed, classical texts contained the substance for reflection, what episodes excited the Jesuit masters? What storylines aroused their curiosity? What human experiences did they believe influenced the development of character?

The answer lies in the ideal formulations contained in the narratives of their writings. The literary content shaped the perceptions and the discussions of medieval scholars. Classical works spoke of noble and ignoble deeds, magnanimous and self-absorbed acts, valor and cowardice. The books offered insights into human nature. Their narratives revealed cultural values, social mores and beliefs. The classics provided a wealth of imagery, actions and dramas that made them effective subjects of moral and social analysis. McMahon in this respect notes: "By utilizing these perennial works, the Jesuits formed the soul by noble deeds and great acts; inspired their students and provided a vision for the young mind" (p. 7). Negative acts of protagonists also deepened understanding of the human condition.

In Homer's *Iliad* the schoolmen point to the pride of Achilles and how it led to the tragic death of his dear friend, Patroclus. It exposed his grief, rage and desire for revenge, and resulted in the brutal slaying of Hector and the defiling of his corpse. Homer portrayed the Trojan War, not merely as a bitter siege but also as a commentary on temporal punishment for the marital transgression of Paris and Helen. The rich reservoir of ideas that filled the pages of enduring works was exemplified in Virgil's epic, the *Aeneid*. The hero Aeneas emerges from the chaos of a burning city and demonstrates the love and reverence he feels for his parents (McMahon, p. 7). Later, in Aeneas' journey to the underworld Virgil makes a statement about the nature of reincarnation; of the deceased's departure from Elysium and his sojourn through an earthly life in repetitive cycles of death, purgation and rebirth (McDougall & Pavlos, 2000).

13 - Expurgation and Ignatius. If noble sentiments and deeds enshrined in the pages of the classics could contribute to the development of character, the opposite is also true; ignoble literature could corrupt a young soul. The value of good literature lay in its capacity to instill light and nurture virtue, just as the bane of bad literature is its capacity to darken and debase. The recognition of the power of written words to ennoble or diminish personhood endured well into the 19th nineteenth century.

This idea was manifest in the school hygiene movement in the latter half of the 19th century in France. The hygiene movement asserted that, besides the physical and intellectual, the moral development of the child must be nurtured with proper literature; and that literary works that induce the child to adopt inappropriate behavior should be avoided in the classroom (Lorenz, 2010, pp. 157-158.)

Fr. Donahue (1963) recognizes the Jesuits' respect for the power of classical texts when he writes that "they believed that great books could shape intelligence and hence influence character by reason of the interplay between mind and heart, [and] they also believed that an evil book can corrupt" (pp. 172-173). For the early Jesuits, if the written words of the classics could instill and nurture virtue, they could also engender inappropriate thoughts in the impressionable reader. The Society therefore advocated the expurgation of portions of texts whose ideas they deemed offensive or inimical to the teachings of the Church,

In a letter dated 1549, Ignatius acknowledged the positive and negative effects that books have on immature young readers: "A boy's first impressions which are often strongest and remain for long years have a definite influence for good or ill in after life. Hence, the books put into his hands must be such as exert a good influence or at least they must be such as exert a good influence, or at least they must not be such as would surely expose him to moral corruption" (as cited in Farrell, 1970, p.118).³ It was therefore important to be vigilant so that the "immature soul of the young boy" not be corrupted and that his "Latinity" continues to be perfected and preserved. Hence, the works of Horace, Martial, Terence, Persius

³ Ignatius' original quote can be found in Monumenta Ignatiana, Ser. I, II, p. 445.

and Juvenal, in particular, drew the attention of the Jesuit publishers of expurgated editions during the century following Ignatius' voiced concern (Farrell, 1970, pp. 118-119).

Types of Publications

14 - Introduction. Sweeney (2015) in the *Stanford Encyclopedia of Philosophy* summarizes the sources and types of written works on philosophy:

Medieval philosophical texts have as their formal sources Greek commentaries, Neoplatonic treatises, dialogues, and allegories, as well as Aristotelian treatises, and the works of Augustine. Before the formal development of universities and university curricula that dictated the established forms for writing philosophical/theological texts in the 13th century, medieval philosophical texts were written in a wide variety of forms. From the 10th to the 12th century, writers in the Christian, Jewish and Arabic traditions composed dialogues, allegories, axiomatic works, disputations, and *summae*, while the 13th and 14th centuries in the Latin West were dominated by commentary, principally on Peter Lombard's *Sentences* and the works of Aristotle, various forms of the disputed question, and the *summa*. (sec. Historical Sources, para. 1)

15 - Variety of Medieval Publications. The Bible was the primary object of study in early medieval monasteries and cathedral schools. It was considered the written expression of revelation and hence the ultimate authority for the study of theology in the abbatial schools.

From the 9th to the 12th century a number of "broadly philosophical works by schoolmasters" appeared in different literary forms. Marenbon (1987) observes that written products in this period "took the form of glosses and commentaries. Sometimes scholars went on to produce quasi-independent handbooks to a discipline; but they were not *completely* independent, because they would generally follow the subject-matter and order of the authoritative texts" (p. 10). Early 12th-century theologians consulted and produced an assortment of works, such as *sententiae*, *quaestiones* and *summae*.

16 - Role of Authoritative Texts. With the resurgence of Aristotle in the University of Paris in 1255, the faculty of arts guardedly organized its studies around his works. Unlike the hermeneutics of the faculty of theology, which was acknowledged to have the final word on Truth, the masters of the arts did not consider Aristotle's writings free from error. This gave them license to comment on "questions arising from the text rather than the exposition of text This shift is heralded by most scholars as marking an important development toward modern notions of both science and commentary" (Sweeney, 2015, sec. Commentary, para. 6).

Whether or not Aristotle's writings were pathways to understanding man, nature and the cosmos, they remained an essential source for discussion and debate. Sweeney notes that the medieval tradition of attaching great importance to "authoritative texts" insured that Aristotle still stood at the forefront of philosophical speculation, for "medieval philosophical writers understood their own work as emerging out of a tradition of authorities rather than in abstraction from or in opposition to a tradition" This means, "their work emerges out of an encounter with texts rather than in unmediated contact with ideas, problems, or arguments" (sec. Commentary, para 7).

The question arises whether medieval scholars demonstrated creativity and freedom of thought given that they were firmly committed to the ideas of authors of stature. Sweeney's response is that the originality of medieval thinkers derived from "an acknowledged connection with what went before," in

the sense that they engaged not just with the words of ancient texts, but also with the ideas that they expressed (sec. Commentary, para. 7).

16.1 – Fr. Donohue (1963) describes the prevailing concept of a philosophy course in the 16th century. He notes that “[the] teaching philosophy in the Roman college at the time sought to entice [auditors] by telling them that the ancient thinkers [had] solved every philosophical problem and all that remained to be done was to gather in leisure the ripe fruits won by the industry of Greece. As one reads the *Ratio*’s prescriptions for the philosophy curriculum one finds that Aristotle is as dominant here as Cicero was in the middle school” (p. 124).

17 - **Quaestiones.** The *Quaestione*, or question technique, was fundamental to the analysis of authoritative texts. It challenged students to use logic to “reconcile texts which appear contradictory.” This contrasted to the elenctic [Socratic] debate described by Aristotle in his *Topics*, which had little to do with the analysis of texts and the resolution of problems (Marenbon, 1987, p. 13).

The *Quaestio* was a literary device used by an author to advance arguments for or against a proposition. The technique evolved from the effort to reconcile contradictory statements in the Bible. Scholars compiled and organized canonical statements in summary works and when faced with obvious discrepancies in substance or interpretation they highlighted the apparent contradictions through questions. A properly formulated question laid the groundwork for systematically reconciling contradictions of subject matter, regardless of the topic under review. As Marenbon notes, “Gradually, the *quaestio*-technique became . . . a method for organizing the practice of teaching in the medieval universities” (p. 14).

In works of the later 12th century, questions were used in organizing *sententiae*. In this literary form, “a problem is divided into a series of discrete questions, which can be answered ‘yes’ or ‘no’. The writer assembles citations and arguments for each of the two replies, and not only does he explain why his response is correct, but also why the material he has adduced for the opposite solution does not in fact vindicate it” (Marenbon, p. 12). Questions were also used in more comprehensive works such as *summae*.

18 - **Glosses.** A gloss is a collection of brief notations normally found in the margins or between the lines of an authoritative text written in a classical language. The notations might be translations of difficult or obscure words or interlinear translations of sections of the text. Glosses were primarily used when interpreting Holy Scripture. The annotations were studied and memorized by biblical scholars and often considered authoritative in their own right (“Gloss. Annotation,” *Wikipedia*).

19 - **Commentaries.** Ellen Sweeney (2015) in her explanation of the literary forms of medieval philosophy describes the nature of commentaries and their relationship to valued works of antiquity, especially those of Aristotle. She writes that during the late Middle Ages,

commentators worked on the assumption that the author intended to express the truth; thus every effort was made to bring an author's text into harmony with the truth as the author understands it from what he takes to be authoritative sources. This attitude toward texts is generally thought to emerge from the tradition of biblical exegesis, where the biblical text is assumed to be true, to be in accord with the basic articles of faith, and, hence, as needing to be interpreted from within those parameters. (sec. Commentary, para. 5)

The mind-set of the 12th and 13th centuries was that the principles imbedded in an authoritative text -- whether the Bible or a work of classical antiquity -- were subject to interpretation. Latin commentators believed that the texts they examined were filled with meaning and their job was to reflect upon and summarize propositions and clarify ambiguities and inconsistencies. It was common for commentators to offer different interpretations of the same written work, or for a commentator to identify conflicting statements about issues or articles of faith in different works. Sweeney observes that this led interpreters to "deal with conflicts between authorities by attempting to harmonize different opinions rather than simply keeping some and discarding others. As an example, Aquinas tries to save Aristotle from unambiguously holding the position that the world is eternal, arguing that Aristotle's argument for the eternity of motion might be merely hypothetical." Sweeney goes on to note that this practice was particularly commonplace in the 14th century, for "even when the Aristotelian text was extremely cryptic, corrupt, or terse, commentators made every effort to give the text a clear and consistent sense, even if it was largely constructed. Aquinas took such a position when he commented on the difficult passages explaining the nature of the intellect in Aristotle's *De Anima*" (sec. Commentary, para. 5).

In the beginning of the 14th century, commentators took a more systematic approach in their writings by subdividing the text in comprehensible units and adding descriptions of the overall structure and forward progression of its arguments. These divisions and explanations gave unity and coherence to valued texts that did not originally possess these features (sec. Commentary, para. 5).

20 - Sententiae. The scholasticists looked to books for knowledge. The schoolmen critically read the works of renowned authors and passed on their written observations to their readers. Their narratives referenced works such as the decrees of Church councils, papal letters and edicts, commentaries, etc., and identified points of disagreement in statements called *sententiae*. These medieval written works derived from an earlier genre of literature called *florilegia*, or literally "a gathering of flowers." Aristotle, Quintilian and latter-day writers made use of this literary form (Sweeney, 2015, sec. Sentences and Sentences Commentaries, para. 1).

The Latin *sententiae* is the plural form of *sententia* and refers to excerpts of written works. Sentences in the middle ages were compilations of statements extracted from the works of Christian Fathers and authors, some of whom were pagan. These took the form of declarative sentences, proverbs, adages and aphorisms, all found in ancient or popular sources. The purpose of this genre of written work was to assemble under one cover a comprehensive set of theological assertions derived from recognized authorities. The process involved in constructing *sententiae* required a careful perusal of authoritative texts and the identification of significant topics, themes and doctrines. These were systematically organized in concise statements for examination and the reconciliation of contradictions arising from different interpretations of the sources.

The scholastic method of resolving contentious points of view on a topic employed either a philological analysis of the different meanings attributed to the words of a text, or a logical analysis of the arguments and subjective interpretations of the author of a text.

21 - Peter Lombard. One of the most cited examples of the *sententiae* genre is the work of Peter Lombard (1100-1160), a scholastic theologian who was born in Novara, Piedmont, in northern Italy. He later moved to neighboring Lombardy thus identifying him as Peter the Lombard, or Peter Lombard. He pursued advanced studies in the cathedral schools at Reims and Paris and taught theology at the cathedral

school of Notre Dame for ten years. He was ordained priest circa 1156 and consecrated Bishop of Paris in 1159.

Peter Lombard was a skilled compiler of sentences during the brief period prior to his ordination. His most significant work was *The Four Books of Sentences* (*Libri Quattuor Sententiarum*), which appeared in the 12th century and is considered one of the seminal works of the medieval period. Sweeney estimates that Lombard's *Book of Sentences* was probably written between 1147 and 1150, and asserts that it "was by far the most successful instance of this form. Commenting on it became an academic requirement for the master of theology in the 13th century, a status it retained until the later 15th century, with new commentaries still appearing in the 18th century" (Sweeney, 2015, sec. Sentences and Sentences Commentaries, para. 2).

Lombard organized certain questions according to a plan that was "based on Augustine's distinction between things to be enjoyed (God alone) and things to be used (everything else)." Second, he offers his own responses to questions, engages and refutes opinions of contemporaries, and in many cases uses this form to articulate, justify, and create a consensus view" (sec. Sentences and Sentences Commentaries, para. 2). He organized his material in four books and subdivided the material into chapters. Hence, Lombard's *The Four Books of Sentences* is a collection of authoritative statements on biblical passages that address the following topics: I - The Trinity; II - Creation; III - Christ and the Incarnation; and IV - Sacraments and the Doctrine of Signs. Later, one of his followers subdivided the chapters into "distinctions." It was the standard textbook of theology for several centuries.

Lombard, however, leaves many issues open for discussion. Thus, the format of the *Sentences* has been described as a type of casebook. Lombard avoids pressing forward his views or the views of other commentators on authoritative texts. Rather, his narrative provides the reader opportunities to reflect upon the ideas of past authorities and apply them to contemporary questions, but with juridical-like discipline. The *Sentences* was a compilation of sources that gave young scholars an opportunity to suggest responses to thorny theological issues. Finally, as an organized compendium of sources, the *Sentences* was a richly-documented resource that engaged masters and students in philosophical and theological discussions and disputations (sec. Sentences and Sentences Commentaries, para. 2).

Sweeney concludes that in writing the *Sentences* Peter Lombard's "attempted to give substantive and metaphysically based rather than merely verbal solutions to theological problems, a method more in tune with the 13th century curriculum focused on Aristotle, than the 12th, organized around the *trivium* arts." This ultimately rendered his work the preeminent theological textbook of the 13th century and thereafter. Every candidate applying for a Bachelor's degree in the theological faculty was required to write a commentary on Lombard's work as part of his qualifying examination (sec. Sentences and Sentences Commentaries, para. 2).

22 - Hermeneutics and Exegesis. Interest in investigating the content of written works evolved into the science of hermeneutics. Hermeneutics at first referred to the interpretation, or exegesis, of scripture. Later, the term was broadened to refer to the interpretation of written, verbal, and non-verbal communications. Exegesis focuses primarily upon the word and grammar of texts. Whereas

ermeneutics is concerned with how to interpret the Bible, exegesis is the actual drawing of meaning from biblical text ("Biblical Hermeneutics").⁴

Hermeneutics is the theory and methodology of interpretation, especially of written texts. The goal of hermeneutics is to systematically arrive at an understanding of an author's intended meaning. This is achieved by analyzing a text's historical, grammatical, linguistic, or rhetorical context. Modern hermeneutics examines both verbal and non-verbal communication. Medieval hermeneutics analyzed first, the Bible, and later, philosophical texts.

22.1 - Theological scholars have long been committed to interpreting the meanings of various passages in the Bible. Biblical interpretation was an integral part of Judaism and Christianity. The *Encyclopedia Britannica* (2017) defines "hermeneutics" as the study of the general principles of biblical interpretation. The purpose of hermeneutics and exegesis was to discover the truths in the Bible. The encyclopedia goes on to explain the four major types of hermeneutics: literal, moral, allegorical and analogical ("Hermeneutics").

Since the early 17th century, the word "exegesis" referred to explanations of Scripture. Today, academic writers interpret different types of texts; exegesis is no longer associated only with the Bible. With the advent of the humanist movement in the 15th century, "the discipline of hermeneutics emerged . . . as a historical and critical methodology for analyzing texts. . . . Thus hermeneutics expanded from its medieval role of explaining the true meaning of the Bible" ("Philosophical Hermeneutics").

⁴ See: Exegesis. (n.d.) *Merriam Webster Dictionary*. Retrieved from <https://www.merriam-webster.com/dictionary/exegesis>. See also: The Critical Study of Biblical Literature: Exegesis and Hermeneutics. (2018). *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/topic/biblical-literature/The-critical-study-of-biblical-literature-exegesis-and-hermeneutics>

III - ARISTOTLE

1 – Biography. Aristotle was born in 384 BC in Stagirus, in central Macedonia, Greece. He was the son of Phaestis and Nicomachus, a physician. He studied under Plato at the Academy in Athens and taught there from 367–347 BC. Some years later, in 343–342 BC, he was appointed tutor to young Alexander by his father King Philip of Macedon. After Philip's death, Aristotle opened his own peripatetic school of philosophy in Athens, the Lyceum. He fled Athens in 322 BC because of anti-Macedonian sentiment and relocated to Chalcis, a town on the island of Euboea in Greece, where he died that same year.

Aristotle's Body of Works

2 – Aristotle vs. Plato. Aristotle was familiar with Plato's thoughts on the existence of a transcendent "World of Ideas" that channels man's understanding of the "World of Things." The Platonic Idea is a non-corporeal entity that exists apart from the sensorial world and beyond human comprehension. It is perfect and immutable and the Ideal Form that a real thing aspires to. Plato believed that the knowledge of things is achieved by accessing these ethereal *Ideas qua Ideals* and applying them to things we encounter through our senses, i.e. metaphorically superimposing them on the artifacts of the real world in order to apprehend them.

Aristotle, for his part, was an empiricist who garnered an extensive amount of observations on nature and the political world of man. He was a deep thinker who drew on his gift for abstraction when reflecting on the world around him. These two dispositions defined his philosophy of nature and led some scholars to refer to him as a "philosopher-scientist." Such a characterization explains an aphorism that refers to Aristotle as a "scribe of nature who dipped his pen in thought" (Barnes, 1982, pp. 60-61). For Aristotle, understanding of the real world is achieved through reason and reflection on what is observed; there is no Platonic World of Ideas beyond our senses.

3 – Aristotle the Polymath. Aristotle was responsible for a vast literary output remarkable for its depth and variety. There was no human endeavor that he failed to explore. He recorded his observations and thoughts on numerous subjects. So prodigious was Aristotle's writings that one of his biographers, Diogenes Laertius (180-240 AD), identified and compiled a list of 150 publications that he wrote and that today would be equivalent to 50 volumes of material – and this did not include the *Metaphysics* and his *Nicomachean Ethics* (Barnes, 1982, p. 2). Aristotle's curiosity was limitless and his inquiries were wide-ranging, resulting in a wealth of notes and publications. He was the first to classify areas of human knowledge into distinct disciplines such as mathematics, biology, and ethics. Some of these classifications are still used today. His insatiable curiosity, powers of observation and acumen generated a catalog of titles that includes:

On Justice, On the Poets, On Wealth, On the Soul, On Pleasure, On the Sciences, On Species and Genus, Deductions, Definitions, Lectures on Political Theory (in eight books), *The Art of Rhetoric, On the Pythagoreans, On Animals* (in nine books), *Dissections* (in seven books), *On Plants, On Motion, On Astronomy, Homeric Poems* (in six books), *On Magnets, Olympic Victors, Proverbs, On the River Nile*. There are works on logic and on language; on the arts; on ethics and politics and law; on constitutional history and on intellectual history; on psychology and physiology; on natural history – zoology, biology, botany; on chemistry, astronomy, mechanics,

mathematics; on the philosophy of science and the nature of motion, space and time; on metaphysics and the theory of knowledge. (Barnes, p. 3)

Aristotle wrote as many as two-hundred treatises, of which only thirty-one survive. Unfortunately, these works are in the form of lecture notes and draft manuscripts never intended for general readership. Even though they do not demonstrate a polished prose style, they attracted many readers including the Roman Cicero.

4 – Difficulty in Reading Aristotle. Reading the totality of Aristotle's works is a difficult undertaking. Much of what he wrote was never meant for public consumption and many of his ideas were contained in lectures that his students transcribed. His works were collected by assiduous researchers who imposed a semblance of order on the array of topics he addressed. For this reason, a reading of Aristotle's transcriptions is onerous. They are often too concise and non-sequential, with narratives characterized by "abrupt transitions, inelegant repetitions, careless allusions. Paragraphs of continuous exposition are set among staccato jottings. The language is spare and sinewy," and faithful to Aristotle's predilection for simplicity in scientific writing (Barnes, 1982, p. 3). Contrasted to the polished works of Plato's dialogues, the totality of Aristotle's writings stands out for its ambiguities, disjunctions and contradictions (p. 3).

5 - Recovery of Aristotle. Aristotle's original works were unavailable to the West during much of the Middle Ages. Greek authors were seldom read in their mother tongue; almost everyone made use of Latin translations (Wulf, 1952, p. 58). Inaccessibility to his original texts and the lack of technology for copying them, as well as a limited number of specialists able to translate Greek texts, impeded the divulgence of Aristotle's works.

Perry et al. (2008) note that Arabic translators were primarily responsible for introducing Aristotle's works to Europe. Beginning in the 12th century there was an upsurge in translating Aristotle's works from Greek to Latin and in retranslating them from Arabic to Latin, resulting in the publication of forty-two of his works.⁵ The authors estimate that at least 4000 pages from Aristotelian texts were translated and made available during this period (pp. 261-262).

6 – Influence of the Translations of Aristotle. Beginning in 1100 AD, important works of Aristotle were translated into Latin. During the next 150 years there appeared translations of Greek editions of *Topics*, *Prior* and *Posterior Analytics*, and *Sophistical Arguments*. These works comprised what is referred to as the "New Logic" (*Logica Nova*), and were exceptionally influential. The early translations of Aristotle's *Topics* and *Analytics* introduced his concepts of "disputation" and "science," which ultimately changed how scholars understood the nature of disciplined discussion and inquiry (Maurer, 1962, p. 85). Maurer observes that because of the translations, "Theologians like Saint Thomas Aquinas adapted the Aristotelian notion of science of theology, which now became the 'science' of sacred doctrine" (p. 85).

⁵ Information on translations is presented by McInerney, 1963, Vol. II, Pt. IV, Ch. I, sec. Translations, paras. 1-3 at <https://maritain.nd.edu/jmc/etext/hwp215.htm>; and Vol. II, Pt. III, Ch. VI, sec. Dominicus Gundissilinus, paras 1-2 at <https://maritain.nd.edu/jmc/etext/hwp214.htm>

Some of Aristotle's other works represent what has been called the "Old Logic" (*Logica Vetus*), which included the *Categories* and *On Interpretation*. Also translated were original works and commentaries of Aristotle's *Physics*, *On the Heavens*, *On the Soul*, *On Generation and Corruption*, *On the Intellect*, *Metaphysics* and the *Nicomachean Ethics* (Maurer, pp. 86-87).

Maurer notes that after much discussion and debate about the merits of the Aristotelian body of literature, his works eventually replaced many of the textbooks and writings in the faculty of arts of the University of Paris. Yet, even though opposition to Aristotelian texts by schoolmen -- some eminent in their own right, like St. Bonaventure -- continued, his body of work exercised its "magic" and became firmly entrenched in the curriculum of the university (pp. 85-86).

7 - Corpus Aristotelicum. The *Corpus Aristotelicum* refers to the existing body of Aristotle's works. The standard method of organizing this body of literature divides the works into major categories according to the scheme developed by the classical philologist August Immanuel Bekker (1785-1871). His schema, in turn, was based on ancient classifications of Aristotle's writings.

Bekker assigned the extant works of Aristotle to one of five categories (I-V). Below are listed the categories and the titles confirmed as authentic writings of Aristotle. Works catalogued by Becker that are generally agreed to be "spurious" or whose authenticity are "seriously doubted" have been excluded. Bekker's numbering system and all of the works he originally listed can be found in the Revised Oxford Translation ("Bekker Numbering," *Wikipedia*). The edited list of authenticated works of the Corpus Aristotelicum is as follows:

<u>I Logic (Organon)</u>	<u>II Natural Philosophy</u>	<u>III Ethics-Politics</u>
<i>Categories</i>	<i>Physics</i>	<i>Nicomachean Ethics</i>
<i>On Interpretation</i>	<i>On the Heavens</i>	<i>Eudemian Ethics</i>
<i>Prior Analytics</i>	<i>On Generation and Corruption</i>	<i>Politics</i>
<i>Posterior Analytics</i>	<i>Meteorology</i>	
<i>Topics</i>	<i>On the Soul</i>	<u>IV Metaphysics</u>
<i>Sophistical Refutations</i>	<i>Parva Naturalia</i>	<i>Metaphysics</i>
	<i>History of Animals</i>	
<u>V Rhetoric-Poetics</u>	<u>Spurious Works</u>	
<i>Rhetoric</i>	<i>On the Universe</i>	
<i>Poetics</i>	<i>Mechanics</i>	

7.1 - The *Internet Encyclopedia of Philosophy* (n.d.) observes that Aristotle's works are of three types. The first consists of his "dialogues and other works of a popular character." The second consists of "collections of facts and material from scientific treatment." This group accounts for 200 titles, "most in fragments, collected by Aristotle's school and used as research." The third set comprises systematic treatises "that were not, in most cases, published by Aristotle himself or during his lifetime, but were edited after his death from unfinished manuscripts ("Aristotle," sec. Writings, para. 2). The *Internet Encyclopedia* (sec. Writings) divides Aristotle's treatises in five groups:

- Logic
 1. Categories (10 classifications of terms)
 2. On Interpretation (propositions, truth, modality)
 3. Prior Analytics (syllogistic logic)
 4. Posterior Analytics (scientific method and syllogism)
 5. Topics (rules for effective arguments and debate)
 6. On Sophistical Refutations (informal fallacies)
- Physical works
 1. Physics (explains change, motion, void, time)
 2. On the Heavens (structure of heaven, earth, elements)
 3. On Generation (through combining material constituents)
 4. Meteorologies (origin of comets, weather, disasters)
- Psychological works
 1. On the Soul (explains faculties, senses, mind, imagination)
 2. On Memory, Reminiscence, Dreams, and Prophesying
- Works on natural history
 1. History of Animals (physical/mental qualities, habits)
 2. On the parts of Animals
 3. On the Movement of Animals
 4. On the Progression of Animals
 5. On the Generation of Animals
 6. Minor treatises
 7. Problems
- Philosophical works
 1. Metaphysics (substance, cause, form, potentiality)
 2. Nicomachean Ethics (soul, happiness, virtue, friendship)
 3. Eudemian Ethics
 4. Magna Moralia
 5. Politics (best states, utopias, constitutions, revolutions)
 6. Rhetoric (elements of forensic and political debate)
 7. Poetics (tragedy, epic poetry)

7.2 - The majority of Aristotle's works were lost, with only an estimated 20% available for study (Barnes, 1982, p. 3). The remaining material consists of lecture notes and some memoranda. Not all of the works are considered genuine. Aristotle's existing publications are published in twenty-three volumes and categorized by the Loeb Classical Library at Harvard ("Harvard University Press"):

I. Practical: *Nicomachean Ethics*; *Great Ethics (Magna Moralia)*; *Eudemian Ethics*; *Politics*; *Oeconomica* (on the good of the family); *Virtues and Vices*.

II. Logical: *Categories*; *On Interpretation*; *Analytics (Prior and Posterior)*; *On Sophistical Refutations*; *Topics*.

III. Physical: Twenty-six works (some suspect) including astronomy, generation and destruction, the senses, memory, sleep, dreams, life, facts about animals, etc.

IV. *Metaphysics*: on being as being.

V. On Art: *Art of Rhetoric* and *Poetics*.

VI. Other works including the *Athenian Constitution*; more works also of doubtful authorship.

VII. Fragments of various works such as dialogues on philosophy and literature; and of treatises on rhetoric, politics and metaphysics.

The Science of Aristotle

Among the major contributions of Aristotle to medieval science were his analytical system, biological research and cosmology.

8 – The Three Philosophies. David Ross (1949) relates that Aristotle classified the sciences into the Theoretical, “which aim at knowledge for its own sake;” the Practical, “which aim at knowledge as a guide to conduct;” and the Productive, “which aim at knowledge to be used in making something useful or practical” (p. 62). Aristotle further divided the Theoretical Sciences into three disciplines: Physics, Mathematics and Theology (or Metaphysics). These subdivisions focus on specific areas of knowledge that are conceptually related.

With respect to Aristotle’s *Physics*, this work presents itself as an introduction to the “science of nature.” The text examines natural bodies, living and non-living, that exist and change, primarily through innate movement -- either circular or towards and away from the center of the earth. Aristotle does not consider manufactured or composite bodies to be natural, since by definition they demonstrate movement caused by an external agent (Ross, p. 63).

Mathematics deals with idealized entities that have no physical existence and are immutable, such as numerical relationships and spatial figures that exist only in one’s creative imagination. Aristotle was not a professional mathematician, but he was acquainted with mathematical concepts as demonstrated in his essays on numbers in Books XIII and XIV of the *Metaphysics* (Barnes, 1982, p. 24).

Finally, Theology addresses realities that exist and are unchangeable, i.e. substances that are free from all connections with matter. The grandest of these pure substances is *Theos*, or God (Ross, p. 62).

9 – Metaphysics. The *Internet Encyclopedia of Philosophy* (n.d.) states that “Aristotle’s editors gave the name ‘Metaphysics’ to his works on *first philosophy*, either because they went *beyond* or followed *after* his physical investigations” (“Aristotle,” sec. Metaphysics, para. 1). “Metaphysics” can thus be literally translated as “What comes after natural science.” Cohen, in the *Stanford Encyclopedia of Philosophy* (2016), states as much:

Aristotle himself did not use that title or even describe his field of study as “metaphysics”; the name was evidently coined by the first century C.E. editor who assembled the treatise we know as Aristotle’s *Metaphysics* out of various smaller selections of Aristotle’s works. The title “metaphysics”— literally, “after the *Physics*”— very likely indicated the place the topics discussed therein were intended to occupy in the philosophical curriculum. They were to be studied after the treatises dealing with nature (*Ta phusika*). (sec. Aristotle’s Metaphysics, para. 1)

9.1 - Aristotle did not use the term “metaphysics” in his abstract musings. Rather, he referred to the subject matter we associate with metaphysics in four ways: as “first philosophy,” or “first science,” or “wisdom,” or “theology” (Van Inwagen & Sullivan, 2018, sec. The word “Metaphysics,” para. 1). However, as the first or primary philosophy, it is most identified with theology.

In the Aristotelean system, Metaphysics or Theology is the “first” and “highest” science because it “studies things (if indeed there are any) that are eternal, not subject to change, and independent of matter” (Cohen, 2016, sec. The Subject Matter of Aristotle’s Metaphysics, para. 7). As the most fundamental of the sciences, it studies questions about what it means for “things” to exist and can be said about different types of existence. In philosophical terms, it answers the central question: “What is true of existents insofar as they exist?” or stated differently, “What is true of substance insofar as it exists” (“Metaphysics and Being Qua Being,” paras. 2, 8). Metaphysics as the study of *being qua being* thus “deals with the first principles of things, including abstract concepts such as being, knowing, substance, cause, identity, time, and space” (“Metaphysics,” 2019).

10 - Zoological Researches. Aristotle laid the foundation for the life sciences with his extensive studies of fauna. He published his findings in two volumes: *History of Animals* and *Dissection*. In the title of the first work, the Greek word “*historia*” is more accurately translated as “inquiry” or “research.” It therefore is more precise to rephrase the title as *Zoological Researches* (Barnes, 1982, p. 9). Barnes gives an idea of the extension of this work in the following passage:

The *Researches* discuss in detail the parts of the animals, both external and internal; the different stuffs – blood, bone, hair and the rest – of which animal bodies are constructed; the various modes of reproduction found among animals; their diet, habitat and behavior. Aristotle talks of sheep, goats, deer, pigs, lions, hyenas, elephants, camels., mice, mules. He describes swallows, pigeons, quails, woodpeckers, eagles, crows, blackbirds, cuckoos. His researches cover tortoises and lizards, crocodiles and vipers, porpoises and whales. He goes through the kinds of insects. He is particularly informative about marine creatures – fish, crustacea, cephalopods, testacea. The *Researches* range from man to the cheese-mite, from the European bison to the Mediterranean oyster. Every species of animal known to the Greeks is noticed; most species are given detailed descriptions; in some cases Aristotle’s accounts are long, precise and astonishingly accurate. (p. 9)

11 - Physical Phenomena. Aristotle authored a number of works that speculated on physical phenomena. In the *Meteorologica* he explains that his treatment of science begins with Books I and II of his *Physics*, which address the first cause of natural objects and the “constituent elements” that are involved in any change; Books III-VIII discuss the phenomenon of movement. In Books I and II of the *De Caelo*, Aristotle writes about the movement of the stars and their order in the heavens, and in Books III and IV about the nature of the bodily elements and how they are transformed. The *De Generatione et Corruptione* ponders how things come into existence and then pass away, and the *Meteorologica* treats “the things that happen in accordance with nature, but a nature less ordered than that of the first (or celestial) element, in the region that borders most closely on the movement of the stars” (Ross, 1949, p. 62). Finally, Aristotle presents his observations on and organization of animals and plants in his works on biology.

12 – Organizational Plan. Aristotle explains the organizational plan he followed in the introduction to his *Meteorology*:

I have already dealt with the first causes of nature and with all the natural motion [in the *Physics*], and also with the heavenly bodies, arranged in the upper paths [in *On the Heavens*], and with the number and nature of the material elements, with their mutual transformations, and with generation and destruction in general [in *On the Generation and Corruption*]. The part of this enquiry remaining to be considered is what all the earlier thinkers called meteorology. (as cited in Barnes, 1982, p. 61)

13 - Cosmology. The cosmology of Aristotle was one of the great contributions to medieval thinking. Creative, yet erroneous, his system influenced astronomers well before the Renaissance. It also was the prevailing paradigm adopted by St. Thomas Aquinas. The Aristotelian cosmology was laid out in his work on the heavens, *De Caelo*, and implicit in his *Physics*.

The Greek philosopher's universe is an impressive imaginative construct. The geocentric universe according to Aristotle consists of a sphere divided in two parts: a celestial or "lunary" world that encompasses the moon, sun, planets, stars and other celestial bodies; and a "sublunary" world that comprises all material objects and natural phenomena that exist on earth.

The *Lunary World* is composed of some fifty concentric translucent spheres emanating progressively outward from the earth which lays stationary at the center. Embedded in the spheres are the planets, which are opaque bodies in constant motion. A visual analogy might be "the layers of an onion enclosing the earth as their core, with eight or so pieces of buckshot stuck in different layers" (Thomas, 1999, p. xxv). Each celestial sphere is acted upon by an intrinsic "mover" that causes it to traverse the heavens in a circular trajectory around the earth. The spheres are progressively aligned outwards from the earth to the moon, sun, mercury, mars, etc. The movement of each is relatively slower to others as its distance increases from the earth. The final sphere of the universe contains the fixed stars and it rotates slowly, impelled by the "unmoved mover" (Mason, 1962, p. 42).

The *Sublunary World* consists of all substances that exist on the earth. These substances are composed of four elements: earth, water, air and fire. Between the sublunar and lunar worlds is the atmosphere and its phenomena. Aristotle reflects on these phenomena in his *Meteorology*, which literally may be translated as "the things suspended in mid-air." Phenomena associated with the mid-air world are "clouds, thunder, rain, snow, frost, dew – roughly speaking, the weather. It was easily extended to include matters that would be classified under astronomy (meteors, comets, the milky way, etc.) or under geography (rivers, the sea, mountains, etc.)." The theory unifying the study of these phenomena is the notion that the earth continuously gives off "exhalations" through a form of evaporation (Barnes, 1982, p. 62). These exhalations -- which may be either wet or steamy, or dry or smoky -- explain the phenomena observed in the atmosphere

14 - The Elements. Aristotle's *Physics* outlines a four-element theory. For Aristotle, the sublunar world is comprised of all the substances and forms that exist on the earth. These substances are composed of a combination of four elements: earth, water, fire and air. The four elements tend to seek their natural place in the universe, with the heavier elements of earth and water attracted downward towards the earth's center and the lighter elements of fire and air rising upwards away from the center. Substances are also characterized by the amount of dryness, wetness, oiliness and roughness they possess. Hence, Aristotle

speaks of objects that contain permutations of the two sets of four-qualities. The long-enduring theory of the elements was adopted during the Middle Ages and can be characterized as a primitive form of chemical science. The eight components identified by Aristotle constitute the building blocks of matter of the sublunar world. The heavenly bodies of the lunar world, for their part, were divine, yet also consisted of "stuff" that Aristotle identified as a fifth element, the "quintessence" (Barnes, 1982, p. 64).

15 - Motion and Change. Major contributions of Aristotle's *Physics* were his concepts of "motion" and "cause." In Book VIII he addressed the issue of the mover and objects that are moved. Aristotle argued that any change in the universe – whether it is a change in position or in constitution -- must be caused by an agent. He reasoned that if we logically posit a regression from a change to its agent, and backwards from the agent to its agent and so forth, we are forced to conclude that there exists a final change-agent at the end of this regressive chain that does not itself change. The "Unmoved Mover," therefore, is "the first cause of all motion that is itself unmoved. Aristotle extended this natural science concept to his theology, arguing that the Unmoved Mover was equivalent to God" (SparkNotes Editors, 2005a). Viewed in this manner, Aristotle argued that "the concentric celestial spheres, and the celestial bodies they carry, are all quintessential and divine; but they are moving divinities. Beyond them, incorporeal and outside the universe is the primary divinity, the changeless originator of all change" (Barnes, 1982, p. 64).

Axiomatic to Aristotle's theory of change is the proposition that for a body to continue in motion it must be in contact with either an internal or an external mover. Aristotle explains &

Finally, just as an object can change its position, a substance can experience change in its composition over time. Using the logic of regression that posits the existence of an Unmoved Mover, one can logically argue that the Unmoved Mover is also an Unchangeable Agent of Change.

16 – Meaning of Cause: As Explanation. Aristotle reflected on the notion of "cause," which in Aristotelico-Thomistic philosophy had a broader meaning than what we currently understand. We define "cause" as an agent – a person, thing or phenomenon – that creates an action or gives rise to a condition. A cause is linked to an effect. Aristotle, on the other hand, operated under a different frame of reference when he examined natural and man-made phenomena. For Aristotle, the term "cause" means the type of question that one asks about a thing, or the type of explanation one might formulate about a thing. Falcon (2015) frames the issue thus: "Since Aristotle obviously conceives of a causal investigation as the search for an answer to the question 'why?', and a why-question is a request for an explanation, it can be useful to think of a cause as a certain type of explanation" (sec. The Four Causes, para. 1).

16.1 - Jonathan Barnes (1982) notes that Aristotle's first condition for knowledge is "causality." The term is best understood in its broad sense as an "explanation" of an object or phenomenon. Hence, "To *explain* something is to say why it is so; and to say why something is so is to cite its *cause*. Therefore there is a connection between explanation and cause, in the broad sense" (p. 8). A thing -- object or phenomenon -- can be explained in different ways. One can discuss what it is made of, what its form is and how it achieved its form, what purpose it serves, and how it was created. Hence, all products of nature and the arts can be questioned in four ways.

17 – The Four Causes. The Four Causes comprise Aristotle's analytic method. It raises four questions that guide inquiries into physical and non-physical phenomena. The first explanation of a thing is its *Material Cause*, or the identification of the matter or substance of which it is made. Second is the *Formal*

Cause, or an explanation of why a thing assumes a particular design, pattern or form. Next, the *Efficient Cause* refers to the process or agent that determines the form of an object. How it came about. Lastly, the *Final Cause* is the purpose of the object.

Barnes (1982) asserts that “[t]hroughout his biological works Aristotle constantly looks for final causes.” (p. 73). He adds that for Aristotle, “Natural behavior and natural structure usually have final causes – for nature does nothing in vain. But the final causes are constrained by necessity – nature does the best she can ‘in circumstances’ and sometimes there is no final cause to be discovered at all” (p. 75).

17.1 – Frederick Woodbridge (1965) states that all objects and phenomena of nature and the arts can be “explained” by Aristotle in four ways: “There is the material factor [cause] like the stones and timbers of a house; there is the formal factor, like that which the word ‘house’ designates and distinguishes a house from a barn; there is the final factor which is the use, service, or end purpose of the house; and there is the efficient factor which is the builder of the house” (p. 72).

17.2 - There are four causes or questions that can be asked about a natural object in Aristotle’s analytical system. Kenneth Thomas (1999) elucidates these questions with an example about an automobile. In accordance with Aristotle’s questions, one would ask: (1) What is it made of? (2) What is its structural arrangement or working design? How is it organized? (3) What is its purpose? What was it made for? and (4) What or who produced the machine? These four questions are identified, respectively, as its “material,” “formal,” “final” and “efficient” causes. Aristotle’s concept of causes is intended to guide inquiries into the world of things, i.e., the sublunary world (pp. xxv-xxvi).

Physics

18 - **Science of Physics.** Aristotle’s *Physics* is an introduction to the “science of nature.” The work discusses living and non-living natural bodies that demonstrate movement and rest. The movements can be circular or towards and away from the center of the earth. A manufactured body also demonstrates movement, but this is imposed externally by an agent, such as the “craftsmen” responsible for its creation (Ross, 1949, p. 63). For Aristotle, the science of “physics essentially aimed at providing the causes of the composition and changes of natural consequences of bodies” and the phenomena of movement and change (Hellyer, 2005, p. 79).

19 - **Physics Curriculum.** The Jesuit educational system in the early 17th century required that in the philosophy curriculum the *Physics* of Aristotle be preceded by the study of Logic, since the latter introduces concepts essential for discussions of Aristotelean science. Students who completed their study of logic moved on to the study of physics, which was divided into two blocks of content: the *physica generalis* and the *physica particularis*. The first set of concepts dealt with characteristics common to all natural bodies. The content focused on key themes in Aristotle’s *Physics*, such as Cosmos, Movement and Causality. The second set of concepts dealt with particular bodies (e.g. celestial orbs), atmospheric bodies, the elements and living bodies, in that order. The subject matter was based on the works *De Caelo*, *Meteorologica*, *De Generatione et Corruptione*, and *De Anima*. The study of machines, however, was relegated to the science of mathematics (Hellyer, 2005, p. 89).

Marcus Hellyer in his study of the teaching of physics in German universities observes that “[t]he *Ratio Studiorum* specified that the philosophical curriculum was to be divided into three years, called Logic, Physics, and Metaphysics, and was to be structured around the works of Aristotle” (p. 73). In the latter part of the Logic year, students were prepared for their second year of studies in natural philosophy. Hellyer relates the Rules for the Professor of Philosophy:

[In] order that the whole second year may be devoted to matters of physics, at the end of the first year a full disputation on *scientia* should be prepared; into which should be put mainly a prolegomena of physics, such as the divisions of science, abstractions, speculative, practical, subalternate, also the different methods of proceeding in physics and mathematics, about which Aristotle [writes] in the second book of the *Physics*. Finally, something should be said about definition in book two of *De Anima*. (p. 73)

Peripatetic (i.e. Aristotelean) physics was taught in the second year and was based on the eight books of the *Physics*, the second, third and fourth books of *De Caelo*, and the first book of *De Generatione*. Parts of book eight of the *Physics* dealt with a number of intelligences and the nature of the Prime Mover and was taught in the third-year metaphysics course, along with Aristotle’s *Metaphysics*, *De Anima* and the second book of the *De Generatione*. The professor was directed not to discuss anatomical questions when he explored issues raised by *De Anima* because these would be addressed later by the medical faculty (Hellyer, p. 73).

20 - Physics Instruction. The Jesuits did not teach in the medical courses of the universities. They limited their teaching activities to the philosophy and theology programs. Because natural history was taught in the medical faculties, the Jesuits did not include its subject matter as a unified body of knowledge in the philosophy curriculum. However, they did incorporate natural history concepts in their discussions of natural philosophy. For example, concepts related to the mineral kingdom were mentioned when discussing the “elements of earth;” or characteristics of animals and plants were introduced when discussing the differences among vegetative, animate and intellectual souls. No attempt was made to discuss the contents of Aristotle’s books on biology. The focus remained on natural philosophy (Hellyer, 2005, p. 84).

According to Hellyer, the second year course in philosophy in German Jesuit colleges opened with a definition of physics and an explanation of the division of the sciences as the practical and the speculative. The practical sciences included ethics and politics and taught “precepts for action.” The speculative sciences contemplated the nature of truth and were divided into three branches: Physics, Mathematics and Metaphysics. These disciplines were sequentially organized with Physics reflecting on natural bodies, Mathematics dealing with quantity removed from the physical body, and Metaphysics contemplating “being” removed from matter. In this sequence, Physics was based on reflection and logical syllogisms, rather than on experimentation and systematic observations of nature. Experimentation and the manipulation of materials were considered the province of the mechanical arts and therefore had no place in the program of studies (p. 79).

21 - The New Physics. By the early decades of the 17th century Physics teaching underwent changes that no longer adhered to the directives of the *Ratio Studiorum*. Philosophy, mathematics and natural science were taught in the arts program in a number of universities. The original *Ratio* stipulated that Aristotelean physics was to be taught in the philosophy class, but Aristotle was not mentioned in the

revised *Ratio* of 1832. Thomas Aquinas, however, continued to be the primary author studied in the theology course (Schwickerath, 1903, p. 193).

The pedagogy that first prevailed was Aristotle's peripatetic method. In scholastic physics, observations of nature were discussed for the purpose of developing propositions from which syllogistic formulations proceeded. In contrast, the new physics was based on observations and experimentation of individual or constructed events. The transition of speculative natural philosophy to an experientially-based discipline in Jesuit schools was complicated by the Society's omission of the study of mechanics. Machines were considered artificial because they did not reveal natural phenomena.

The fundamentals of Aristotelean physics were increasingly challenged by experientially-based findings in the physical sciences. Evolving scientific ideas addressed "place, space, and the void, including those postulating that a vacuum was possible in nature." As an example, "[t]he doctrine of absolute heaviness and lightness and other peripatetic views of free fall were ... challenged by the new Galilean mechanics" (Hellyer, 2005, pp. 88-89). Particularly vexing to the proponents of peripatetic physics was the question about the composition and changes undergone by celestial matter. Hellyer notes that Tycho Brahe's calculation that a comet's orbit in 1577 moved across the "concentric planetary crystalline spheres" supported "the notion of a *'fluid heaven'* and contradicted the physical reality of these spheres as real, hard, transparent, and contiguous spherical shells," as proposed by Aristotle (p. 89). Also, the determination that a nova was located beyond the sphere of the Moon challenged Aristotle's model of celestial orbs. These and Galileo's observations on the topography of the moon, along with the discoveries by the Jesuit Christoph Scheiner about sunspots, challenged the classical notion that the heavens were immutable (p. 89).

IV – SCHOOLING IN THE MIDDLE AGES

Monastic and Cathedral Schools

1 - Overview. Predating the *Ratio Studiorum*, religious enclaves took it upon themselves to educate the clergy. Monastic and cathedral schools were the main educational institutions in the Latin West from the 5th to the 12th century. Benedictine, Franciscan, Augustinian and other orders educated their novitiates through the study of the Bible and religious writings approved by the Church. Instruction constantly reinforced the monastic virtues of obedience, chastity and poverty (Graves, 1910, pp. 13-14).

The *Encyclopedia Britannica* (1911, 2015) writes the following about later episcopal schools: “The cathedral school taught only what was supposed to be necessary for the education of the priest; the monastic school taught only what was supposed to be in harmony with the aims of the monk.” Christian education represented by these two systems “could not altogether dispense with the ancient text-books, simply because there were no others in existence. Certain treatises of Aristotle, of Porphyry, of Martianus Capella and of Boetius continued consequently to be used and studied” (“Universities,” sec. History of Learning before the University Era.)

2 – First Institutions. Monastic and cathedral schools were prominent from the 10th century on as Benedictine, Franciscan, Augustinian and other mendicant orders instructed their novitiates in the knowledge and skills of computation, reading and writing. Gordon Leff (1992) observes that monastic and cathedral schools were “the main foci of higher education and learning until the middle of the twelfth century,” and continued to educate the clergy until the end of the Middle Ages (p. 310).

There were also institutions attached to Episcopalian churches with programs for both religious and secular students, and palace schools supported by royal courts, the best known created by Charlemagne and the French kings. In this panoply of schools – monastic, cathedral, palatial and private – there existed a recognizable uniformity in their programs of studies, philosophical orientations, libraries and teaching methods. This can be attributed to highly mobile teachers who moved from one school to another, organizations that promoted new courses and readings, the exchange and sharing of manuscripts among schools, and the dissemination of newly discovered Greek and Moslem texts (Wulf, 1952, p. 52).

3 – The Rule of Saint Benedict. The monastic movement originated in Egypt and Syria in the 4th century and from their spread to the Western Mediterranean and Europe. Benedict of Nursia (480 – 550 AD) established the Monastery of Monte Cassino, close to Rome and Naples, in 529. He wrote an extensive document known as the *Rule* that consisted of 73 chapters of varying lengths that described the organization and activities of a monastic community and provided guidelines for the abbot and other members of the monastery. It also explained spiritual principles and practices for the monks. Of note, in the section on daily manual labor Benedict’s Rule identifies reading as an essential activity of the monks’ daily schedule (Corwin, 2016, para. 1).

The *Rule of Saint Benedict* was a model emulated by other monasteries in Western Europe. The Rule advocates

teaching about the basic monastic virtues of humility, silence, and obedience as well as directives for daily living. The Rule prescribes times for common prayer, meditative reading, and manual work; it legislates for the details of common living such as clothing, sleeping arrangements, food and drink, care of the sick, reception of guests, recruitment of new members, journeys away from

the monastery, etc. While the Rule does not shun minute instructions, it allows the abbot to determine the particulars of common living according to his wise discretion. (CSPB, n.d., para. 3)

4 -- Monastic Schools. Monasteries and cathedrals were responsible for formal education in the early Middle Ages. Benedictine monasteries, renowned for their care and preservation of classical literature, were great centers of learning. The Order of Saint Benedict was established in 529 AD in Subiaco, Italy. The members of the order were the first Catholic educators in the West. They founded schools in Ireland and later in England. From the time of Charlemagne to the 11th century -- known as the Benedictine Age -- the monastic schools of Ireland were visited by scholars from all over Europe. Such was the fame of its monasteries that Ireland earned the title of Island of Saints and Scholars (i.e. *Insula Sanctorum et Doctorum*).

Other religious orders such as the Cistercians and the monks of Cluny opened monastic schools from the second half of the 12th century onwards.. One of the most famous institutions was the School of Saint Victor in Paris, which was founded by the Canons Regular (priests) who followed the Rules of St. Augustine. The school, which resided in the Abbey of St. Victor, was later designated a college of the University of Paris (Wulf, 1952, p. 51)

The 12th century was the "golden age of monasticism" and the "golden age of schools" (p. 50). Centers of study appeared in Salzburg, France. Italy, Germany and Hungary. In many schools, especially those of the Benedictine order, two programs of studies predominated. The first was the *schola inferior claustra* for the monks, and the second the *schola exterior* for secular students.

5 -- Monastic Education. Monasteries of the 10th to the 13th century assumed responsibility for educating members of their orders. The purpose of monastic education was to promote and reinforce the virtues of obedience, chastity and poverty. Benedictine, Franciscan and Augustinian houses, for example, adopted the Bible and religious writings approved by the Church as their objects of study. Early medieval schooling taught monks to read so they could study the Bible and religious writings, to write so they could copy sacred books, and to manipulate numbers so they could determine the dates of church festivals. Later, monastic schooling also prepared the monks for collecting texts and organizing libraries, for reading and comprehending manuscripts, and for authoring original religious, moral and historical texts (Graves, 1910, pp. 13-14).

6 -- Books and First Monasteries. The importance of classical texts was emphasized by the Roman statesman and scholar, Cassiodorus, who established the Vivarium in A.D. 544 in Calabria, Italy. The Vivarium was a monastery, library and center for biblical studies. It was distinguished by its *scriptorium*, or workshop, where classical Greek and Latin literature was copied and preserved (Corwin, 1963, sec. The Process). Cassiodorus believed that the "idle" reading of texts should be supplemented by the compulsory task of copying them. This emphasis spread among other religious monasteries:

Suddenly, as per popular adoption of Cassiodorus' *Institutes* rule book, copying texts of all kinds became an important (and highly pretentious) part of life in monasteries. He [Cassiodorus] saw copying biblical texts as spreading the message of the Christian religion and "fighting with pen and ink against the unlawful snares of the devil" (ch. 30), which seems as noble a purpose as any for devout monks to perform daily as part of their grueling manual labor." (Corwin, 1963, para. 1)

7 - Difficulties in Copying Texts. Monks who copied classical texts written in Latin or Greek often encountered language difficulties. Corwin (1963) explains the challenge they faced:

A Latin speaking monk may be asked to copy down a Greek text, but even if the text was in Latin, it was a very different form of Latin than what he would be used to. By the middle ages, the Latin language had regionalized and evolved into something that was nothing like the archaic Latin of Ancient Rome, both in grammar and syntax, much like the difference between modern English and Middle English. Some people thought this was for the best; Poggio, a major (and enthusiastic) figure in copying culture during the Renaissance, believed that understanding the text was not favorable, as it would introduce the possibility of more hypercorrection errors because monks would feel more comfortable correcting their own language. This would make the manuscripts more precise in their readings, but may be dangerous if a scribe was unable to recognize if he himself made a major error in copying a foreign language. (sec. The Unavoidable Problems, para 2)

8 - Carolingian Revival. Charlemagne (or Charles the Great), King of the Franks (768–814) and Emperor of the Romans from A.D. 800, revived interest in learning. He encouraged scholarship, founded monastic schools, and valued the arduous work of scribes who copied texts in the monastic workshops. Corwin (1963) adds that the emperor also encouraged the publication of “scholarly editions of manuscripts . . . , with scholia, or commentary paratext, taking up stretches of the page longer than the actual text itself.” He concludes that Charlemagne initiated the transformation of the literary and intellectual culture of Medieval Europe:

The Carolingian Revival is the single most important event in classical literary history, because of this sudden extreme interest in classical texts that were copied and spread like wildfire. This single-handedly saved ancient texts which do not have any surviving manuscripts from antiquity, making the Carolingian Era manuscripts the only surviving and most important texts we have. It is because of those book productions in the medieval world that we have most of the Greek and Latin classics we have today, which just may validate all the hard work done by scribal monks living quietly in the far remote reaches of society so long ago. (sec. The Carolingian Revival, para. 2)

9 - Cathedral Schools. Catholic bishops founded schools that were affiliated with major cathedrals after the decline of the Roman Empire. Their objective was to educate future generations of clergy for careers in the Church. During the 6th and 7th centuries cathedral schools were established in Spain and France, and in A.D. 789 Charlemagne, King of the Franks who later was crowned emperor, decreed that schools be established in every monastery and bishopric under his jurisdiction. He mandated that youth be taught grammar, reading, computation and notation as well as psalms and chants (Riché, 1978, p. 191). Subsequent royal proclamations addressed the curriculum and teacher qualifications. The best-known cathedral schools were located in Paris, Chartres, Orleans, Laon, Reims and Rouen in France; and Utrecht, Liege, Cologne, Metz, Wurzburg, Bamberg and Magdeburg in Germany. The schools at first educated the clergy, but in the 8th and 9th centuries they opened their doors to lay students and prepared them for secular careers.

With the exception of the cathedral schools of Chartres and Notre Dame – the latter evolved into the University of Paris -- the transformation of cathedral schools into universities was rare. Taken

together, these two versions of formal education – cathedral schools and universities -- comprised a network of *studia* that by 1400 AD numbered about forty (Leff, 1992, p. 310).

10 - Cathedral School Curriculum. The cathedral schools were initially dedicated to educating students in Catholic doctrine. Ministers were responsible for instruction. Later, some schools opened their doors to lay students. While there was agreement on their ecclesiastical mission, two types of institutions evolved and attended to different populations. The first addressed the needs of young children and was known as a *schola minor*, or what today might be considered an elementary school. The curriculum developed basic literacy skills such as reading, writing, and psalmody (the singing of psalms and canticles) as preparation for later studies. Older students attended the *schola major*, or secondary school. These schools were known for their rigorous curriculum, which consisted of two divisions of studies: the trivium (grammar, logic and rhetoric) and the quadrivium (arithmetic, geometry, musical harmony and astronomy). Boethius in the 5th century and Cassiodorus in the 6th century gave identity to the two academic divisions by linking them into what came to be known as the seven Liberal Arts.

Whereas the three disciplines of the trivium focused on cultivating proper dispositions in the young monks through literary studies, the quadrivium developed skills of numeracy that were necessary for performing basic tasks in the monasteries: arithmetic for counting, geometry for architectural design and surveying, astronomy for calculating the seasons and the date of Easter, and music for psalmody and exploring the meaning of harmony. Hence, students received a comprehensive education in which they learned to read, write and speak Latin -- the universal language of the European upper class at the time -- communication skills, the rigor of logical thinking, and an introduction to abstract thinking through the mathematical sciences.

By the 11th century cathedral schools incorporated additional studies in the quadrivium division. The school at Reims introduced Arabic numerical notation and the use of the abacus and astrolabe. The school at Orleans expanded the study of the classical authors while that at Chartres further developed the mathematical theory of musical harmony. The monastery school at Bec, under the leadership of Lanfranc and Anselm, achieved notoriety for the teaching of law. The schools also expanded their reading options to include works by Cassiodorus, Martianus Capella and Isidore of Seville, three luminaries who contributed to idealizing and solidifying the concept of the Liberal Arts (Nelson, 2001, sec. Cathedral and Monastery Schools).

Another standout publication was *The Consolation of Philosophy* by the sixth-century Greek scholar Boethius. The *Consolation* was highly popular in Europe and became a standard text throughout the middle ages. The text is a hypothetical dialogue between Boethius (who was incarcerated at the time when he wrote his opus) and his "Nurse Philosophy." It explores the nature of good and evil, fortune and misfortune, fate and free will, and other questions related to man's experiences (Nelson, sec. Cathedral and Monastery Schools).

Studium Generale and University

11 - Overview. The university, as we understand it today, was an outgrowth of medieval schools in the 12th and 13th centuries. Prior to the universities, monastic and cathedral schools were largely responsible for education. As early as the 6th century monks taught their novitiates to perform simple functions related to reading, transcribing and writing documents. In time and with the demand for a more knowledgeable clergy, monastic and cathedral schools devoted themselves to train clergy in canon law.

Up to the 11th century institutions of higher learning spread throughout Europe; by the 13th century institutions they appeared as universities or, at the time, *studia generales*. From the 12th to the end of the 14th century, approximately 80 European universities of confirmed or disputed status were founded in Salerno, Bologna, Montpellier, Paris, Oxford, Cambridge, Padua, Naples, Orléans, Valladolid, Lisbon/Coimbra, Rome, Avignon, Pisa, Prague, Florence, Cracow, Vienna, Heidelberg, Vienna, Leipzig, Rostock, Louvain, Cen, Barcelona, Glasgow, Basel, Ingolstadt, Nantes, Bourges, Venice, Copenhagen, Uppsala, and Palma in Majorca (Verger, 1992, pp. 62-64).

12 - The Meaning of University. According the *Encyclopedia Britannica* (1911, 2015),

The medieval Latin term *universitas* (from which the English word “university” is derived) was originally employed to denote any community or corporation regarded under its collective aspect. When used in its modern sense, as denoting a body devoted to learning and education, it required the addition of other words in order to complete the definition—the most frequent form of expression being “*universitas magistrorum et scholarium*” (or “*discipulorum*”). In the course of time, probably towards the latter part of the 14th century, the term began to be used by itself, with the exclusive meaning of a community of teachers and scholars whose corporate existence had been recognized and sanctioned by civil or ecclesiastical authority or by both. But the more ancient and customary designation of such communities in medieval times (regarded as places of instruction) was “*studium*” (and subsequently “*studium generale*”), a term implying a centre of instruction for all. (“Universities,” para. 1)

13 - Studium Generale. The term *studium* in the Middle Ages referred to a school of limited scope and depth of studies. A *studium particulare* was a school that served a local community or students of a defined geographical area. In contrast, a *studium generale* accepted students from all regions and all countries (Marenbon, 1987, p. 8).

The term *studium generale* was introduced after the first universities had been established. In the mid-13th century the term was applied to institutions such as those in Montpellier (1289), Bologna (1291) and Paris (1292) (Verger, 1992, p. 36). By the latter part of the 13th century, *studia generales* referred to institutions of higher learning that were officially recognized by either a papal bull or an imperial charter of the Holy Roman Emperor. In either case, it was autonomous and free from interference and interventions by local, civil and diocesan authorities.

Official recognition of an establishment as a *studium generale* was granted when certain conditions were met. First, the institution offered a program of studies in the arts and at least one of the higher faculties of law, medicine or theology. Second, courses were taught by masters or officially recognized teachers. Third, the school welcomed all students regardless of the local, district or region where they lived. The classification of *studium generale* was thus accorded only to institutions that were open to all applicants, even though they might offer the requisite programs of studies (“*Studium Generale*,” *Wikipedia*). Such institutions included cathedral and municipal *studia*, ecclesiastical schools, private law schools, establishments administered by the mendicant orders, and other independent schools. By the mid-14th century at least twenty *studia generales* were awarded this distinction in England, Italy and Spain, and in cities such as Lisbon, Prague, Vienna and Krakow

There were of course exceptions, such as the school of medicine in Salerno. But these outliers were rare and gradually disappeared by the 14th century when the concept of a university was clearly established and the term *studium generale* was employed only according to its literal meaning. Verger

(1992) opines that "there is even some probability that fairly early the shorter term 'university' was used to denote institutions of higher learning without losing its original meaning" (pp. 37-38).

14 - Faculty and Studium Generale. The faculty of a *studium generale* enjoyed certain rights that were universal and that transcended all local divisions (towns, dioceses, principalities, and states). As an example, the license to teach, or *licentia docendi* once granted by a *studium*, allowed the holder to teach at another *studium*, regardless of its local. The same held true for holders of the titles of Doctor or Master. They were also awarded the privileges and honors bestowed to that rank, regardless of the institution (Verger, 1992, p. 35).

15 - Universitas. The term *universitas* (or "totality"), instead of *studium generale*, was used when speaking of some higher education institutions in the 13th century. In medieval juridical jargon, it was a "general term used to designate all kinds of communities or corporations (a guild, a trade, a brotherhood, and so on)." The term applied to any number of occupations and professions. When specifically referring to education, "one would talk of 'the university of students' or 'the university of masters and students' (*universitas scholarium* or *universitas magistrorum et scholarium*) of such and such a place" (Verger, 1992, p. 37). The term "university," derived from *universitas*, was a Roman legal term for a corporation of students and faculty.

16 - Ecclesiastical Status. Walter Rüegg (1992) argues that "the organization of a university occurred only when economically, socially, and politically powerful foreign students joined together to protect their interests collectively against the town and their teachers" (p. 12). Hence, the meaning of the term "universitas" is based on both teachers and students coming together for the purpose of learning whatever subjects were available or in demand. These organized communities of individuals were authorized to function by the Church, as Schwickerath (1903) notes:

The universities were, to a great extent, ecclesiastical institutions, they were at least, endowed with privileges from the Holy See. They were meant to be the highest schools not only of secular, but also of religious learning, and stood under the jurisdiction of the Church, as well as under her special protection. It was through the privileges of the Church that the universities were raised from merely local into ecumenical organizations. The doctorate became an order of intellectual nobility, with as distinct and definite a place in the hierarchical system of medieval Christendom as the priesthood and the knighthood. In fact the *Sacerdotium*, *Imperium*, and *Studium* are the three great forces which energized those times and built up and maintained the mighty fabric of medieval Christendom. (pp. 38-39)

17 - Universitas Scholarium. The hierarchical structure of a *universitas scholarium* was similar to that of a guild. The teacher was the authority of his subject and was therefore the "master" of an area of knowledge. The student who learns from the master was an "apprentice," and the graduate who achieves mastery in his specialization -- but is not yet a master -- was free to travel and teach in other locals as a "journeyman." In the medieval period, a master who taught in a *studium generale* was granted the right to teach in other *studia generales*. This provision, which acknowledges the itinerant privilege of the master teacher, was one of the defining characteristics of a *studium generale*. It allowed knowledge to be perpetuated and circulated from region to region.

18 –Emergence of Universities. Historians give various reasons for the emergence of the early universities, yet they do not offer a compelling explanation for their rapid expansion. Contributing factors, however, include “the substantial increase in the number of independent teachers in the 12th century and the successful struggle of the scholars, who had achieved self-consciousness, for the recognition of their rights and privileges” (Ruegg, 1992, p. 9). Another explanation identifies three general causes for the “the remarkable development and novel character” of teaching and the first universities in the 12th and 13th centuries: “(1) the introduction of new subjects of study, as embodied in a new or revived literature; (2) the adoption of new methods of teaching which were rendered necessary by the new studies; (3) the growing tendency to organization which accompanied the development and consolidation of the European nationalities” (“Universities,” 2015, sec. General Causes of Formation of First Universities).

19 –Expansion of Universities. Universities as organized entities first appeared in the 11th century and by the end of the 13th century were well established throughout Europe. In Italy, the University of Bologna was the first institution to be founded in 1088. It was followed by the University of Padua (1222) and the universities in Naples (1224) and Arezzo (1215). In England, the University of Oxford first offered courses in 1167; Cambridge was in operation by 1209. The University of Salamanca was founded in 1134 and granted its royal charter in 1218. Universities also surfaced in Siena (1240) and Valladolid (1241). In France, the University of Paris was established between 1150 and 1180 as a corporation associated with the cathedral school of Notre Dame; the University of Montpellier appeared in 1289. The University of Coimbra was founded in 1290 in Lisbon, and moved permanently to the city of Coimbra in 1537. Later, universities were established in other cities throughout Europe: Rome (1303), Florence (1321), Prague (1348), Vienna (1365), Heidelberg (1386), Leipzig (1409), Louvain (1425), Freiburg (1457), Tübingen (1477), and Saint Andrews (1411) and Glasgow (1451) in Scotland (“Medieval University,” *Wikipedia*).

20 - Differences among Universities. The expansion of universities in Europe provided opportunities for curious and eager young men to study the liberal arts and the noble professions. These youths found significant differences in university organization and legal status. Universities in northern Italy were approved as independent corporations of scholars, while those in southern Italy and Iberia were approved by royal and imperial charters (Rait, 1912, p. 138). Universities also differed by geographical location. In continental Europe, differences separated those north and south of the Apennine mountains. Italian universities specialized in law and medicine, while northern universities in France, Germany and Great Britain concentrated on arts and theology. Institutions in the south modeled themselves after the student-controlled University of Bologna, while institutions in the north adopted the faculty-governance model of the University of Paris (p. 133). Scottish universities differed from their Dutch counterparts in their collegiate structure, in which in the latter a college could be a university, while Spanish universities differed from their French counterparts by ceding the responsibility for administering the institutions to the authorities (Frijhoff, 1996, p. 53). Some universities were sponsored and financed by the Church, while others were supported by the State. Some were strictly secular and others religious, or a combination of both.

Contributing to this diversity was the fact that the governance of many universities lay in the hands of the students: they paid for the teachers, dictated instruction, and made decisions on the curriculum, academic requirements, discipline, etc. Most unsettling was that students often were exempted from following a prescribed sequence of studies or attending courses on a regular basis. As for the professors, they were free to disassociate themselves at will from their universities and seek employment at other institutions.

21 - Academic Ethos. The consolidation and organization of communities of masters and students into what evolved as the *universitas scholarium* was achieved within the context of religious and social values. These values were part of a worldview that focused on the philosophical and theological meaning of Man and his relationship to the Divine. Rüegg (1992, pp. 33-34) comments on this phenomenon when he identifies seven "evaluative propositions" that defined the academic ethos of the medieval university: (1) There was a belief in a world order created by God that could be explained by human reason; (2) There was an "understanding of man as an imperfect being and the Judeo-Christian idea of a creature fallen into sin. Acknowledgement of these as causes for the limitations of the human intellect transformed "general ethical values like modesty, reverence, and self-criticism into the image of the ideal scientist and scholar;" (3) There was "[r]espect for the individual as a reflection of the macrocosm or as having been formed in the image of God," thus freeing men from constraints on their scholarly and teaching pursuits; (4) There existed a belief in the "absoluteness of the imperative of scientific truth," leading to the acceptance of "one's own assertions to the generally valid rules of evidence, openness to all possible objections to one's own argument, and the public character of argument and discussion;" (5) There was "[t]he recognition of scientific and scholarly knowledge as a public good which is ultimately a gift of God," thereby minimizing an interest in research and teaching for economic gains; (6) The ethos was committed to "a continuous process of *reformation*" in which the scholar viewed "one's own scientific efforts as the renewal of previously established knowledge and its further development 'in the cause of improvement.'" This increased reliance on and critical scrutiny of the works of "older authors;" (7) Finally, there was a recognition that the "equality and solidarity of scholars in confronting tasks of science enable the universities to become institutional centres of the scientific community." The concept of equality among academic peers, which implies a disregard of "social inequalities," laid the foundation for the Ideal of a Community Scholars in the medieval university.

22 - Nations and Faculties. Ruegg (1992a) contends that "the organizational form of the university cannot be traced to classical antiquity, nor was it influenced by Byzantium" (p. 7). The University of Bologna, for example, came into existence in the 12th century when law students banded together in "nations," thus creating a template for the basic organization of the medieval university south of the Apennines. This model is referred to as the *modus Italicus*. The University of Paris, on the other hand, formed an association of teachers and students as a corporate body that came to predominate north of the Apennines, and was known as the *modus Parisiensis*. The university also had nations, but with less autonomy than those in Bologna. The structure of the university in Bologna preceded that in Paris, but only by a few years.

The idea of students grouping themselves by "nations" was a concept that spread among many universities. There were some twenty nations at Bologna, ten at Orleans, and four at the universities in Paris and Salamanca and other universities of the Holy Roman Empire and eastern European cities such as at Prague, Vienna, Louvain, etc. (Verger, 1992, p. 39).

Masters and students also organized themselves into "faculties" by areas of study, the most common being arts, law, medicine and theology. A number of universities – Bologna, Padua, Montpellier -- were comprised of only one specialized area, thus negating the need for an organized faculty (Verger, p. 40).

23 – Early University Curriculum. Universities varied in size, student body and program of study. As a rule, the curricula of universities in Italy, Spain, France and England in the 11th and 12th centuries focused on the study of the arts (i.e. philosophy), medicine, law and theology. An institution would offer only the arts program or a combination of the arts and any or all of the remaining three subject areas.

The content and organization of the curriculum of late medieval universities were derived from two sources. The first was ancient educational theory and practice aligned with the two divisions of the liberal arts: the trivium and the quadrivium. The second was the content of philosophical, medical and scientific works that was translated into Latin from the Greek and Arabian languages.

v - UNIVERSITY OF PARIS

Educational Milieu

1 - Overview. McNerny (1963) provides a general description of the faculties and teaching degrees of the University of Paris in the following passages:

There were four faculties at Paris -- arts, law, medicine, and theology -- with the faculty of arts serving as preparation for the others and thus as the undergraduate college, so to speak. The principal purpose of the university was to train future masters who, after prescribed courses of studies and the successful passing of examinations, were granted degrees. The degree arose quite naturally out of the license to teach. However, not all those who received a degree became teaching masters at the university, thus the distinction between the *magistri regentes* and *magistri non regentes*. (Vol. II, Pt. IV, Ch. I, sec. Universities, para. 4)

The student entering the faculty of arts was thirteen or fourteen years old, and he embarked on a course of studies which continued for something over four years (even more at universities other than Paris). The curriculum of the arts faculty can conveniently be thought of in terms of the *trivium* and *quadrivium*. (para. 5)

2 - Reputation of the University of Paris. John Marenbon (1987) writes that "sophisticated abstract thinkers" were trained at universities in France and England. He notes the following about the areas of specialization of these universities:

For the period up to 1350, two universities are of outstanding importance for the history of philosophy: Paris and Oxford. There were indeed other large, respected and earlier established universities, like Bologna, Salerno and Montpellier; but Bologna specialized in law, Salerno and Montpellier in medicine. Only later in the fourteenth century did other universities -- such as Cambridge, Prague, Vienna and Heidelberg -- begin to become important centres for the study of logic and theology. (p. 7)

The University of Paris was one of the great seats of learning in Europe. It stood at a distance from the educational chaos of its time. Gordon Leff (1992) states that the institution was "the undisputed centre of theological studies in the thirteenth and fourteen centuries" (p. 309). Papal decrees guaranteed the status of theological studies at the university. Until the 1360s, Rome forbade the teaching of theology outside of Paris, thus ensuring the institution's academic hegemony and its insulation from "subversive doctrines arising from the study of pagan authors in the arts faculty." Similar concerns affected the theology faculties of the universities at Oxford and Cambridge. Beyond this privileged trifecta, however, the curricula of European universities followed their own autonomous paths of development, free from subservience to theological considerations (pp. 311-312).

The reputation of Paris with regard to the study of logic, philosophy and especially theology in the 12th century was beyond contestation. Its privileged standing attracted both masters and students from all over Europe. The organization and discipline exercised by the university authorities were key factors in attracting young men from France as well as Germany, Spain, Portugal, Denmark, the Low Countries, Italy, and even England where the university at Oxford was recognized for its exceptional program of theology.

The influx of masters and young men thirsting for knowledge resulted in the proliferation of schools throughout Paris. Visiting masters were authorized by the bishop to found new schools, thereby expanding educational opportunities beyond the cathedral school of Notre Dame or Abelard's school on Mte. St. Geveviève. As the number of possibilities increased during the 12th century, "[the] Parisian schools began to develop the institutional organization which would characterize the later medieval university: faculties became distinct, an order of studies was fixed and a pattern of degrees established to mark a student's academic progress" (Marenbon, p. 7).

3 – Requirements. Robert de Courçon (1160-1219) was an English scholastic elected chancellor of the University of Paris in 1211. Years later he issued a set of instructions outlining the organization of the University. Courçon's statutes of 1215 consolidated what had mostly been common practice in the institution. A student would begin his studies in the faculty of arts and after having completed the six-year program, and provided he attained the minimum age of twenty-one, would be conferred the degree of Master of Arts. The statutes also prohibited students from lecturing on theological issues until they had completed at least five years of study in the theology faculty and had reached the age of thirty-five.

While the statutes allowed students to study medicine and law, the program of theology was so demanding that pupils rarely took advantage of these options. It was also common for many students to terminate their studies after completing the arts program or even before. Marenbon, in this regard, observes that "[i]n Paris, . . . only about a third of the university belonged to the three higher faculties; and there were, in most medieval universities, many more students of law than theology" (1987, p. 14).

4 - Faculties and Nations. In the section titled "The nations," the *Encyclopedia Britannica* (1911, 2015) explains the organization of the University of Paris. It states that the university was divided into four faculties: the "superior" faculties of theology, canon law and medicine, and the "inferior" faculty of arts. The arts faculty, which counted the largest number of students, was divided into four "nations" or groups of students and professors: "(1) the French nation, composed, in addition to the native element, of Spaniards, Italians and Greeks; (2) the Picard nation, representing the students from the north-east and from the Netherlands; (3) the Norman nation; (4) the English nation, comprising, besides students from the provinces under English rule, those from England, Ireland, Scotland and Germany." ("Universities," sec. The Nations).

A dean presided over each faculty and a proctor over each nation. The rector "in the first instance was head of the faculty of arts, by whom he was elected, was eventually head of the whole university." It should be noted that "[n]either the entire university nor the separate faculties had thus, it will be seen, originally a common head, and it was not until the middle of the 14th century that the rector became the head of the collective university" ("Universities," sec. The Nations).

5 – Faculty of Theology. McInerny (1963) provides the following information on the faculty of theology of the University of Paris.

To finish the arts course was to obtain a license to teach in that faculty and to pursue studies in one of the others. The hours of instruction in theology, for example, were such that a master from the faculty of arts could do his teaching and then attend lectures in theology. As a student of theology one followed lectures on Scripture for four years, after which two years were spent attending lectures on the Sentences of Peter Lombard. When one had finished this course and had attained the age of twenty-six, he received the baccalaureate and himself lectured on Scripture for

two years and subsequently on the Sentences. The doctorate of theology could then be awarded if one had achieved the age of thirty-four and fulfilled other requirements such as holding public disputations. (Vol. II, Pt. IV, Ch. I, sec. Universities, para. 6).

6 - Early Colleges. Thousands of young men migrated to major cities throughout Europe: Bologna, Toulouse and Oxford. The same occurred in Paris. Many were fourteen or fifteen years old. They sought lodging in Parisian hostels, pensions and private residences. Depending upon their financial situation, some lived in ample to sumptuous quarters, while others less affluent lived in modest conditions. Reacting to the need for adequate quarters for the throng of errant students, sponsors founded communal houses of scholars, later known as "colleges." These boarding houses accommodated the continuous flow of migrant students by providing food and lodging. They did not provide instruction -- as was later the case -- nor did they have an official relationship with the University. Thus there appeared the College of Eighteen (students) in 1180 and the College of Saint Thomas of Louvre in 1186.

7 - Ecclesiastical Colleges. The first prominent colleges of the University of Paris sheltered ecclesiastical students. The Dominicans established a religious house of study in 1218, followed by houses of the Franciscans in 1219, the Benedictines in 1229, and the Augustinians in 1259. Unlike the early boarding-houses, each of these academic cloisters was a *studium* that provided religious instruction for aspiring members of their Order. Later, mendicant orders such as the Dominicans and the Franciscans allowed extern or non-clerical students to freely attend lectures delivered in their colleges (Feret, 1912, par. 1).

In 1257, Robert de Sorbon, a distinguished professor and preacher, founded a college for poor extern or lay students intent on studying theology. The College of Sorbon initially accepted twenty students and then quickly grew in prominence as it attracted famous scholars throughout Europe. By 1292 the college boasted a chapel and the largest library of the university and by 1470 it housed one of the first printing presses in France. The Sorbonne, as it was later known, achieved renown as one of the most prestigious institutions of theological study in Europe.

In 1280 the Collège d'Harcourt was founded and later became the famed Lycée Saint-Louis. It was the only public secondary school that offered preparatory classes for the *grandes écoles*.

8 - Colleges of Montaigu and Saint-Barbe. Ignatius of Loyola attended two schools of the University of Paris: the Collège de Sainte-Barbé and the Collège de Montaigu. Both were instrumental in shaping the religious ideology of Ignatius and the first Jesuits. The Collège de Sainte-Barbé was founded in 1460 by Pierre Antoine Victor de Lanneau, a teacher of religion, in the 5th arrondissement of Paris. It was located on the left bank of the River Seine where prestigious lower schools, colleges and institutions of higher learning were concentrated. Many students from the Iberian Peninsula attended the college. Young men from Spain and Portugal quickly became Ignatius's companions.

Gilles Aycelin de Montaigu, a French diplomat who later became Chancellor of France, founded the Collège de Montaigu in 1314. Pierre Aycelin de Montaigu, Bishop of Nevers and Laon, restored the college in 1388. By the late 1400s the school, under the leadership of the master Jan Standonck, earned a reputation as an outstanding theological college of Paris. Among its students were the Dutch Renaissance humanist Erasmus of Rotterdam, the French Christian theologian John Calvin, the Portuguese diplomat and humanist Diogo de Gouveia, the Scottish reformer John Knox, and Ignatius of Loyola. Its rigorous program of studies provided a foundation for the institutional vision and precepts of the Jesuit educational system.

9 - Student Body. Young men throughout Europe flocked to Paris and wandered the streets of the Latin Quarter in the 16th century, looking for lodging so they could engage in their studies at the University. A specific terminology referred to these aspirants. *Martinets* were day (extern) students who lived in hospices, but attended classes in the college, and *portionistes* were boarders who paid to reside in colleges. *Boursiers* were poorer students on scholarships and *caméristes* lived in more affluent surroundings, such as suites and houses where they were cared for by servants and private tutors. Finally, the *galoches* were souls who perpetually attended classes with no apparent objective in mind other than to enjoy the intellectual and social life that the university offered (Codina, 2000, p. 33).

10 - Four Nations. The *Encyclopedia Britannica* (1911, 2015) explains the organization of the University of Paris. It states that the university was divided into four faculties: the “superior” faculties of theology, canon law and medicine, and the “inferior” faculty of arts. The arts faculty, which counted the largest number of students, was divided into four “nations” or groups of students, professors and scholars: “(1) the French nation, composed, in addition to the native element, of Spaniards, Italians and Greeks; (2) the Picard nation, representing the students from the north-east and from the Netherlands; (3) the Norman nation; (4) the English nation, comprising, besides students from the provinces under English rule, those from England, Ireland, Scotland and Germany.” (sec. The Nations).

10.1 - Marenbon (1987) expounds the meaning and importance of the four Nations in this passage:

The arts masters in Paris were divided into four Nations (the French – which included masters from Spain and Italy – the Normans, the Picard and the English-German, each of which had its own schools and was responsible for much of the organization of a student’s academic life. The four Nations of the Paris arts faculty elected a rector, who was in practice the head of the university. The arts faculty was therefore in the somewhat odd position of being institutionally predominant within the university and yet intellectually subordinate to the higher faculties: when a scholar had become a fully qualified teacher of arts, he was merely ready to begin his studies in theology, law or medicine. (p. 15)

11 - Censure of Aristotle’s Works. From 1100 to 1250 important works of Aristotle were translated into Latin, some of which were discussed in Paris. A number of Aristotle’s writings, however, raised questions about fundamental Christian concepts. The challenge that Aristotle presented was how to reconcile his scientific writings with Christian doctrines espoused in the faculty of theology. The rational speculation practiced by Aristotle conflicted with Catholic dogma and beliefs that appealed to faith for approbation. Points of contention included the existence of a personal God, an immortal soul, the existence of a vacuum and the natural condition of rectilinear motion.

The local council of Paris responded to this discord and decreed in 1210 that Aristotle’s books on natural philosophy and the works by his Arab commentators were prohibited from being taught in the University. Robert de Courçon, chancellor of the institution, upheld the selective prohibition of the works of Aristotle in 1211: “He explicitly allowed the teaching of Aristotle’s logical treatises and his *Ethics* under strictly controlled conditions, but banned the teaching of *Metaphysics* and all his natural philosophy works (*Physics*, etc.), including a ban on all summaries and commentaries on them” (Fonseca, n.d., par. 5). Of note, whereas the University of Paris took a harsh stand on Aristotle’s scientific works, other universities such as Oxford and Toulouse were more open to his writings.

Debates on the suitability of Aristotle's teachings at the University of Paris continued until 1277. Over time, the influence of Aristotle held sway. The intellectual appeal of Aristotle's arguments and his analytic approach turned the tide by 1255 when his texts were adopted in the curriculum of the faculty of arts. His works eventually substituted many of the textbooks and writings in the faculty. Marenbon (1987) writes that "most of Aristotle's works – including the *Metaphysics*, *Physics* and *De anima* – were prescribed for students of arts in Paris. From about this time onwards, the arts course in every medieval university involved the study of a wide range of Aristotelean texts" (p. 17). It should also be noted that "Aristotle's non-logical works came to occupy the position which the quadrivium had traditionally held in relation to the trivium. Grammar and logic remained the beginning and foundation of all learning, the primary sources of intellectual method" (Marenbon, p.17).

Not all schoolmen, however, agreed with Aristotle's ascension. Some scholars like St. Bonaventure opposed the use of many of the philosopher's works, but to little avail. Nevertheless, according to Maurer (1962) Aristotelianism gradually became firmly entrenched in the curriculum of the faculty (p. 85).

12 - Censorship and Aquinas. The relaxation of censorship in Paris allowed Thomas Aquinas to successfully reconcile Aristotle's reflections on physical and spiritual existence with Church doctrines and unify the Aristotelian and Catholic intellectual traditions. At the bequest of Pope Urban IV in 1263, Aquinas produced extensive commentaries on Aristotle, with the help of new translations by William of Moerbeke, and later wrote the *Summa Theologiae* (Maurer, 1962, p. 89). The unfinished manuscript of the *Summa* was composed between 1265 and 1274 and was first published in 1485. Aquinas' grand work effectively demonstrated that Aristotelean philosophy was complementary and not antagonistic to Christian doctrine and that criticism of Aristotelianism no longer enjoyed the credibility it had once enjoyed.

13 – Humanism in France. Renaissance Humanism spread from Italy to Northern Europe and diffused throughout universities beginning in the middle of the 15th century. A humanistic movement emerged in the faculties of the universities in the 1400s and prompted a rethinking of the way certain disciplines were taught. Grammar and rhetoric in the arts curriculum were affected when emphasis was given to "returning to the sources" for edification. Some advocates argued for a rethinking of the third discipline of the trivium and called for a "humanistic logic." Other disciplines were added to the traditional curriculum such as poetics, history and moral philosophy (Ruegg, 1992a, p. 456)

Italian Humanism, however, took root slowly in France: "Taken as a whole, humanism in the fifteenth century played a relatively modest part in the French universities. The *studia humanitatis* offered only optional lectures, and teaching was confined to individual colleges. Humanistic reforms occurred only in the sixteenth century, and even then as a result of much strenuous exertion" (Ruegg, p. 458). By the 1500s, humanistic thought had become a fixture in many European institutions of higher learning.

14 - Humanism in the University. Ruegg (1992a) marks 1452 as the date when humanistic thought experienced an upsurge in the University of Paris (p. 465). The arrival of Italian humanists who took on teaching duties facilitated the assimilation of humanistic ideas in the scholastic environment. The effect of humanism in the university was primarily of a pedagogical nature. Contrary to the emphasis on logic and the formalism of scholastic methodology, humanist pedagogy advocated historical criticism of texts and the philological analysis of "the epistemological status of linguistic configurations." According to Ruegg,

these critical forms of analysis were promoted by Petrarch and Salutati in the 1300s in their examinations of classical texts (p. 454). The investigation of the content and context of classical works challenged the presumptive irrefutability of authoritative scholastic sources. Hence, the groundwork was laid for a dispute between the humanists and the scholasticists regarding the meaning and significance of scholastic philosophy (p. 456).

At first there was resistance to the humanist movement, but by 1517 it "had taken root in Paris, though more profoundly in some colleges of the University than in others. The Collège de Montaigu incorporated a few of the elements of the humanist doctrine in its rules, but it was in the Collège de Saint-Barbe that humanism found its most fertile soil" (Farrell, 1938, p. 31). The French historian Jules Quicherat in his *Histoire de Saint-Barbé* writes that "between 1525 and 1530 the aim toward which the new movement and its protagonists had so long aspired was finally attained: genuine classical teaching was established in all the chairs of the college" (as cited in Farrell, 1938, p. 31).

15 - Jesuits in Paris. When Ignatius arrived at the University of Paris young men from all over the continent traveled to the capital to seek out the institution. Students from the two Iberian countries, some of whom became the first members of the Jesuit Order, populated the colleges of Sainte Barbe and Montaigu.

Ignatius was at first a day student at the university and lived in the hospice of Saint Jacques while he attended classes at the Collège de Montaigu. After one year, he earned enough money to acquire accommodations at the Collège de St. Barbé. There he met and mingled with Spanish and Portuguese students (Codina, 2000, p. 29). The close relationship of Ignatius and his Iberian companions was nurtured in part by their great affection for the university, which they considered their *alma mater*. This connection with the university, however, was not reciprocated by the institution or the French parliament, which later opposed the expansion of the Jesuit Order in France (p. 30).

15.1 - The Loyola Jesuits experienced the renewal of Thomist thought at the University of Paris. They were inspired by the historical and critical methods that attributed significance to ancient sciences and philosophies. The first Jesuits were exposed to an environment that appreciated the elegance of classical Latin and the restoration of rhetoric to a place of distinction. While at the university the group received an education in the arts – i.e. philosophy -- followed by instruction in theology based on the readings of Thomas Aquinas. They engaged in exercises conducted in Latin and participated in disputations that perfected their technique of public debate.

16 – Ignatius' Alma Mater. Robert Schwickerath (1903) in his work on the history and principles of Jesuit education points to the importance of the University of Paris in the development of the curricula and pedagogy of Ignatius' system. He writes that the university was the alma mater of the founding Jesuits:

Great must have been the influence of this seat of learning on the formation of the educational system of the Jesuits. Bartoli, one of the historians of the Society, goes so far as to say, "Spain gave the Society a father in St. Ignatius, France a mother in the University of Paris." From this university Ignatius probably adopted the three-part division of his system of studies: Language, Arts or Philosophy, Theology. (p. 137)

Modus Parisiensis

17 – Overview. Ignatius and the first Jesuits responsible for establishing colleges repeatedly referred to the methods and organization of the University of Paris. The key to the university's remarkable success was its commitment to order, organization and discipline. Ignatius specifically referenced the "Paris method" in his writings. Also, Jerónimo Nadal in Messina and Diego de Ledesma in Rome adopted the arts program and teaching methods of Paris in their colleges.

18 – Paris and the Ideal University. An ideal model of the medieval university did not exist in the 12th to 14th centuries. In Paris, for example, the first university regulations of the 1215 statutes were designed to improve the schools of the city. As Casalini and Pavur (2016) note, "The professional goals of universities probably made it unnecessary for them to develop a full-fledged and consistent system of thought about the individuals they were forming or about the means by which that formation should be achieved" (p. 3).

As the number of universities increased, many were challenged with adopting a workable higher education model. It was a fact, Ruegg (1992a) asserts, that "from the very beginning they had the task of realizing their proper form, their underlying idea, in the Platonic sense, or their entelechy, in the Aristotelian sense." There was no point of reference, no accessible models or authorities they could consult:

Neither the emperor nor the pope was in a position, like a contemporary "university planner," to lay down an ideal version of a Christian university and to carry it out in every detail! This was left to the creative imaginations of the masters, students and local officials, but more often than not, it resulted in adopting university models that had proven successful. It was here that the universities looked to the two most successful institutions in Europe, Paris and Bologna, and adapted their organization and pedagogy, that is the *modus parisiensis* or the *modus italicus* (p. 31).

Universities looked to Paris and Bologna when organizing their institutions and imitated one or the other, or both, when establishing their ideal form. If there was an ideal university model, elements of it can be found in the structure of the craft guild. The relationship between the seekers and the providers of knowledge echoed the relationship between guild masters and their apprentices. McNerny (1963) writes: "The model of the university was the medieval guild; the university is a society of masters and scholars. Sometimes the guild was made up of the students, as in the south; sometimes, as was the case at Paris, the guild comprised the masters. In the latter case students can be regarded as apprentices who are candidates for full membership in the guild, that is, to the society of masters" (Vol. II, Pt. IV, Ch. I, sec. Universities, para. 3)

19 - Modus Parisiensis vs. Modus Italicus. Sixteenth century European universities generally followed the models established at Paris, Bologna and Oxford. Various iterations of these derivatives became models themselves. Yet, whereas as universities may have differed in their policies and practices, they generally followed the models established at Paris and Bologna. The two educational approaches were known as the *modus Parisiensis* and the *modus Italicus*. They were both unique in their own sense and "were not representative of a comprehensive articulated philosophy of education. The professional goals of universities probably made it unnecessary for them to develop a full-fledged and consistent

system of thought about the individuals they were forming or about the means by which that formation should be achieved” (Casalini & Pavur, 2016, p. 3).

The *modus Parisiensis* and the *modus Italicus* differed significantly. John Padberg (2000) highlights the differences between the education models north and south of the Apennines. In Paris, instruction was offered in the colleges and residential houses, whereas in Italy and the Iberian Peninsula classes were scheduled on the university grounds. Parisian students were subjected to rules, guided by the organization of the university and enforced through rules of discipline, whereas students in Italy, Spain and Portugal experienced a general laxity in rules and discipline and enjoyed considerable freedom in their personal and professional conduct (pp. 88-89).

Parisian masters and students followed the programs mandated by the university. Students were divided into classes according to their ability and knowledge and regularly examined to determine their eligibility to move from one class to another. Expectations were clear: masters were required to regularly give lectures and pupils were responsible for completing their studies after the lectures. Italian students, on the other hand, determined their program of studies and exercised considerable influence over their teachers. In Bologna, students were free to study whichever class they wished and whenever it suited them (Padberg, p. 82).

The order, regularity, structure and institutional expectations established for the masters and students clearly differentiated the University of Paris from the University of Bologna.

20 – The Paris Method. The highly structured approach to higher education elevated the status of the *modus Parisiensis*, rendering it the preferred model for many institutions. It also held great appeal to the early Jesuits. The policies and practices of the university resonated with Ignatius’ and the Jesuits’ preference for order and discipline. Hellyer (2005) summarizes the Parisian model in his discussion of teaching in Jesuit institutions:

There was no choice of subjects; all students followed the same progression. The order of classes was firmly established and their content highly standardized. No student could proceed to the next class until passing an exam. The philosophy triennium followed the five-year humanities curriculum that provided students with the Latin and Greek necessary to study philosophy students were not to be admitted to philosophy unless they could first demonstrate sufficient ability in letters. The material taught was reinforced in daily revision and repetition sessions as well as in frequent disputations. (p. 72).

Farrell (1938) identifies three fundamental characteristics of the Parisian method: “First, a solid foundation in grammar; secondly, progression in studies from lower to higher according to the fitness of the pupil; thirdly, a good deal of repetition” (p. 32). He goes on to state that Ignatius and the Jesuits were aware of the *modus et ordo* of the University of Paris as demonstrated in five key principles of their educational system:

1. The pupils must be solidly founded in grammar.
2. There must be a distribution of classes according to the capacity of the students, each class having a distinct grade and a separate teacher.
3. There must be a progression of studies from the lowest class of grammar through humanities and rhetoric, then through the courses in Arts (philosophy, mathematics, etc.) and in theology; *but only one at a time and in order.*

4. The pupils must be assiduous in attendance of classes. There must be no more scattering of lectures according to the inclination of the professors, the custom of the locality, or the whim of the students.

5. Plenty of exercises must accompany the lessons. Thus repetitions, disputations, memory lessons, and compositions are of capital importance. (pp. 32-33)

21 – Pedagogy and the Colleges. The University of Paris in the early 1500s was a collection of colleges under a central administrative authority. Many of the colleges employed teachers to give instruction to their students. The teaching methods adopted in some of the colleges were more advanced than others, but interaction among them ensured that their educational principles and practices were the same, thereby giving a distinct character to the overall pedagogical approach of the university. Several colleges, in particular, impressed Ignatius and his companions and contributed to their decision to adopt the university's methodology. The foremost among them was the Collège Sainte-Barbe.

Farrell in *The Jesuit Code of Liberal Education* (1938) writes that humanism spread throughout the colleges of the University of Paris and excelled in some schools like that of Saint-Barbe. This resulted in a "remodeling of the curriculum in order to make the classics in very fact the foundation of the higher studies." He goes on to assert that Ignatius was aware of the changes in the curriculum "and afterwards made it the invariable rule of his educational legislation" (p. 31).

Farrell (pp. 31-32) relates that Quicherat located a 16th century document that "embraces under seven points the total organization of a college like that of Saint-Barbe." He summarizes these as follows: (1) The principle of the college should frequently observe classes and evaluate the effectiveness of the masters and the learning of their students. (2) Repetition in philosophy and grammar classes should be held as often as possible. (3) Student should study Dontaus to obtain a solid foundation in Latin grammar before they attempt to read poetry and more advanced works in Latin. (4) Virgil and Cicero should be the two principle authors studied before gradually engaging the works of a larger number of authors. (5) The goal of the college should be to teach students to speak Latin. (6) The students should aspire to mastering the art of oratory and logic. (7) Students should only be allowed to pass from lower to higher classes once they have demonstrated a solid foundation in grammar.

22 – Jesuits' Adoption of the Parisian Model. The first activities of the Society of Jesus focused on creating schools in the university cities of Coimbra, Padua, Louvain and Cologne in 1542 and of Valencia in 1544 (Codina, 2000, p. 30). The Jesuits, however, became disillusioned with the quality of education and the disorganization of these and other universities. According to Hellyer (2005), "When the Jesuits began to implement their educational system in the mid-sixteenth century, many European universities were in shambles. Some universities had closed, other were taught by reformers or protestants, still others eliminated the faculty of theology or were encumbered with vacant chairs in the faculties, especially the faculty of arts" (p. 54). This disorder induced the Jesuits to consider offering classes in the colleges and to modelling much of their curricula and pedagogical practices after those of the University of Paris.

In response to requests for directions on how to organize and teach substantive content in the colleges, Diego Lainez drafted a set of norms in 1546, with specific references to the University of Paris. The *modus Parisiensis* effectively became the standard of the Society once Jerónimo Nadal adopted the method in the College of Messina in 1548 (Codina, p. 31).

22.1 - Vincent Duminuco (2000) identifies the similarities between the organization of Jesuit schools and that of the University of Paris. He notes that the *Ratio Studiorum* identifies a rector and prefect of studies as administrative heads of the college, both analogous positions to those of the university. Jesuit colleges adopted the university policy of administering an entrance examination to determine which class an applicant should be assigned. The rules on discipline, punishments and rewards for students followed the practices of Paris, but with some modifications. The college's morning and afternoon schedule of two to three hours of instruction were the same as in Paris, as well as the school year, which began on October 1 with the feast of St. Remi, and vacation and breaks for Christmas, Easter and Pentecost (pp. 34-36).

23 - Modus Collegii Romani. The practices and pedagogy adopted in Paris were not restricted to that institution. Ignatius and a number of the early Jesuits –Alfonso de Salmerón, Diego Laínez, Nicolás Bobadilla, Jerónimo Nadal, Martín de Olave and Diego de Ledesma -- first experienced the *modus Parisiensis* at the University of Alcalá and then later at the University of Paris. Higher education at Alcalá was modeled after that of Paris, thus making it one of the academic centers of Renaissance Europe. Ignatius and his colleagues attended both universities and were impressed with their organization, curricula and pedagogy (Codina, 2000, p. 38). Codina provides additional information on how the Parisian method influenced the final version of the *Ratio Studiorum*:

The *modus Parisiensis* was, for the Jesuits, a point of departure for the creation of their own pedagogy and educational system. The method systematized by Jeronimo Nadal in 1548 in the prototype school at Messina evolved and became diffused. From 1551 onward, the Roman College took, developed, and converted it into a model for the rest of the Jesuit colleges. The *modus Parisiensis* gradually ceded its place to the *modus Collegii Romani*. Later this would evolve into the *Ratio Studiorum*. Under new titles, and in successive editions, the Parisian roots of Jesuit pedagogy are unmistakable. (p. 49)

VI - SCHOLASTICISM

1 – Overview. Ignatius and the early Jesuits were products of the education of the scholastic universities at Alcalá and Paris. The Jesuits' experiences in these institutions shaped their approach to studies in the faculties of arts and theology and their preference for the works of Aristotle and Thomas Aquinas. The scholastic influence is apparent in the *Constitutions of the Society* and the *Ratio Studiorum*. The scholastic perspective in the medieval university, as evidenced in Paris, is exemplified in the Jesuit proposal of a multi-tiered educational system that follows the curricular sequence of language, philosophy and theology (Schwickerath, 1903, pp. 136-137).

Nature of Scholasticism

2 – Etymology of Scholastic. Mastin (2009, para. 2) explains the etymology of the term “scholastic.” He writes: “The term ‘scholastic’ is derived from the Latin word ‘scholasticus’ and the Greek ‘scholastikos’ (meaning literally ‘devoting one’s leisure to learning’ or ‘scholar’) and the Greek ‘scholeion’ (meaning ‘school’). The term ‘schoolmen’ is also commonly used to describe scholastics.”

3 - Meaning of Scholasticism. The Christian encyclopedia *Theopedia* (n.d.) explains that “*Scholasticism*” is a term ascribed to an approach to education in medieval European universities from the 12th to the 16th century. It was a system of teaching that was based mainly on authoritative texts of the Church fathers and of Aristotle and his commentators. The scholastic pedagogy adopted in medieval faculties emphasized the teaching of philosophy and theology. As defined in the encyclopedia,

Scholasticism comes from the Latin word *scholasticus* which means ‘that [which] belongs to the school’, and is the school of philosophy taught by the academics (or schoolmen) of medieval universities circa AD 1100 - 1500. Scholasticism attempted to reconcile the philosophy of the ancient classical philosophers with medieval Christian theology. . . . The primary purpose of scholasticism was to find the answer to a question or resolve a contradiction. It is most well known in its application in medieval theology but was applied to classical philosophy and other fields of study. It is not a philosophy or theology on its own, but a tool and method for learning which puts emphasis on dialectical reasoning. (“Scholasticism,” paras. 1-2)

3.1 - The following text presents a pedagogical explanation of the meaning of scholasticism:

Scholasticism is not so much a philosophy or a theology as a method of learning, as it places a strong emphasis on dialectical reasoning to extend knowledge by inference and to resolve contradictions. Scholastic thought is also known for rigorous conceptual analysis and the careful drawing of distinctions. In the classroom and in writing, it often takes the form of explicit disputation; a topic drawn from the tradition is broached in the form of a question, opponents' responses are given, a counterproposal is argued and opponents' arguments rebutted. Because of its emphasis on rigorous dialectical method, scholasticism was eventually applied to many other fields of study. (“Scholasticism,” *Wikipedia*, para. 2)⁶

⁶ See Patte, Daniel. (2010). *The Cambridge Dictionary of Christianity*. Ed. Daniel Patte. New York: Cambridge University Press, 11132-1133; and Grant, Edward. (2004). *God and Reason in the Middle Ages*. Cambridge University Press, 2004, 159

4 - Characteristics of Scholasticism. Mastin (2009) presents comprehensive entry-level information on the history of philosophy. He simplifies and summarizes the ideas of important philosophers and schools of philosophy. In his explanation of basic concepts of philosophy, Mastin identifies what he considers some of the main characteristics of Scholasticism:

- An acceptance of the prevailing Catholic orthodoxy.
- Within this orthodoxy, an acceptance of Aristotle as a greater thinker than Plato.
- The recognition that Aristotle and Plato disagreed about the notion of universals, and that this was a vital question to resolve.
- Giving prominence to dialectical thinking and syllogistic reasoning.
- An acceptance of the distinction between "natural" and "revealed" theology.
- A tendency to dispute everything at great length and in minute detail, often involving word-play. (paras. 5-6)

5 - Inquiry Focus of Scholasticism. The scholastic method of education may be defined by its object, subject and method of inquiry. The *object of inquiry* was the book or written work. The *subject of inquiry* consisted of the philosophical and theological ideas of respected authors. Scholastic pedagogy accepted Catholic orthodoxy on theological matters and acknowledged Aristotle as an authority on philosophical questions. The scholastic *method of inquiry* was the disciplined examination of philosophical and theological propositions for the purpose of clarifying and settling differences among competing assertions. In seeking to reconcile Christian teachings with pagan wisdom, the teaching methodology relied on dialectical thinking and syllogistic reasoning when disputing important questions at length and in minute detail.

6 – Scholastic Theologies. The term *scholastic* is the moniker given to a medieval Christian scholar or master who reflects on philosophical and theological issues. The term "schoolman" is also used to describe a scholastic. In a different sense, the *Ratio Studiorum* of 1599 referred to students as "scholastics."

There was no consensus in the 13th and 14th centuries on what philosophical system or theological set of doctrines should be taught. Talented scholastics like Bonaventure, Thomas Aquinas, Duns Scotus and William of Ockham explained their distinctive understandings of philosophical and theological doctrines. These and other scholars each represented a school of thought that was propagated by its adherents. Weisheipl (2012) describes the commonality shared by the different schools of theology in the following passage:

The most important of these scholastic theologies was Thomism, developed from the teaching of Saint Thomas Aquinas; Augustinism, developed from Saint Augustine; Scotism, from John Duns Scotus; Nominalism, from William of Occam; and Suarezianism, formulated by Francisco Suarez, a 16th-century Jesuit who tried to synthesize various schools. The basic principle underlying all forms of scholasticism was rational consistency with the Christian faith as taught in the Bible and as understood by the living Church of Rome through the writings of the ancient Greek and Latin Fathers, the rulings of the ecumenical councils, the liturgy, and the continuing teaching and practice of the church. (sec. Advanced Information, para. 4)

Regardless of their philosophical persuasions, the scholastics contributed thoughtful texts that provided masters and students with grist for their deliberations. The writings on philosophical and theological issues varied in content and style. The works authored by university teachers were addressed to students and other academics and hence exhibited traces of scientific formalism. They tended to be “impersonal in style, specialized and limited in vocabulary, abounding in abstract formulae, and somewhat rigid in the structure of their organization.” The writings of the Church Fathers, on the other hand, were “more varied in style and less abstract and impersonal.” Their works were intended for the general public and thus lacked pretensions associated with scientific discourse (Maurer, 1962, p. 90).

Among the different scholastic styles certain luminaries stand out, such as St. Bonaventure for his “warmth of feeling” and St. Aquinas for his “wonderful precision and lucidity.” The tone of their writings contrasted with the “dullness and pedantry” that characterized the scholastic style at the end of the Middle Ages (p. 90).

7 - Reconciling Philosophy and Theology. Turner (1912) observes that “Christian thinkers, from the beginning, were confronted with the question: How are we to reconcile reason with revelation, science with faith, philosophy with theology?” The early defenders of Christianity resolved this issue by concluding that the wisdom of the Greeks “was due to the inspiration of the *Logos*; that it was God's truth, and, therefore, could not be in contradiction with the supernatural revelation contained in the Gospels” (sec. Theology and Philosophy, para. 1).

The attempts to harmonize natural and supernatural truths were inspirational but unconvincing when judged by their success in definitively establishing the limits of the two forms of intellectual activity. St. Augustine in the 5th century “argued that philosophical reflection complemented theology, but only when these philosophical reflections were firmly grounded in a prior intellectual commitment to the underlying truth of the Christian faith” (Murray & Rea, 2016, sec. Philosophy ad Christian Theology, para. 1). John Scotus in the 9th century believed that both philosophy and theology contributed to an all-encompassing truth or theophany (the appearance of the divine to humans). Abelard in the 12th century conceived of philosophy and theology as integral parts of a rationalistic system (Turner, sec. Theology and Philosophy, para. 2).

8 - Thomistic Argument for Reconciliation. St Thomas Aquinas in the 13th century also offered his opinion on the problem that had eluded Christian thinkers since the Patristic Era. Murray and Rea (2016) explain that the Thomistic argument maintained that philosophy and theology were two distinct sciences when considering their intellectual starting points:

Philosophy takes as its data the deliverances of our natural mental faculties: what we see, hear, taste, touch, and smell. These data can be accepted on the basis of the reliability of our natural faculties with respect to the natural world. Theology, on the other hand takes as its starting point the divine revelations contained in the Bible. These data can be accepted on the basis of divine authority, in a way analogous to the way in which we accept, for example, the claims made by a physics professor about the basic facts of physics. (sec. Philosophy and Christian Theology, para. 2)

Yet, as pointed out by Turner (1912), while Aquinas argues that philosophy and theology are distinct areas of inquiry, they can be in agreement as affirmed in the following passage:

They are distinct, he [Aquinas] teaches, because, while philosophy relies on reason alone, theology uses the truths derived from revelation, and also because there are some truths, the mysteries of Faith, which lie completely outside the domain of philosophy and belong to theology. They agree, and must agree, because God is the author of all truth, and it is impossible to think that He would teach in the natural order anything that contradicts what He teaches in the supernatural order. (sec. Theology and Philosophy, para. 2)

Turner further observes that Aquinas' "recognition of these principles is one of the crowning achievements of Scholasticism;" and that "[a]s long as it lasted Scholasticism lasted, and as soon as the opposite conviction became established, the conviction, namely, that what is true in theology may be false in philosophy, Scholasticism ceased to exist" (para. 2).

Scholastic Pedagogy

9 – Overview. The scholastic method of analysis applied rational arguments to the study of Church dogma. Whereas the traditional study of theology was based on the literal interpretation of Scripture and the writings of the Church Fathers, later textual analysis adopted a speculative perspective that proved "a previously determined doctrine by reason or at any rate of elaborating its rational aspect. It [was] a rational and metaphysical systematization of the data of the faith. Thus the authorities of the Scriptures, . . . [was] confirmed by a veritable philosophy . . ." (Wulf, 1952, p. 282).

The scholastic method of inquiry addressed theological issues in order to confirm the veracity of articles of faith. Theologians maintained the primacy of the exegetical analysis of Scripture and employed dialectics and philosophical arguments only to confirm their "scientific character." In the mind of the scholastics, "Revelation [was] sovereign, so that at no moment [did] reason contradict faith" (p. 284).

10 - Modus Inveniendi and Modus Proferendi. The scholastic method of instruction sought to enhance the acquisition and effective communication of knowledge. This was achieved through a process of discovery known as *modus inveniendi* and a process of communicating or teaching called *modus proferendi*. These two emphases derived from exegetical analysis in which "[t]he entire treatment of the Scriptures is based upon two factors: the method of discovering what we are to understand and the method of teaching what has been understood" (Galen, 2009, p. 226). In other words, the means of understanding and of expressing the ideas in Scripture.

With respect to the *modus inveniendi*, typically, the schoolman chose the work of a renowned author that his pupils would then read critically. The master also referenced related documents. Points of disagreement in the readings were identified and presented in individual snippets of text called *sententiae*. The schoolman, through reasoned discourse, harmonized the points of contention in the sentences by demonstrating that they agreed on some level.

This agreement could be based on a philological analysis of the words of the authors. The objective was to understand the authors' meaning by reconciling ambiguities surrounding their words and statements. A second type of analysis employed the rules of formal logic to demonstrate that contradictions among meanings were due to the subjective interpretations of the reader; the contradictions were apparent and not real. In both forms of analysis, the students participated in reasoned debates on the merits of differing points of view ("Scholastic Method," *Theopedia*,).

11 - Instructional Techniques. The pedagogy of the medieval university relied on two instructional techniques for deriving meaning from written works. The first was the lecture, which Weisheipl characterizes as “the close, detailed reading (*lectio*) of a particular book recognized as a great or authoritative work of human or divine origin — for example, Aristotle in logic, Euclid in geometry, Cicero in rhetoric, Avicenna and Galen in medicine, the Bible in theology.” The *lectio* introduced the student to the significant ideas of authors of import. The second activity he notes was the “dispute,” which was an “open discussion (*disputatio*) in strict logical form of a relevant question (*quaestio*) arising from the text” (Weisheipl, 2012, sec. Advanced Information, para. 1). Latin was the common language in the university and thus the language of both lectures and scholarly debates.

Lecture

The scholastic *lectio* can trace its origin to the monastic practice of communal reading of Scripture: “The *lectio* (‘reading’) of the monks and canons precedes the *lectio* of the Scholastics. The former is *lectio divina* – sacred reading – including *meditatio* (meditation) and *oratio* (prayer); the latter takes the form of a scholarly lesson, with the *quaestio* and the *disputatio*.”⁷

12 - The Lectio. Instruction in the scholastic classroom was delivered primarily in a lecture format, or *lectio*. Unlike today, the lecture was a reading of a text. The master typically related the contents of an authoritative text and then followed with a published or personal commentary. Students listened in silence to the exposition and then reflected (*meditatio*) on the ideas presented in the text. Afterward, they were encouraged to ask questions (*quaestiones*) about issues raised in the lecture and engage in debates to resolve contradictory interpretations of the meanings of the texts (Asselt, 2011, p. 59). The *Theopedia* (n.d.) describes the *lectio* thus:

The scholastics would choose a book by a renowned scholar (called *auctor*) as a subject of investigation. By reading the book thoroughly and critically, the disciples learned to appreciate the theories of the *auctor*. Other documents related to the source document would be referenced, such as Church councils, papal letters, or anything written on the subject, be it ancient text or contemporary. The points of disagreement and contention between these multiple sources would be written down. For example, the Bible's apparent contradictions have been written about by scholars both ancient and contemporary, and so scholastics would gather all arguments concerning each contradiction, viewing them from all sides with an open mind Once the sources and points of disagreement were laid out through a series of dialectics, the two sides of an argument would be made whole so that they would be found to be in agreement and avoid contradictions. (“Scholastic Method”)

13 - Preferred Texts. The works of Aristotle and popular works of Latin grammar such as the *Ars grammatica* of the Roman grammarian and teacher of rhetoric, Aelius Donatus, were favored in the Faculty of Arts (Maurer, 1962, p. 91). The latter text consists of two parts: the *Ars minor* and the *Ars major*. The first part provides an overview of the eight parts of speech: noun, pronoun, verb, adverb, participle, conjunction, preposition, and interjection. Information is presented in a question-and-answer

⁷ See: Abstract, sec. Hugh of Saint Victor, para.2. In: Beuchot, Mauricio and Juan Tubert-Oklander, (25 Nov 2014). , “Hermeneutics in Medieval Thought” in *The Routledge Companion to Hermeneutics*. Routledge Handbooks Online. Retrieved from <https://www.routledgehandbooks.com/doi/10.4324/9781315771854.ch2>

format. The second part is more complex and deals with stylistic “do’s” and “don’t’s,” and with figurative language such as metaphor, synecdoche and allegory (“Ars Grammatica,” *Wikipedia*,).

McInerney (1963) adds other authors’ works such as Priscian’s *Institutiones Grammaticae* for logic, Porphyry’s *Isagoge* as a general introduction to logic and philosophy,⁸ Aristotle’s entire *Organon* and some *Nicomachean Ethics*. The University of Paris’ statutes of 1215 did not prescribe specific texts for the quadrivium. Of note, Aristotle’s *Metaphysics* and natural writings, “newly introduced in the West” were excluded. This “prohibition was later lifted . . . and with the passage of time other books were prescribed for the arts course (Vol. II, Pt. IV, Ch. I, sec. Universities, para. 5).

Preferred texts in the Faculty of Theology in the 1220s included the Bible and compilations of authoritative statements on biblical passages such as those found in the *Four Books of the Sentences* (*Libri Quattuor Sententiarum*) of the 12th century theologian Peter Lombard. (Marenbon, 1987, p. 17).

14 - Role of the Text. A characteristic of the scholastic method is its focus on books and other documents as the objects of inquiry. The written work, with its reflections on philosophical or theological issues, provided the substance of scholastic arguments. Ideas of great thinkers constituted the substance under analysis. The authoritative figures were not empiricists, positivists, naturalists or experimentalists, but rather philosophers, theologians and commentators. Foremost among the authoritative works referenced in the scholastic classroom were those written by Aristotle for the study of philosophy and by Thomas Aquinas for that of theology

Paul Abelson (1906) notes that medieval texts contained the content that pupils studied and often defined the extent of what the teacher knew of a given subject. Instruction consisted largely of dictation from the written work. So general was this method that the words “legere” and “docere” were synonymous and interchangeable terms (p. 35). In accordance with the pedagogy of the time, books were “read” (*legere*) but in a form different from what we understand today:

Texts *read* were texts expounded. Early medieval masters sometimes limited themselves to brief, literal explanations of their texts, and sometimes produced lengthy commentaries in which they developed their own views in detail. In the universities these two approaches became regularized as a feature of the curriculum. Texts could be *read* ‘cursorily’ (*cursorie*) or ‘ordinarily’ (*ordinarie*). *Cursory reading* was limited to presenting the sense of a text, without discussing the problems it raised, and so the records of these *readings* are not of the greatest interest to the historian. The ordinary *readings* of texts, by contrast, was as much an opportunity for the development of new ideas as for the exposition of old ones” (Marenbon, 1987, p. 17).

15 - Exegetical Reading of the Bible. Early theologians looked to the Bible as their object of inquiry. Masters in the Middle Ages later employed the exegetical techniques developed centuries earlier. In the examination of the Bible the schoolman usually would

divide the text to be studied into sections and sub-sections; then he would proceed to expound it, beginning with a literal explanation but moving into wider ranging discussion and allegorical

⁸ Barnes (2003, pg. xv) contends that Porphyry’s *Isagoge* “[was] not an Introduction to [Aristotle’s] *Categories*, rather “since it was an introduction to the study of logic, [it] was . . . an introduction to philosophy – and hence accidentally an introduction to the *Categories*.”

exegesis as he found necessary. The method for ordinary *reading* of the theologian's other textbook, the *Sentences*, was rather different. Early and mid-thirteenth-century *Sentence* commentaries – such as those by Alexander of Hales and Aquinas – do indeed divide up each section of the Lombard's text and expound it literally; but then follow a series of *quaestiones* on the problems raised by that section of the *Sentences*. But after this time it became usual to omit the introductory division and exposition of the text. Reading the *Sentences* amounted to composing *quaestiones* on the problems discussed in each part of the text. (Marenbon, 1987, p. 18)

16 - Translations by the Scholastics. A large number of Greek, Jewish and Muslim writings were translated into Latin from 1100 to about 1250 AD. Many of the texts were speculative writings that affected the theological and philosophical discourse of medieval universities. The translations originated primarily in the Mediterranean countries of Spain, Italy and Sicily where Christians, Jews and Muslims intermingled (Maurer, 1962, p. 86). The city of Toledo, in particular, was an active center for the divulgation of translated works throughout Europe in the first half of the 13th century. Naples also produced translations. Maurer (pp. 86-88) provides a summary of key texts translated during the 13th century, especially by the Toledo translators.

Turner (1912) paints a vivid picture of the challenges facing medieval schoolmen who attempted to make sense out of the writings of the ancients. Latin was the language of the scholastics, but Greek was the language of the authors of antiquity. Intermediate renditions of Greek works by Mediterranean translators and commentators added to their difficulties in finding Latin words and phrases that accurately represented the terminology found in pagan texts. Turner addresses this problem in the following passage:

Much has been said both in praise and in blame of Scholastic terminology in philosophy and theology. It is rather generally acknowledged that whatever precision there is in the modern languages of Western Europe is due largely to the dialectic disquisitions of the Scholastics. On the other hand, ridicule has been poured on the stiffness, the awkwardness, and the barbarity of the Scholastic style. In an impartial study of the question, it should be remembered that the Scholastics of the thirteenth century—and it was not they but their successors who were guilty of the grossest sins of style—were confronted with a terminological problem unique in the history of thought. They came suddenly into possession of an entirely new literature, the works of Aristotle. They spoke a language, Latin, on which the terminology of Aristotle in metaphysics, psychology etc., had made no impression. Consequently, they were obliged to create all at once Latin words and phrases to express the terminology of Aristotle, a terminology remarkable for its extent, its variety, and its technical complexity. They did it honestly and humbly, by translating Aristotle's phrases literally so that many a strange-sounding Latin phrase in the writings of the Schoolmen would be very good Aristotelean Greek, if rendered word for word into that language. The Latin of the best of the Scholastics may be lacking in elegance and distinction; but no one will deny the merits of its rigorous severity of phrase and its logical soundness of construction. Though wanting the graces of what is called the fine style, graces which have the power of pleasing but do not facilitate the task of the learner in philosophy, the style of the thirteenth-century masters possesses the fundamental qualities, clearness, conciseness, and richness of technical phrase. (sec. Details of Scholastic Method, para. 2)

17 - Effect of the Translations. The effect of the new translations on the speculative literature of the medieval world was transformational. Non-traditional ideas professed in the translations of Greek works “radically changed the content and enlarged the structure of the liberal arts.” They also “challenged many Christian conceptions about the nature of the world and of man, and accordingly involved a redefinition of Christian belief in relation to philosophy, particularly the three philosophies, which were principally those of Aristotle” (Leff, 1992, p. 311).

Medieval scholastics were presented with philosophical and scientific visions of the universe that challenged the model that they had come to accept with few reservations. On this point, Maurer (1962) writes this about the scholastics:

[They] came into possession of some of the greatest treasures of the Greek philosophical genius and the truly remarkable system of the philosophers of the Islamic countries The Greeks and Moslems taught the schoolmen the meaning and method of philosophy. Since their writings were the products of the human mind unassisted by revelation, they opened up unexpected reaches of reason and gave the schoolmen enormous confidence in the power of the human mind (p. 88).

Christian scholars and masters assimilated the ideas of pagan literature in their teachings as they reexamined their understanding of century-long doctrines they had once believed were immutably true.

Disputation

Scholastic pedagogy emphasized formal debates or *disputatio*s. The disputation was an instructional technique employed in urban schools and the *studia* of the mendicant orders. It was prominent in the 13th and 14th centuries (Verger, 1992, p. 44).

18 - Meaning of Disputation. Scholasticism was defined not only by its interest in philosophical and theological questions, but also by the teaching methodology employed by the masters (i.e., the teachers). Their pedagogy emphasized dialectical reasoning when examining the content of written works. The method places great importance on making distinctions that resolve disagreements about the meaning and significance of words and concepts. In its most organized form it was a discursive interaction between master and student called “disputation” (*disputatio*). Unlike a sophist debate that gauged success by the ability to establish the predominance of one viewpoint over another, disputation aspired to a loftier purpose: it sought to establish truth through reasoned debate.

Disputations were customarily scheduled when two authoritative texts contradicted each other on specific issues. In such cases proponents argued for and against the opposing viewpoints. In a disputation, a question or problem was normally posed by the master. Teachers with bachelor’s degrees, or talented students, took opposing viewpoints in addressing the issue. The purpose of the debate was to train students to approach problems from different points of view and defend their positions against the objections of others. Contributing to the successful outcome of a disputation were references to opposing stances of published authorities. The teacher took notes on the supporting and rebutting arguments and then submitted his position on the issue.

19 - Disputation and Dialectics. The disputations of the late medieval period followed the canons of Aristotelian logic. Reasoned discourse and debate, founded on the bedrock of dialectics, defined scholastic methodology. Wulf (1952) acknowledges the significant contribution of Aristotle to medieval

thinking when he writes that "[t]he dialectic influence of Aristotle, which could be seen in all the Western thinkers, taught them to put order into their expositions, and clearness in their vocabulary. . . . It was one of the most beneficent activities of Peripateticism" (p. 14). Aristotle set down the rules that governed dialectics in his *Topics*, a work that was first translated in 1128 by James of Venice.

The purpose of Aristotle's dialectical method was to educate the student to appreciate the arguments of opposing points of view. This required that the young aspirant be thoroughly familiar with authoritative writings and refer to them when defending his position against the objections of opponents (Maurer, 1962, p. 91). The role of Aristotelian dialectics in this exchange is summarized by Verger (1992) in his characterization of the disputation:

[It is an] oral debate conducted according to the rules of Aristotelean syllogistics. It required relevant references to the 'authorities' and served to establish, defend, or refute a particular thesis or 'case', allowed one to resolve and to develop into a body of consistent doctrine problems of every kind (philosophical, juridical, theological, etc.) which arose out of the study and comparison of texts. (p. 43)

20 - Syllogistic Debate. In its basic form the syllogistic debate examined a proposition called a *thesis* and a counter-proposition called an *antithesis*, with the intent of reconciling the disagreements between the two viewpoints. The outcome of a dialogue between opposing arguments might result in a middle proposition, the *synthesis*, or a combination of opposing arguments or an improvement in the quality of the debate (Ayer & O'Grady, 1992, p. 484).⁹ In classical philosophy, the exercise of reconciling a thesis and antithesis to achieve a "unity of opposites" followed a prescribed format:

1. A question (*quaestio*) is put forward ("It is asked whether...").
2. A provisory answer to the question is posited ("And it seems that...").
3. Principal arguments in favor of the provisory answer are presented.
4. An argument, traditionally from an authority, rejecting the provisory answer is proposed ("On the contrary...").
5. After weighing the evidence, a general response to the provisory answer is given ("I answer that...").
6. Replies to each of the initial objections is then offered. ("To the first, to the second etc., I answer that..."). ("Dialectic," sec. Medieval Philosophy, *Wikipedia*)

21 - Disputation in the Theology Course. The disputation technique was widely adopted in the theology course of the University of Paris. Disputations were held either in the classroom between master and students or among the students themselves; or in formal venues prior to the holidays such as Christmas or Easter. The extent to which disputations were scheduled depended upon the university, the faculty -- Philosophy, Law, Theology -- and the duration of the course. These forms of engagement had the effect of establishing a personal relationship between masters and students as they presented, examined and countered each other's arguments about their understanding of the ideas presented in authoritative texts.

⁹ See also Dialectic. sec. Classical Philosophy. In *Wikipedia*. Retrieved from https://en.wikipedia.org/wiki/Dialectic#Classical_philosophy.

22 - Types of Disputation in the Theology Course. The practice of advancing contrary propositions characterized the debates between masters and pupils in the theological faculty. McInerny (1963) refers to the disputations or inquiries as the *Quaestio Disputata* and the *Quaestio Quodlibetalis*.¹⁰ Marenbon classifies the disputations as ordinary and *quodlibetal*.

Ordinary disputes were the responsibility of a master who organized debates among his students. They were frequent and often occurred once a week.

The master decided on a thesis or set of theses – short statements of position answerable by ‘yes’ or ‘no’ – to be debated. . . Each disputation had two sessions. In the first session, the pupils conducted most of the argument, although the master intervened whenever he thought it useful. The pupils could each contribute in one of two ways: as an ‘objector’ (*opponens, quaerens*), putting forward arguments against the thesis or as a ‘responder’ (*respondens*), countering the objector’s arguments. A responder’s task was usually more difficult than that of an objector, since he was expected to set out his own general views on the problem at issue before answering the objection itself. In the second section, the master summarized the various arguments given by his pupils for and against the thesis and ‘determined’ the question at issue by giving his own answer and the reasoning which led him to it. (Marenbon, 1987, p. 19)

The *quodlibetal* disputations, on the other hand, were less frequent, occurring perhaps twice a year. They were normally scheduled in formal venues prior to the holidays, such as Christmas or Easter. Unlike the more restricted environment of the ordinary dispute, the master conducted this second debate publically. The disputation was open to pupils from the entire university; any student was free to raise a problem with supporting arguments. A pupil, not necessarily under the charge of the master, could be the responder and contest the argument of the presenter. Hence, “*quodlibets* were disputes about anything (*de quolibet*) raised by anyone (*a quolibet*).” Any number of theses could be debated and as in the ordinary dispute a second session was scheduled in which the master summarized his thoughts on the issues and proposed his solutions (Marenbon, 1987, p. 20).

23 - Disputation in the Philosophy Course. The disputation technique employed in the Faculty of Theology was also adopted in the Faculty of Arts. Although little detailed information exists about these disputes in the lower studies, Marenbon (2008) suggests three types of disputation that likely followed the same format as that in the theological faculty. Disputations *de sophismata* were about logic and that late in the middle ages referred to any disputation in the faculty. A second variety was the disputation *de questione*, which was about issues raised in the *scientiae reales*, i.e. issues about things addressed in the sciences such as physics and the methods of reasoning about them. Finally, there were open disputes in the *quodlibet* tradition (p. 20). In this version of the disputation, *sententiae* were consulted and referenced. These could be authored by the master himself or they could be a collection of notes or *reportatio*s of students who attended the lectures of the master (pp. 24-25).

¹⁰ For an explanation of the two kinds of disputation see Vol. II, Pt. IV, Ch. I, sec. Universities, para. 7 at <https://maritain.nd.edu/jmc/etext/hwp215.htm>

24 - Disputation and the Lower Studies. The efficacy of the disputation method employed in the higher studies presupposed that students had been previously prepared in grammar and dialectics, thus attributing a propaedeutic function to the lower studies in the university. It also ascribed special importance to original texts, commentaries, glosses, sentences and other documents as sources for argumentation; and it required memorization, previously developed through repetition, of the ideas and narratives of authoritative works (Maurer, 1962, p. 91).

25 - Criticism of Scholasticism - Scholastic universities were committed to the dialectical method, but often in excess. Their zeal minimized other forms of intellectual engagement such as traditional exegetical analysis, philological and historical analyses, and empirical verification and experimentation. The single-minded commitment to scholastic pedagogy led James Monroe to decry the "narrow pedantry" of the medieval schoolmen in his book *The Educational Ideal* (1906). The rigid adherence to dialectics was only lessened with the advent of the humanist ideal in the university environment.

VII - ST. AUGUSTINE

1 - Biography. Saint Augustine of Hippo (354 – 430 AD) was born in the Numidian city of Thagaste, in present day Algeria, where he was educated and later taught Latin grammar and literature. He founded a school of rhetoric in Carthage in 373 AD and in 383 AD taught the same subject in Rome. The following year he did the same in Milan, where Ambrose, the Bishop of Milan, introduced him to the allegorical and Platonic interpretation of the Scriptures. In 387 AD Ambrose baptized Augustine who the next year established a religious community. Augustine founded a similar community in Hippo in 391 AD when he was ordained a priest. He was named the Bishop of Hippo Regius in North Africa in 396 AD. Throughout his years in Hippo, Augustine dedicated himself to writing philosophical and theological works such as *The City of God*, *On Cristian Doctrine* and *Confessions*. He died in 430 AD. He is considered one of the important Church Father during the Patristic Period.

St. Augustine and Education

2 -- Augustine and Plato. Maurice de Wulf (1952) writes: "Plato was introduced to the Middle Ages more through the instrumentality of his discipline, St. Augustine and the neo-Platonists than by his own *Dialogues*. Thus Plato's theory of ideal-types as the stable element in things was modified and completed by St. Augustine's Exemplarism, which links up these idea-types with the Divine Essence" (p. 15).

3 – Meaning of Exemplarism. The Oxford Dictionary (n.d.) defines "Exemplarism" in philosophy and theology as "[t]he theory that things in the world exist as imperfect copies or approximations of abstract or eternally existing patterns or archetypes; especially the theory that created things are patterned after ideas eternally existing in the mind of God." The *New Catholic Encyclopedia* (2003) elaborates on this definition:

An epistemological or ontological teaching that makes extensive use of the notion of exemplar in explaining intelligent activity, both human and divine. An exemplar (Lat. *exemplum*, meaning a pattern or model) can be generally described as that in imitation of which something is made (or done) by an agent who himself determines the goal of his activity, i.e., an intelligent agent. According to this description, exemplar refers not only to a pattern or idea according to which a work is made—its usual meaning in philosophy—but also to a model for human action, as when Christ is spoken of as the Divine Exemplar. In any case, an exemplar is something whose likeness an intelligent agent seeks to realize as best he can, either in his action or in his work. Indeed it is a measure in the light of which he works to achieve a determinate effect. ("Exemplarism," sec. Introduction)

4 - Platonic Exemplarism. Plato's Theory of Forms explains the origin of sensate reality. The *New Catholic Encyclopedia* (2003) states that his theory proposes that non-material archetypes exist in the mind of an omnipotent and good being, or demiurge, who acts in accordance with a preconceived end:

In the *Timaeus* he holds that the demiurge, being good and wishing to communicate his goodness, fashioned the universe after an ideal pattern Again, in the *Laws* he maintains that the ruler of the universe has ordered all things with a view to the excellence and preservation of the whole Thus, according to Plato, the universe has been made and is ruled by an all-powerful and good being who acts in light of a preconceived end. ("Exemplarism," sec. Platonic Exemplarism, para 1)

Mortal beings intuit these archetypes when trying to understand the nature of an empirical reality that exists "apart from the mind of the demiurge" (para 1).

Early Christian philosophers like Augustine were influenced by the philosophical system known as Neoplatonism. This system of thought was founded by Plotinus in the 3rd century and combined Platonic doctrines with eastern mysticism. Its main belief was that "all existence consists of emanations from the One with whom the soul may be reunited." Elements of Plato's Theory of Forms also were part of Neoplatonism. Plato's metaphysics and epistemology, as espoused by the Neoplatonists, shaped Augustine's conception of God as a source of absolute goodness. This idea reflected, to a degree, Plato's thinking of Ideal Forms." For Plato, every entity in the world is a representation of a perfect idea of that entity. For Augustine, God is the source of all ideal Forms.

5 - Emanation. The system of thought called *Emanationism* is a "cosmogenic" theory -- not a theological theory -- about the origin of things. The Neoplatonist philosopher Plotinus (203-270 AD) was the theory's primary classical proponent. He posited that

all things proceed from the same Divine substance, some immediately, others mediately. All beings form a series the beginning of which is God. The second reality is an emanation from the first, the third from the second, and so on. At every step the derived being is less perfect than its source; but, by giving rise to other beings, the source itself loses none of its perfections. The first source, then, from which everything flows, remains unchanged; its perfection is neither exhausted nor lessened (Dubray, 1909, para. 1).

One may construe from this theory that "all things, from the highest spiritual substances to the lowest forms of matter, come from God as their first origin, matter being the last and therefore the most imperfect emanation" (Dubray, para. 2).

Contrary to the theory of evolution, which explains the appearance of past and present beings as "an ascent, a movement upwards towards a greater perfection," emanationism conceives of their appearance as a "descent." The process "begins with the infinitely perfect, and at every step the emanating beings are less pure, less perfect, less divine. The Infinite is postulated as a starting-point, instead of being the goal which the universe is ever striving to realize." In Aristotelean terms, God is distinct from all things and is their efficient cause (Dubray, para. 4).

6 -- The Primacy of Theology Wulf (1952) states that all facets of medieval society -- familial, social, political, artistic and scientific -- were permeated with religious spirit. It was the same for the schoolmen who labored over philosophical questions. In the intellectual activity of the clerics the "Christian Wisdom" of St. Augustine remained for a long time the model of all knowledge, and the zeal for theological studies was superior to the desire to develop profane knowledge." Thus, "theology was considered the highest of all studies. It was for this reason that young monks who were products of monastic and cathedral (abbatial) education schools aspired to study philosophy as a step to becoming theologians" (p. 277).

7 -- De Doctrina Christiana. Prior to the 11th century education was conceived within "the almost exclusively religious framework of the earlier monastic and cathedral schools and along the lines prescribed in Saint Augustine's *De Doctrina Christiana*; it involved the acquisition of profane or natural knowledge to serve Christian ends" (Leff, 1992, p. 307). Augustine's theological text consisted of four

volumes that were published between 397 and 426 AD. They provided guidance to Christian educators and preachers on how to discover, teach and defend the truth when Holy Scripture is under assault. In the words of Israel Galindo of Columbia Theological Seminary, "Augustine's influence on Christian education was formative. His work, *Christian Education*, provided a manual of instruction for Christian teachers, both clergy and lay. It provided a philosophical base for interpreting the Scripture and gave techniques for teaching. It was a work of considerable pedagogical importance, and it remained a classic for Christian educators for centuries" (2013, para. 2).

8 -- Augustinian Educational Principles. Saint Augustine believed in the primacy of faith. Yet, he valued reason because it set humans above all other forms of creation. To reconcile these two positions he believed that faith leads to understanding, but this "did not lessen the need to use reason, especially to avoid over reliance on the sense perceptions" (Galindo, 2013, para. 3).

As related by Galindo (para. 4), Reed and Prevost in their 1993 history of Christian education identify six educational principles that they derived from Augustine's writings:

- The teacher should help the student experience God
- The teacher should take into account the unique characteristics of each student and relate to the students as unique individuals
- Christian education should include the study of Plato, for most Christian doctrines were contained in his writings
- Teachers must recognize the image of God in persons as their rational nature, thus it is to be used as a tool to relate them to God
- Teachers should distrust the senses as a means to knowledge and use reason instead
- In the tension between faith and reason, faith must predominate.

9 -- Significance of Augustinian Education. Leff (1992) avers the importance of Augustine's educational work was its contention that the arts preceded and were subordinate to the study of theology. Also, the knowledge of philosophy was a prerequisite for the study of theology, "having as [its] *raison d'être* the putting of worldly wisdom at the service of the Christian wisdom to be found in the Bible." The practical effect of this argument was that it continued the monastic practice of instruction in literacy and numeracy and introduced "the Greek and Roman classificatory schemes of knowledge, transmitted to the Middle Ages by Boethius, Cassiodorus, and Isidore of Seville, of which the division into the three philosophies in the thirteenth century was one outcome" (pp.307-308).

Theory of Signs

10 -- Bible and Signs. The Bible was the primary object of analysis in the Patristic Era and the early Middle Ages. It was considered the Word of God and a source of revelation. Schoolmen believed that divine truths could be discovered through an analysis of sacred texts. This led to different approaches of analyzing Holy Scripture. St. Augustine, for example, proposed a theory of interpreting texts based on the meaning of "signs." His theory had the effect of infusing into textual analyses of Holy Scripture a rational approach to defining Christian doctrine.

11 - Augustine and Translation of Texts. Rowan Williams (1989) in his reflections on the *De Doctrina Christiana* writes that this treatise by Saint Augustine

has been called the first Christian essay in hermeneutics. It is not simply a discussion of biblical exegesis and the skills necessary for this, but a general consideration of how to understand strange texts, texts of an alien culture and language. Just *how* strange the Christian scriptures were to the literate late antique mind is almost impossible for those formed in an even residually Christian culture to imagine; Augustine is writing about the literature of what, from the 'civilized' point of view, is unmistakably a counter-culture' (p.1.)

One can imagine the innumerable and staggering challenges faced by educated readers of the Augustinian era as they strived to extract meaning from the Latin of the North African Bible, or the Latin versions of Greek classical works translated in the Eastern Roman Empire.¹¹

11.1 - Saint Augustine dedicated himself to demonstrating that faith could be achieved and defended through the study of Holy Scripture and the texts of Christian authors. Unlike those who advocated a literal analysis of Scripture, Augustine firmly believed in the importance of critical analysis of written texts. He analyzed scriptural interpretations that were not fully supported by logic, promoting what has been termed "skeptical philosophy" (Kirwin, 1999, p. 16). His approach to textual analysis led Augustine to stress the importance of translation of classical texts. He firmly believed that only through accurate translation could the true sense of ideas contained in books be made accessible to the reader. He was critical of those who offered imprecise translations, and marveled that knowledge "should still be in Hebrew texts which has escaped so many learned scholars." Augustine further wrote: "[Scholars] disturb me more who have made the translations more recently, and who have said to have a better grasp of the style and syntax of Hebrew words and phrases" (as cited in Leinenweber, p. 41).

Augustine's support of critical analysis of the Bible and Christian texts was acknowledged by medieval scholars. According to Henry Chadwick, "The theology and philosophy of the medieval schoolmen and the creators of medieval universities were rooted in Augustinian ideas of the relation between faith and reason" (1986, p. 1).

12 -- Alexandrian and Antiochene Traditions. During the 3rd and 4th centuries, two schools of thought -- one originating in Alexandria and the other in Antioch -- promoted different views about the spiritual interpretation of scripture. The Alexandrian Christians, represented by Origen of Alexandria, believed heavily in allegorical interpretation. The Antiochene Christians, on the other hand, represented by Diodore of Tarsus, focused more on the literal and historical meaning of the texts. Augustine, who was a Roman African, adhered to neither the Alexandrian nor Antiochene traditions and instead offered a theory of textual analysis that was intermediate between the two:

He sided against Origen and the Alexandrians in insisting that portions of Scripture have only a proper signification. In terms of abrogating the literal sense of Scripture, Augustine sided against Diodore and the Antiochenes and claimed that it can be allowed. Thus he outlines a Western view of Scriptural signification -- one not quite congruent with any of those in the East, but one with a definitive answer to the question of the interpretation of signs. (Siefert, 1999, sec. Conclusion)

¹¹ Also known as the Byzantine Empire, or the Greek East to distinguish it from the Latin West.

13 -- On Christian Doctrine and Signification. In the Prologue of *On Christian Doctrine* Augustine answers critics who object to his analytic method of deciphering the meaning of Scripture. He particularly responds to those who claim they are able to interpret Scripture, even though language is imperfect. For Augustine, language is created by man and thus, by its nature, is ambiguous.

In Book One, Augustine introduces the basics of his theory of signification. He states that there are things (*res*) that exist apart from any other forms of representation, and signs (*signum*) that symbolize things, even though strictly speaking they are also "things." He discusses "how humans ought to love God, how God's love is expressed in His use of humanity, and how people may appreciate God's love through the Scriptures, faith, and charity. Augustine also claims that those who think they understand the Scriptures, but do not interpret them to reflect charity and love, do not really understand them" ("De Doctrina Christiana," sec. Book One, para. 4, *Wikipedia*).

In Books Two and Three Augustine defines a sign as a thing that causes something else to come into the mind "as a consequence of itself." He then distinguishes between "natural" and "conventional" signs. A natural sign unintentionally leads to the knowledge of something else, as in the case when smoke indicates fire. A conventional sign is a thing that men transmit to others to represent their feelings, perceptions and thoughts. Words and written texts are conventional signs and are the primary interest of the author. For Augustine, there are two types of conventional signs:

These signs are also either proper or figurative, that is they have one or two levels of signification. The word "ox," for example is a conventional sign. In the proper sense (one level of signification), it points to the animal which is an ox. But in the figurative sense (two levels of signification), it points to one of the four evangelists. One arrives at this figuration through two levels of signification -- from the word to the animal, and from the animal to the evangelist (Siefert, sec. The Basics of Augustinian Signs, para. 3)

Augustine then discusses signs whose meanings are unknown. Ambiguous signs can be literal or figurative (ex. metaphorical, allegorical, etc.) or a combination of both. This distinction is important because errors may arise from interpreting literal expressions figuratively. The interpreter of Scripture confronted with this dilemma may ameliorate its effect by committing it to memory -- which is critical to understanding -- and then achieving mastery of the original language of Scripture (ex. Hebrew.) This will avoid the problems of imperfect and divergent translations that lead to misinterpretation of ambiguous signs. Augustine then proposes a method for distinguishing between the literal and the figurative in Scripture: "He tells us that, 'Whatever there is in the word of God that cannot, when taken literally, be referred either to purity of life, or soundness of doctrine, you may set it down as figurative . . .'" (Siefert, para. 6).

In Book IV Augustine discusses teaching and the relationship between rhetorical eloquence and teaching, which includes

various stylistic points, a discussion of inspiration, and the claim that eloquence and teaching are both to be valued. Drawing on Cicero, Augustine outlines three types of style—subdued style, moderate style, and grand style—and discusses the proper context for each. The use of these styles must be determined by subject matter as well as the audience. ("De Doctrina Christiana," Book Four, para. 2, *Wikipedia*)

Augustine concludes by considering the importance of the preacher's life, which is more important than eloquence for persuading the audience. In this regard, things (the preacher's actions) are more important than signs (the preacher's words). Prayer is essential in order to receive from God the wisdom that will be passed on to the audience. The text concludes with an injunction to humility and thanks to God that he (Augustine) has been able to discuss these topics ("De Doctrina Christiana", Book Four, para. 3).¹²

14 - Augustine's Hermeneutics. Augustine reveals his hermeneutical approach in Book I of *On Christian Doctrine*: "The fulfillment and end of scripture is the love of God and our neighbor." For Augustine, understanding Scripture is not "realized by discovering the text's historical meaning or theological meaning or even doctrinal meaning; true understanding of scripture is realized when the reader submits to the authority of the text and experiences personal transformation worked out in greater love for God and fellow man." The goal of Bible interpretation then is not to acquire knowledge and collect facts but to elicit a change in the reader (Emadi, 2011, paras. 2, 4).

Augustine as the Object of Inquiry

15 - Overview. Among scholars who extended their analyses to realms outside of the book culture, St. Augustine stands out for his analysis of himself. In this pursuit he focused on himself as the object of inquiry: his emotions, thoughts, feelings and existential moments in his life's journey. Augustine's focus on Self is all the more remarkable considering that this occurred during the Patristic Era when sacred Scripture was the primary source of knowledge. He thus enriched the pursuit of truth by extending the range of inquiry beyond the interpretation of books and the written word.

16 -- Augustine as Psychologist. Psychology in the 12th century was based mainly on the ideas of Plato, along with those of Aristotle (Wulf, 1952, p. 263). Augustine examined his own thought processes, emotions and physical drives and arrived at insights uncommon for his time. As arguably the "first psychologist," he

touched upon the motivations of infants, as well as memory, the origins of grief, and the unconscious desires and motivations of dreams. Augustine pointed out that infants are self-centered and not socially aware. He also argued that the fear of punishment was a barrier to learning in children, because fear of castigation curbed curiosity, which he believed was the easiest way to learn. When discussing grief and emotions in general, he portrayed these as part of his wider idea of inner turmoil and the battle between God and self. Augustine looked at mind-body, believing that both were essential for making up a person, with the mind superior and the body inferior. (Shuttleworth, 2011, sec. Philosophy, Psychology and Theology, para. 2)

17 -- Inquiry into Self and the Confessions. Prior to Augustine, monastic clergy focused on biblical exegesis, that is, the critical interpretation of Scripture. The Bible and its religious content was, respectively, the object and subject of inquiry in the monasteries of Western Europe. With the publication of the *Confessions* in 397-400 AD, Augustine took the object of religious inquiry in a different direction when he described his youthful excesses and eventual conversion to Christianity. In this memorable work

¹² See also *Augustine: De doctrina Christiana*, edited and translated by R. P. H. Green in 1995 and published by Oxford Early Christian Texts, Oxford, Clarendon Press.

composed in Latin, he reflected upon himself and by extension the inner workings of all men. His analysis also led him to acknowledge theological principles, many of which he took on faith. This inward journey can be characterized as a form of monastic contemplation of the relationship between Man and Holy Scripture, and ultimately of Man's relationship to God.

Self-contemplation led Augustine to identify two driving forces that moved him: the attachment to carnal pleasure and delight – sex, food, music, theater, and the search for enlightenment and spiritual fulfillment. Augustine's gift for introspection is evidenced in the *Confessions* when he relates his innermost thoughts and exposes the struggle between his carnal and spiritual selves. He recognized that humans possessed an "inner self" and "that a healthy person has inner unity, whereas inner disunity led to inner malady." This led him to conclude that by examining oneself it is possible to acquire an understanding of the intimate relationship between Man and the Divine (Shuttleworth, 2011, sec. Philosophy, Psychology and Theology, para. 1).

18 – Books of the Confessions. The *Confessions* is an autobiographical work written in Latin between 397 and 400 AD. The tome consists of thirteen "books" that relate important events in Augustine's life and his reflections on the events that led him to discover and understand God's presence in his personal journey. In this narrative, Augustine presents his personal revelations and understanding of medieval Church theology.

Two summaries of each of the books of the *Confessions* are presented below. The first summary is quoted from the revised and edited work by Kevin Knight (2017) in the New Advent website,¹³ and the second, in italics, from Cliff Notes ("St. Augustine's Confessions").

Book 1 - Commencing with the invocation of God, Augustine relates in detail the beginning of his life, his infancy and boyhood, up to his fifteenth year; at which age he acknowledges that he was more inclined to all youthful pleasures and vices than to the study of letters. --- *Augustine's infancy and early childhood. He falls ill and is almost baptized; he is sent to school to study Latin literature.*

Book 2 - He advances to puberty, and indeed to the early part of the sixteenth year of his age, in which, having abandoned his studies, he indulged in lustful pleasures, and, with his companions, committed theft. --- *Augustine's adolescence. He continues his studies; he becomes sexually mature; he steals pears with a group of friends.*

Book 3 - Of the seventeenth, eighteenth, and nineteenth years of his age, passed at Carthage, when, having completed his course of studies, he is caught in the snares of a licentious passion, and falls into the errors of the Manichaeans.--- *Augustine's early adulthood. He goes to Carthage to study; he reads Cicero's Hortensius, which inspires him with a love of wisdom; he encounters Manichaeism and becomes a Manichee.*

Book 4 - Then follows a period of nine years from the nineteenth year of his age, during which having lost a friend, he followed the Manichaeans --- and wrote books on the fair and fit, and published a work on the liberal arts, and the categories of Aristotle. --- *Augustine becomes a teacher of rhetoric; he takes a concubine; his grief at the death of a close friend drives him away from Thagaste.*

¹³ Knight's summary is based on J.G. Pilkington's 1887 translation, titled *Nicene and post-Nicene Fathers, First series*, Vol. 1. Edited by Philip Schaff. Publisher: Buffalo, NY: Christian Literature Publishing Co.

Book 5 - He describes the twenty-ninth year of his age, in which, having discovered the fallacies of the Manichaeans, he professed rhetoric at Rome and Milan. Having heard Ambrose, he begins to come to himself. --- *Augustine teaches at Carthage. He meets the Manichee bishop Faustus and is disappointed by Faustus' lack of knowledge; Augustine leaves Carthage for Rome and then Milan, where he hears the sermons of Bishop Ambrose, causing him to reject the teachings of the Manichees.*

Book 6 - Attaining his thirtieth year, he, under the admonition of the discourses of Ambrose, discovered more and more the truth of the Catholic doctrine, and deliberates as to the better regulation of his life. --- *Augustine learns more about Christianity but still cannot fully accept it; Monica arranges his marriage to a Christian girl, forcing him to send his concubine away.*

Book 7 - He recalls the beginning of his youth, i.e. the thirty-first year of his age, in which very grave errors as to the nature of God and the origin of evil being distinguished, and the sacred books more accurately known, he at length arrives at a clear knowledge of God, not yet rightly apprehending Jesus Christ. --- *Augustine reads books of Platonist philosophy, which deepen his understanding of Christianity and the nature of evil; he finally accepts the truth of Christianity and repudiates Manichaeism.*

Book 8 - He finally describes the thirty-second year of his age, the most memorable of his whole life, in which, being instructed by Simplicianus concerning the conversion of others, and the manner of acting, he is, after a severe struggle, renewed in his whole mind, and is converted unto God. --- *Augustine wavers in making a complete commitment to Christianity; after hearing various stories of conversion, he reaches a moment of spiritual crisis. Hearing a voice say, "Take and read," he picks up the Epistles of St. Paul and reads a passage that convinces him to give up his worldly career and devote himself to God.*

Book 9 - He speaks of his design of forsaking the profession of rhetoric; of the death of his friends, Nebridius and Verecundus; of having received baptism in the thirty-third year of his age; and of the virtues and death of his mother, Monica. --- *Augustine resigns his position and withdraws from the world. After his baptism, he sets out for Africa, but is delayed at Ostia, where Monica dies.*

Book 10 - Having manifested what he was and what he is, he shows the great fruit of his confession; and being about to examine by what method God and the happy life may be found, he enlarges on the nature and power of memory. Then he examines his own acts, thoughts and affections, viewed under the threefold division of temptation; and commemorates the Lord, the one mediator of God and men. --- *Examination of memory and the temptations of the senses.*

Book 11 - The design of his confessions being declared, he seeks from God the knowledge of the Holy Scriptures, and begins to expound the words of Genesis 1:1, concerning the creation of the world. The questions of rash disputers being refuted, "what did God before he created the world?" that he might the better overcome his opponents, he adds a copious disquisition concerning time. --- *Explanation of the first verse of Genesis, in which God begins the creation of the world; discussion of the nature of time and eternity.*

Book 12 - He continues his explanation of the first chapter of Genesis according to the Septuagint, and by its assistance he argues, especially, concerning the double Heaven, and the formless matter out of which the whole world may have been created; afterwards of the interpretations of others not disallowed, and sets forth at great length the sense of the Holy Scripture. --- *Explanation of the second verse of Genesis, with emphasis on the Word (Christ); discussion of how scripture may be interpreted*

Book 13 - Of the goodness of God explained in the creation of things, and of the Trinity as found in the first words of Genesis. The story concerning the origin of the world (Genesis 1) is allegorically explained, and he applies it to those things which God works for sanctified and blessed man. Finally, he makes an end of this work, having implored eternal rest from God. --- *Explanation of the seven days of creation (the remainder of Genesis Chapter 1).*

VIII - LIBERAL ARTS

Definition and Meaning

1 - Modern Definition. The *Encyclopedia Britannica* (2010) defines “liberal arts” as those studies that impart general knowledge and develop general intellectual capacities in contrast to professional, vocational, or technical knowledge and skills. With reference to the curriculum, it notes the following:

In modern colleges and universities the liberal arts include the study of literature, languages, philosophy, history, mathematics, and science as the basis of a general, or liberal, education. Sometimes the liberal-arts curriculum is described as comprehending the study of three main branches of knowledge: the humanities (literature, language, philosophy, the fine arts, and history), the physical and biological sciences and mathematics, and the social sciences. (“Liberal Arts”)

2 - Modern Liberal Arts and Language. In the abstract of her paper, “The liberal arts and the end of education,” Kathleen Haney (1998) writes:

The liberal arts of the traditional undergraduate curriculum provided the skills to liberate the student's linguistic powers so that he or she could read, speak, and understand natural language in all its functions. To educate human persons to master language is to encourage students to take possession of their natural powers so that they can express themselves, understand what others say, and reason together. The arts of natural language lead to mastery of the mathematical arts which use a language that is no one's mother tongue.

3 - Definition of Classical Antiquity. The liberal arts as originally conceived in Greece and Rome differs from its current usage. In classical antiquity it referred to a body of knowledge and a skill-set that was deemed essential for a free man (*liber*) to conduct himself with dignity and efficiency in civil affairs. Referred to as the *artes liberales*, the liberal arts differed from the knowledge and skills required of the *artes serviles* or *artes mecanicas*, which prepared men for manual labor and the trades associated with the indentured segments of the population. The *New International Encyclopædia* (1905) states the following about the liberal arts:

The distinction between the liberal arts and the practical arts on the one hand, and philosophy on the other, originates in Greek education and philosophy. In the *Republic* (Bk. xi.) of Plato, and the *Politics* (viii. 1) of Aristotle, the “liberal arts” are those subjects that are suitable for the development of intellectual and moral excellence, as distinguished from those that are merely useful or practical. The distinction was always made, by the Greek theorists, between music, literature in the form of grammar and rhetoric, and the mathematical studies, and that higher aspect of the liberal discipline termed philosophy. Philosophy was sometimes called the liberal art *par excellence*. (as cited in “Liberal Arts,” sec. G, *Wikiquote*)

4 - Classical Origin of the Liberal Arts. The schoolmen in the Middle Ages searched for a curriculum model and found it in Plato's description of an educational system that prepared the leaders of the City. Willmann (1907) writes that in the *Republic* Plato proposed an ideal course of studies that perfected the “Pythagorean course” (para. 4). “Utopia,” Plato believed, “rests on proper education. Laws may not be necessary if all citizens learn from childhood to rule themselves well. In order to control the

direction of the growth of the soul, all children began their education with stories and physical education” (Haney, 1998, para. 5). Plato’s program of studies begins with

musico-gymnastic culture, by means of which he aims to impress upon the senses the fundamental forms of the beautiful and the good, i.e. rhythm and form (*aisthesis*). The intermediate course embraces the mathematical branches, viz. arithmetic, geometry, astronomy, and music, which are calculated to put into action the powers of reflection (*dianoia*), and to enable the student to progress by degrees from sensuous to intellectual perception, as he successively masters the theory of numbers, of forms, of the kinetic laws of bodies, and of the laws of (musical) sounds. This leads to the highest grade of the educational system, its pinnacle (*thrigkos*) so to speak, i.e. philosophy, which Plato calls dialectic, thereby elevating the word from its current meaning to signify the science of the Eternal as ground and prototype of the world of sense. This progress to dialectic (*dialektike poreia*) is the work of our highest cognitive faculty, the intuitive intellect (*nous*). In this manner Plato secures a psychological, or noetic, basis for the sequence of his studies, namely: sense-perception, reflection, and intellectual insight. (Willmann, para. 4)

5 - Cassiodorus’ Definition. Cassiodorus (485-555 AD) explains his understanding of the etymology of “liberal arts.” The Latin term “liber,” he contends, means “either book or free.” McNerney (1963) explains his reasoning thus: “Book is signified by ‘liber’ because in early times writing was done on bark freed from trees. Thus, ‘liberal’ in the phrase ‘liberal arts’ refers to the fact that books are involved in their pursuit. Cassiodorus thus does not attach the same significance to the term in this context as did the Greeks” (Vol. II, Pt. I, Ch. V, para. 3). Regarding the origin of the term “art,” he suggests that “the word has come from the fact that art binds and limits (*artet*) us with its rules, or it may come from the Greek term for excellence or skill (*arete*). From this passage, then, one might conclude that liberal arts are those skills or rules gathered in books” (para. 4).

6 - Medieval Definition. Otto Willmann (1907) in the *New Advent Catholic Encyclopedia* writes:

The expression *artes liberales*, chiefly used during the Middle Ages, does not mean arts as we understand the word at this present day, but those branches of knowledge which were taught in the schools of that time. They are called liberal (Latin *liber*, free), because they serve the purpose of training the free man, in contrast with the *artes illiberales*, which are pursued for economic purposes; their aim is to prepare the student not for gaining a livelihood, but for the pursuit of science in the strict sense of the term, i.e. the combination of philosophy and theology known as scholasticism. (para. 1)

Medieval scholars such as Boethius, Cassiodorus and Augustine legitimized the concept of the liberal arts in the early Middle Ages. The significance they attributed to its meaning and substance was considerable.

7 - Contents of the Liberal Arts. Willmann (1907) describes the content of the basic curriculum of medieval liberal arts in the following passage:

They are seven in number and may be arranged in two groups, the first embracing grammar, rhetoric, and dialectic, in other words, the sciences of language, of oratory, and of logic, better known as the *artes sermocinales*, or language studies; the second group comprises arithmetic,

geometry, astronomy, and music, i.e. the mathematico-physical disciplines, known as the *artes reales*, or *physicae*. The first group is considered to be the elementary group, whence these branches are also called *artes triviales*, or *trivium*, i.e. a well-beaten ground like the junction of three roads, or a cross-roads open to all. Contrasted with them we find the mathematical disciplines as *artes quadriviales*, or *quadrivium*, or a road with four branches. The seven liberal arts are thus the members of a system of studies which embraces language branches as the lower, the mathematical branches as the intermediate, and science properly so called as the uppermost and terminal grade. (para. 1)

8 - Significance of Number Seven. The number 7 as it relates to the liberal arts had a special meaning. The number has always been attributed to the spiritual or to the mysterious God force. It appeared in classical and medieval literature and the Bible and sacred writings in a variety of contexts. It gave special significance to the meaning of liberal arts. Willoman (1907) make this point in the following passage:

By the number seven the system was made popular; the Seven Arts recalled the Seven Petitions of the Lord's Prayer, the Seven Gifts of the Holy Ghost, the Seven Sacraments, the Seven Virtues, etc. The Seven Words on the Cross, the Seven Pillars of Wisdom, the Seven Heavens might also suggest particular branches of learning. The seven liberal arts found counterparts in the seven mechanical arts; the latter included weaving, blacksmithing, war, navigation, agriculture, hunting, medicine, and the *ars theatrica*. To these were added dancing, wrestling, and driving. Even the accomplishments to be mastered by candidates for knighthood were fixed at seven: riding, tilting, fencing, wrestling, running, leaping, and spear-throwing . . . As counterparts of the liberal arts are found seven higher sciences: civil law, canon law, and the five branches of theology entitled speculative, scriptural, scholastic, contemplative, and apologetic. (para. 8)

9 - Hierarchy and the Liberal Arts. Wulf (1952) writes that Pseudo Dionysius and Augustine were the great inspirers of "all those who delight in drawing up hierarchical tables of reality, with God at the summit" (p. 104). The curricular model suggested in antiquity exercised great influence over early higher education in Europe. Leff (1992) notes as much when he writes that "[m]edieval universities gave institutional form to a hierarchical notion of knowledge which they inherited from antiquity." He states that by the 12th century a hierarchical program of studies was clearly marked out, with liberal arts as the base, philosophy in the center, and theology at the top (p. 307). This tiered curricular model prevailed well into the 16th century when the Jesuits formally proposed their educational system in the *Ratio Studiorum*.

10- Propaedeutic Function. The liberal arts were not initially conceived as a sequenced and organized program of studies. Rather, in practice "they were a heterogeneous grouping without any unity other than their common introductory function" (Leff, 1992, p. 308). Centuries later they were conceptualized as seven areas of studies in the 6th-century writings of Boethius, Cassiodorus and Martianus Capella (Curtius, 1973, p. 37).

Since antiquity, the lower studies known as the liberal arts were distinguished from the higher study of philosophy and theology. The propaedeutic role of the liberal arts was acknowledged in Roman education as a preparation for the practice of law and public functions. As important, "it was in turn inherited by the Middle Ages and adapted above all by Saint Augustine to Christian objectives of mastering the meaning of Scripture as the repository of Christian wisdom founded upon faith and the love

of God.” Towards the end of the Middle Ages, “profane knowledge” was extended from the exclusive study of theology to include those in law and medicine (Leff, pp. 307-308).

Kathleen Haney (1998) points out that “[t]he liberal arts were the locus of the unity of the university” (para. 9). Medieval European universities based their studies on the seven liberal arts: grammar, rhetoric, logic, geometry, arithmetic, music and astronomy. The medieval student advanced progressively from the studies of grammar, logic and rhetoric (referred to as the trivium) to the symbolic thinking required in the sciences and mathematics consisting of arithmetic, geometry, astronomy and music (known as the quadrivium). These seven arts prepared the student for dialectical reasoning and search for truth through philosophy.

Gordon Leff (1992) in his article “The Trivium and the Three Philosophies” explains the role of the liberal arts in medieval education:

Both Plato (Republic II, III, VII) and Aristotle (Politics VII, VIII) described a basic education which comprised a grounding in elementary grammar, literature, music, and arithmetic, and which prepared the way for the advanced study of mathematics and finally philosophy, whose object was wisdom, the supreme end of knowledge. That view of the propaedeutic role of the ‘liberal arts’, as they were called, arts for the free, as opposed to the servile, man passed into Roman education, where they had the directly practical end of preparing for a training in law and public life. It was in turn inherited by the Middle Ages and adapted, above all by Saint Augustine, to Christian objects of mastering the meaning of Scripture as the repository of Christian wisdom founded upon faith and the love of God. By the time of the emergence of universities in the twelfth century, theology, as the end of profane knowledge, had been joined by the more practical ends of law and medicine. (pp. 307-308)

11 – Liberal Arts and Philosophy. Farrell (1938) observes that the liberal arts disciplines’ emphasis on classical works of antiquity prepared the way for scholastic philosophy, especially Aristotelean metaphysics. This, he avers, was accomplished “by laying a sound foundation for an adequate understanding, interpretation and application to human life of the sciences, both natural and social, and by providing a rational basis for faith — becoming the handmaid of religion, which is the proper and supreme integrating principle of knowledge” (p. 403).

12 – Liberal Arts and Theology. The liberal arts served as the core of the early medieval curriculum because of their value in preparing the clergy for the study of Holy Scripture. During the early Middle Ages a pattern of education emerged in which the study of grammar and logic served as preparation for the advanced study of theology. Teaching opportunities were available to those who excelled in the liberal arts program and then moved on to the theology program. Marenbon (1987) writes that “[d]uring the following decades it became a regular feature of scholastic life for a teacher of arts to go on to become a student, and then finally a teacher of theology” (p. 10).

Trivium and Quadrivium

13 - Horizontal and Vertical Integration of Studies. Wulf (1952) highlights the significance of the seven liberal arts in Capella’s *Satyricon*: “The Middle Ages eagerly studied this encyclopedia because it was an attempt at a classification of human knowledge and drew up a plan of study” (p. 80). The liberal arts described by Capella and reiterated by Cassiodorus provided a program of studies that led to the acquisition of knowledge and wisdom.

The schoolmen in the Middle Ages discovered a curriculum model in Plato's description of an ideal educational system. They identified two sets of studies that were horizontally and vertically linked and that they believed formed the Ideal Citizen. The first set was comprised of the verbal studies of grammar, rhetoric and logic (or dialectics) and was known as the trivium (the threefold way to wisdom). These disciplines were utilitarian because they prepared the individual for effectively persuading others through disciplined logic. The trivium was followed by four studies called the quadrivium (the fourfold way), which were more abstract. They prepared the mind for the pursuit of wisdom through the study of philosophy. The quadrivium consisted of the sequential arrangement of the mathematical disciplines of arithmetic, geometry, astronomy and music.

14 – Contents of the Trivium. The first division of the liberal arts was known as the trivium, or *artes triviales*. It consisted of three disciplines: grammar, logic and rhetoric.

Grammar. Sister Miriam Joseph in her book *The Trivium: The Liberal Arts of Logic, Grammar, and Rhetoric* (2002) describes the study of grammar as the symbolic representation of objects experienced by the senses. It is concerned with the mechanics of language; i.e., the art of inventing and combining symbols to express thought.

The medieval study of grammar was based on the works of the grammarians Donatus and Priscian. Donatus, celebrated throughout Rome in the 4th century, earned renown for his introduction to grammar for beginners: the *Ars Minor*, which explained the eight parts of speech and prepared the student for advanced studies, and the *Ars Major*, which dealt with conventions of speech. Priscian was born in Caesarea, Mauritania, and was active in the early 6th century. He was known for his monumental eighteen-book opus titled *Institutio de Arte Grammatica*. In the Latin grammar classes the works of these two authors were supplemented by the works of Virgil, Seneca, Horace, Terence, Juvenal and others, as well as Christian writers like Boethius and Gregory of Tours (Wulf, 1952, p. 54).

Logic. Logic encompassed the use of language to develop "the art of thinking," or the mechanics of thought. It involved the skills of analysis, of differentiating true from fallacious arguments and reconciling contradictions, and of producing unassailable factual knowledge (Joseph, 2002). The discipline of logic occupied the most important position in the trivium in the 11th and 12th centuries.

Marenbon (2008) writes that the study of logic "was based around the Boethian curriculum that had come into general." He notes that in 1110 AD Abelard stated that seven books written by three authors anchored the curriculum. Two of the works were by Aristotle: *Categories* and *On Interpretation*. Four books were authored by Boethius: *On Division*, *Topics*, *Categorical Syllogisms* and *Hypothetical Syllogisms*. The final work, the *Isagoge*, was authored by Porphyry (p. 65).

Rhetoric. Language and logic skills were employed to arrive at sustainable propositions. Rhetorical skills were required to communicate these propositions to others and convince them of their validity. From the 5th to the 16th century this rhetorical goal was achieved by consulting the works of Cicero and Quintilian. This assertion is based on the *Heptateuchon* of Theodoric of Chartres, which discussed Plato's division of the sciences into logic, ethics and speculative science (Wulf, p. 54).

15 - Scholae Triviales. Aldo Scaglione in his 1986 work on the liberal arts and Jesuit colleges writes that in "most 'liberal' or non-vocational schools, the trivium was the basis for the curriculum, with the addition of rudimentary arithmetic and some music for the simple purpose of training to sing in the church. Hence the name *scholae triviales*" (p. 14). Graduates from these schools had direct access to the universities. A number of these "secondary" institutions, especially those administered by the Brethren of

the Common Good, expanded the curriculum to include other disciplines, some of them from the traditional quadrivium and others normally offered by the university, such as moral philosophy, natural philosophy, and some study of the Scriptures (beyond the basic Doctrine). The inclusion of pre-university subjects in the *scholae triviales* was emulated by Melanchthon, Johannes Sturm and other notables in their colleges (p. 14).

The *scholae triviales* played an important role in the preparation of students for university studies in Paris. They took the place, albeit unsystematically, of a "secondary" school system before university colleges had reached their maximum organization in the early 16th century. As Scaglione notes: "Before the development of the college of interns, university was entered after the 'trivial' school (mostly a monastery or cathedral school) which started with reading and writing before imparting the rudiments of the trivium (mostly grammar) and rarely often also some quadrivium (mostly arithmetic) along with some church singing" (p. 27). Since the only entrance requirement was mastery of Latin grammar, an applicant could enter the university as early as twelve years of age (p. 27).

By the end of the 15th century Humanism re-prioritized the studies of the trivium. The humanist curriculum attributed great value to rhetoric and a diminished relevance to dialectics which "began to be taught as an integral part of the *artes sermocinales* instead of being offered only as the foundation of philosophy and theology in the higher stages of the graduate curricula" (Scaglione, p. 29).

16 - Logic vs. Rhetoric. Scholastic philosophers and literary scholars differed in the emphasis they placed on the disciplines of the trivium. The first "regarded logic as the culminating achievement and true foundation even for an understanding in depth of the meanings and values of language, grammar's special domain." The second defended literary values and "continued to uphold rhetoric as the superior teacher of the effective use of language for communication and expression" (Scaglione, 1986, p. 9).

These contrasting views were reconciled to an extent by the religious reformers of the 16th century who exhibited a renewed interest in the search for Truth. They considered logic or dialectics as a foundation discipline for the latter studies of the quadrivium. These advanced disciplines were considered "little more than aspects of a philosophical study of the world of nature and man, the macrocosm and the microcosm, hence formal aspects of the natural and moral philosophy, to be studied next, after the trivium. Furthermore, the arts of the quadrivium, namely mathematics, music astronomy, and geometry, were intimately connected as aspects of a mystical, divinely established bond among the parts of the universe and between man and his environment" (Scaglione, p. 9).

17 - Contents of the Quadrivium. The second division of liberal arts was called the quadrivium, or *artes quadriviales*, and consisted of the mathematical sciences: arithmetic, geometry, astronomy and music. Whereas the studies of the trivium afforded the student grammatical, logical and rhetorical tools to persuasively articulate a point of view, the four studies of the quadrivium, or etymologically "the place where four roads meet," introduced the student to abstract thinking through mathematics. Abstraction was deemed necessary to exercise the highest form of intellectual pursuit: philosophy.

The four disciplines of the quadrivium dealt with matter and quantity as proposed by Plato in the seventh Book of the *Republic*. The four disciplines of the quadrivium were horizontally linked through the concepts of space and time: Arithmetic introduces numbers, Geometry deals with numbers in space, Music treats numbers in time (that is, the study of harmonics) and Astronomy considers numbers in space and time. This horizontal representation of the disciplines followed a logic that links them sequentially and then vertically with the disciplines of the trivium.

17.1 - The divisions of the quadrivium were originally conceived by Pythagoras. They were implicit in his early writings and can be considered the source of Plato's Ideal Curriculum. Again, there was horizontal integration of the four disciplines. Proclus in commenting on the Pythagorean organization of mathematical knowledge explained the relationship of the four disciplines in this way:

The Pythagoreans considered all mathematical science to be divided into four parts: one half they marked off as concerned with quantity, the other half with magnitude; and each of these they posited as twofold. A quantity can be considered in regard to its character by itself or in its relation to another quantity, magnitudes as either stationary or in motion. Arithmetic, then, studies quantities as such, music the relations between quantities, geometry magnitude at rest, spherics [astronomy] magnitude inherently moving (1992, pp. 29-30).

18 - Arithmetic and Geometry. John North (1996) writes that Boethius's *De Institutione Arithmetica* was the primary text used to teach numeracy, with Euclid's *Elements* serving in a supplementary capacity, since it contained many arithmetic concepts. There were, however, other texts that appeared on numbers and their practical applications.

Geometry in the classical and medieval period was seen as both a practical and a speculative science. From the practical viewpoint, geometry employed numbers for architecture. Geometry was later applied to the study of statics, as in *De Ponderibus* by Jordanus, and of optics, of which numerous texts abounded (North, p. 347). But more so, it was found to be useful to "find the size of the heavens and of the earth, and the distance separating them, not to mention other proportions that are a source of wonder" (Glorieux as cited by North, 346).¹⁴ As a speculative science it discovered and represented spatial relationships through the use of logic and lent a character of abstraction to its study. Hence, geometry served as a bridge between the practical uses of arithmetic and the speculative uses of geometry for astronomy.

The distinction between the practical and the speculative natures of mathematics was commented on by Plato and Aristotle. By the 12th and 13th centuries their ideas were firmly acknowledged by scholars. Euclid's text was the main work adopted for the study of geometry; "there is abundant evidence that Euclid was studied by many in order to prepare the way for the study of the *Almagest* – 'which is the principal goal of our study', as Robert of Ketton said" (North, p. 346).

19 - Music. The study of music was held in high esteem before the rise of the universities because of its importance in Christian worship. While there was a practical side related to vocal and instrumental music, the Pythagorean mathematical interpretation of music as "a means to the perfection of the spirit, a point that Boethius made strongly" led to theoretical discussions of the nature of harmony and especially the theory of the monochord. More than a hundred medieval texts can be found that addressed this theme, the most influential being the *De Institutione Musica* of Boethius (North, 1996, p. 343). This work was a continuation of his *Arithmetica*, which examined "the arithmetical, geometrical, and harmonic ratios of the numbers, 6, 8, 9, and 12." Boethius's paradigm embraced two Ideals: "The concept of *musica humana* concerned the supposed harmony of psychical and bodily function. That of *musica mundana*, with each of the heavens having its own chord, would have reminded the student of astronomical pleasures in store." (p. 344) Boethius's works on music were quite popular; they were taught in every medieval university where the study of music was included in the arts curriculum.

¹⁴ See Glorieux, P. *La Faculté des arts et ses maîtres au XIIIe siècle*, Paris, 1971.

20 - Astronomy. The *Almagest* was the astronomy text of Ptolemy. North (1996) writes that astronomy teaching described a simplified model of the universe that consisted of planets embedded in moving concentric spheres in the heavens and a set of concentric spheres at the sublunary or terrestrial levels. This echoed closely the Aristotelian cosmological paradigm. While Ptolemy's *Almagest* was a serious source consulted by scholars, it was rarely used in the classroom. Rather, it "was replaced by digests such as that of Alfraganus, . . . or by one of several derivative works with the generic title *De sphere*" (p. 348). Alfraganus was a 9th century Muslim astronomer who authored the *Elements of Astronomy on the Celestial Motions* (833 AD), which was a summary of Ptolemy's *Almagest*. It was translated into Latin in the 12th century and revised to reflect findings of Islamic astronomers (Dallai, 2010, p. 32). Other texts include that of the monk, astronomer and teacher at the University of Paris, Johannes de Sacrobosco. His text *De Sphaera Mundi* was published in 1230 and was based heavily on the *Almagest*. It was widely used in the 13th century and even commented on by the Jesuit Christopher Clavius.

The pedagogy for teaching astronomy was far from empirical or utilitarian. While quadrants and astrolabes were used as part of instruction, they were merely employed for time-telling, and not for the collection of data. In sum, "Astronomy was probably never handled in a truly practical way in the *quadrivium*, in the sense of requiring that observations be made, recorded, and reduced" (North, p. 350). The transmittance and examination of cosmological models was the main focus of instruction.

21 - Uneven Adoption of the Trivium and Quadrivium. Even though the trivium took precedence over the quadrivium in the universities, the study of the three verbal disciplines was uneven in the Middle Ages. In the universities of Paris, Oxford and Cambridge rhetoric was incorporated into the study of grammar, while in the southern universities especially in Bologna and Padua where the study of law was paramount, rhetoric was predominant. In the northern universities the emphasis was on theology with the arts relegated to a preparatory role for the study of theology, thus confirming the close relationship between the two faculties. Within this context, attention in the arts program was given to "logic as the dominant subject in the old trivium and the three philosophies supplementing the old quadrivium in different proportions." Furthermore, "at Paris greater attention was given to practical and metaphysical philosophy than at Oxford, where the emphasis was on natural philosophy" (Leff, 1992, p. 309). One can generalize that "the arts faculties of southern universities [Bologna, Padua and Salamanca] never attained a comparable status with those in Paris and Oxford, where they were the dominant element both numerically and juridically" (p. 309).

The higher-division studies of the quadrivium were irregularly treated in European schools. They were at-times accompanied and supplanted by the study of other disciplines, such as the sciences. Alchemy and medicine, for example, were studied in Montpellier, Salamanca and other centers, and natural history was offered at Monte Cassino and Chartres (Wulf, 1952, p. 56). However, in the general scheme of things, "The quadrivium never fared very well under any clime" (Scaglione, 1986, p. 30). The humanists downgraded its importance in their curricula. Scientific work, on the other hand, such as those by Euclid, Strabo and Ptolemy were added to the classical "ancient literature," thus making the sciences part of the *humanitatis*. North (1996) comments on the different degrees of implementation of the quadrivium. With respect to Spain and Portugal, he writes:

From the perspective of the Iberian peninsula, however, the picture so far given must seem a distorted one, for there the technicalities of Aristotelian natural philosophy and Greek and Arabic mathematics and astronomy were well established, and this at a time when the monastic teaching of the *quadrivium* elsewhere meant little more than the abacus, the ecclesiastical calendar, the practice of plainsong, and a little practical geometry. (pp. 339-340).

It can be said that "[i]n the Paris colleges the quadrivium was little represented, and in this relative sense the Jesuit colleges will mark an increase in the role of these disciplines" (p. 30). Illustrating this point, one can look to Jerome Nadal who taught mathematics in the college he founded in Messina in 1548.

Medieval Liberal Arts Curriculum

22 – Overview. Educators develop conceptual frameworks in order to identify and achieve instructional goals. A framework that is based on an Educational Ideal assists professionals in defining the purpose and organization of a curriculum, in identifying didactic materials and in developing effective pedagogies. This was the case in early medieval education. A number of medieval authors contributed to the idealization of the seven liberal arts as the content of a viable curriculum model. Encyclopedic textbooks containing information on the liberal arts and their divisions were instrumental in shaping the curricula in the religious houses.

23 - Early History of Liberal Arts. Graves (1910) comments on the change undergone by the studies traditionally associated with the liberal arts from the monastic to early medieval period. He explains that the division of studies of the seven liberal arts, "which was adopted by the monastic and other medieval schools," was the product of a "gradual evolution from Graeco-Roman days" (p. 15). The core concepts originated with Plato,

whose scheme of education included two groups of subjects, -- the lower, consisting of gymnastics, musical practice, and letters, and the higher made up of arithmetic, geometry, musical theory, and astronomy. These 'liberal' subjects, during the later days of Greece and the Roman Republic, gradually combined with the 'practical studies of the sophists, -- rhetoric and dialectic, and, after various changes, the pagan course settled down about the beginning of the Christian era into grammar (or literature), rhetoric, and dialectic, arithmetic, geometry, music, and astronomy. (Graves, p. 15)

Early monastic education was limited to training in basic literacy and numerical skills. By the time of St. Benedict, the monasteries began to recognize the value of pagan literature. They also became acquainted with the Greco-Roman concept of education, understood in its "condensed and rather dry form known as the *Seven Liberal Arts*" (Graves, pp. 14-15). Graves points out that at no time after the 6th century did the Church show itself hostile to the pagan curriculum. However, he notes that the emphasis on the subjects of the liberal arts varied at different times:

Up to the twelfth century, since an acquaintance with the Latin language and literature was absolutely necessary, and dialectic and mathematics were as yet but little developed, stress was laid upon the study of grammar and rhetoric, but . . . in the later centuries of the Middle Ages, when cogency in thought an argument had become all important, dialectic was emphasized, and

when mathematical knowledge came in with the Saracens, arithmetic, geometry, and astronomy were especially favored by the stronger minds. (p. 17)

Graves (1910) takes pain to clarify that although the seven studies of the liberal arts curriculum were clearly defined, their substance varied and evolved with the times. Their content was often broader than what their names implied. Grammar was an introduction to literature and the acquisition of Latin through the reading of proverbs, epigrams and fables of numerous authors, the first and foremost being Virgil, as exemplified in his *Aeneid*. After gaining some proficiency in Latin, the students studied classical and Christian authors and became familiar with the Greek language primarily through translations. The medieval study of rhetoric was intended to prepare individuals to write letters and draw up legal documents. Some knowledge of history and law was thus required. Dialectic or formal logic prepared individuals for the study of metaphysics.

Arithmetic, first used in calculating Church festivals, expanded by the 10th century to include Arabic notations and symbols. Basic geometry was initially useful for geography, surveying and topographical calculations and then was enlarged to include the geometry system of Euclid. The study of astronomy was at first dedicated to calculating the course, magnitude and changes of celestial bodies and the seasons, and later was expanded to include concepts from Ptolemy's *Almagest* and Aristotle's *On the Heavens*. Finally, music at first comprehended only sacred compositions but later covered the history and theory of music. Graves concludes that "as the Middle Ages developed, while the content of the course of study in the monastic as in the other schools varied from time to time, it could at no period be considered really meager" (pp. 18-19).

24 - Important Treatises. According to Graves (1910), in the 5th and 6th centuries the liberal arts was the subject of several important and influential treatises. Martianus Capella (360-428 AD) wrote a treatise on the liberal arts in the early 5th century and St. Augustine (354-430 A.D.) authored treatises on all of the liberal arts, with the exception of astronomy. The effect of Augustine's recognition of liberal studies, in particular, was notable because it "fully influenced the Western world in accepting this curriculum" (p. 16). The liberal arts also became widely known through the writings of Boethius (481-525 AD) who displayed a particular interest in logic and ethics and how their content related to medieval dialectics.

Graves observes that in the 6th century, Cassiodorus (485-585 AD) "regularly used the term 'liberal arts' and justified this specific number by reference to the seven pillars of wisdom mentioned in Proverbs. From this time on the seven liberal arts were recognized by the Christians as the orthodox secular studies preparatory to theology" (p. 16). Isadore of Seville (560-636) followed and fixed the term "liberal arts" and the classification of two sets of disciplines as the trivium and the quadrivium in his encyclopedic work *Etymologie* or *Origines* (pp. 16-17). In the 8th century Alcuin of York (735-804 AD), with the support of Charlemagne, "transplanted into Germany the culture and learning of Ireland. He introduced the trivium and the quadrivium into the school of the palace, and his books survived him as manuals" (Wulf, 1952, p. 118). Leff (1992) concludes that "until the 1230s the trivium was more studied than the quadrivium; that remained true especially of Paris" (p. 308).

25 - Capella. The medieval publication of texts on the liberal arts begins with the Latin prose writer Marcius Capella (360-428 AD) in Carthage about 420 A.D. His work, *Satyricon*, meaning "a full dish," is an extended allegory about the seven liberal arts. The first two books, "Nuptiae Philologiae et Mercurii," tell the story of Mercury, symbolizing intellectual and profitable pursuit, who presents his bride Philology with seven maidens who are to attend to her needs. Each maiden represents one of the

liberal arts and each's contribution is discussed as an area of study. The allegory idealized and promoted liberal studies and was widely adopted in one form or another from the 5th to the 12th century. It also captured the imagination of medieval artists who produced a panoply of elegant paintings that stylized the appearances of the seven arts.

26 – Saint Augustine. Timothy Leonard (n.d.) writes the following about St. Augustine of Hippo's view of liberal education:

Of the two great traditions in liberal education, the oratorical and the philosophical, Augustine is distinctly an orator. He believed more in imparting the truth to students than in supporting the individual student's quest for truth. He used the dialogical mode [dialogue] as one who knows the truth, unlike the Greek philosopher Socrates, who used dialogue as one who does not know anything. He thus established a Christian philosophy, which has influenced scholars and educators throughout the history of the West. (sec. Influence, para. 1)

The writings of Augustine influenced the evolution of medieval pedagogy. His ideas supported the attempts of Cassiodorus in the 6th century and foreshadowed those of Isidore of Seville in the 7th century to enrich the study of Holy Scripture by alluding to the liberal arts. The scholar and headmaster Alcuin adopted Augustine's textbooks on Christian education in the 8th century and introduced the concepts of trivium and quadrivium in Germany. Augustine's reflections on the relationship between reason and faith presaged Thomas Aquinas' reconciliation of philosophy and Christian doctrine in the 13th century and his theory of education was consulted in the development of Christian humanism by the Dutch scholar Erasmus in the 15th and 16th centuries (Leonard, sec. Influence, para. 2).

27 - Boethius. Anicius Manlius Severinus Boëthius (480-524 AD) was a Roman senator, consul, and philosopher of the early 6th century. He served under Theodoric the Great, the Ostrogoth king who reigned after the last Roman emperor Romulus Augustulus was deposed in 476 AD by the barbarian king Flavius Odoacer. Boethius was a scholar who translated works of classical antiquity and thus contributed to monastic and cathedral education in the early Middle Ages. He is credited with having participated in establishing the study of the liberal arts through his commentaries and translations of Greek texts. He has been compared to Aristotle and Saint Augustine with reference to his influence on medieval philosophy.

Boethius's scholarly works on grammar, rhetoric and especially logic were widely adopted in the teaching of what later became known as the trivium. He was largely responsible for divulging the science of dialectics (logic) through his translations of important classical texts. He translated the *Introduction (Isagoge)* of Porphyry, the *Categories* of Aristotle as well as his *On Interpretation*, the *Prior* and *Posterior Analytics* and the *Topics* (Wulf, pp. 106-107). Wulf remarks that Boethius' "Aristotelean commentaries and his philosophical works became classics, and enjoyed a universal reputation, especially at the beginning of the Middle Ages" (p. 114).

Boethius was also interested in the four disciplines of the quadrivium. Pope Benedict XVI in his General Audience of March 12, 2008 writes that Boethius was dedicated to the study of philosophy and theology and that he also "wrote manuals on arithmetic, geometry, music and astronomy, all with the intention of passing on the great Greco-Roman culture to the new generations, to the new times."¹⁵ He

¹⁵ General Audience of Pope Benedict XVI, *Boethius and Cassiodorus*, archived March 12, 2008 at the Wayback Machine. Retrieved January 7, 2017, from at https://w2.vatican.va/content/benedict-xvi/en/audiences/2008/documents/hf_ben-xvi_aud_20080312.html

translated from the Greek Nicomachus's treatise *On Arithmetic* and is believed to have translated Euclid's *Elements* on geometry and Ptolemy's *Almagest*, or mathematical treatise on astronomy; the latter two works have not survived (Masi, 1979, p. 24). He also composed one of the first texts on music, titled *The Principles of Music* (*De Institutione Musica*),¹⁶ which gained considerable popularity in the 9th century.

28 – Saint Augustine and Boethius. Boethius has been compared to Saint Augustine with respect to the development of medieval philosophy. Wulf (1952) notes that the reputation of St. Augustine was clearly established in the 9th to the 12th century, whereas that of Boethius gradually ascended during the same period. For Wulf, both Augustine and Boethius

appear more and more as the great philosophical educators of the early Middle Ages. By his theories on God, and the deductive views which connected with them; by his teaching concerning the independence of the soul, the inferiority of sensation, and of the knowledge of the corporeal, Augustine laid down the tradition of a modified Platonism. By him were inspired above all those who practiced the synthetic method, and who explained the real by relating it to God. Boethius, on the contrary, represents the genius of Aristotelianism, the analytic method, which starts from the observation of the created, gives a place to sensation, lodges the real in the sensible, and rehabilitates the science of the corporeal. The whole of Aristotelianism was in Boethius in potency, but a great deal of time was necessary to actualize it. (pp. 265-266).

29 - Cassiodorus. Magnus Aurelius Cassiodorus (485-585 AD) was a scholar of antiquity and Roman statesman during the reign of Theodoric the Great, king of the Ostrogoths. He was renowned for his thoughtful writings and for founding a monastery, the Vivarium, in Calabria, Italy, where he spent his final years. In 523 AD he was named the "immediate successor of Boethius, who was then falling from grace after less than a year as *magister officiorum*, and who was sent to prison and later executed" (as cited by O'Donnell, 2017, in "Cassiodorus," sec. Life, para 3, *Wikipedia*).

Cassiodorus wrote two works that contributed to the popularization of the liberal arts: the *Institutiones Divinarum et Sæcularium Litterarum* (*Institutes of Divine and Secular Reading*) (543-555 AD) and the *De Artibus ac Disciplinis Liberalium Litterarum* (*On the Liberal Arts*) (560 AD). McNerny (1963) states that Cassiodorus' texts summarized and epitomized ancient doctrines and wisdom, because "it would be impious to shrug off what the ancients did by way of praise of God." The second part of the *Institutiones* forwarded the ideas of early classical writers, such as the Stoics and Aristotle, about philosophy and the division of the liberal arts into the trivium and quadrivium (Vol. II, Pt. I, Ch. V, paras 1,2). Cassiodorus identified seven liberal arts, insisting that the number 7 can be adduced to passages of Scripture. He gives examples such as David's praise of God seven times daily, Wisdom being founded on a house supported by seven pillars, and Moses illuminating his way with seven lights (McNerny, Fn. 1).

The brief manual titled *De Artibus* was intended for clerics. It explained the seven liberal arts, but gave special attention to dialectics, which occupied half of the work. The remaining half was dedicated to the other six arts, with rhetoric given slightly more attention than the others. Cassiodorus encouraged the study of the liberal arts because he believed that they, especially grammar and rhetoric, were essential to understanding Holy Scripture (Sandys, 1903).

¹⁶ See: Cassiodorus, *Variae* I.45.4. Translated by S. J. B. Barnish, *Cassiodorus: Variae*. Liverpool: University Press, 1992

30 - Isidore of Seville. An important work promoting the liberal arts was an etymological encyclopedia titled *Etymologiae* that was authored by Saint Isidore (560-636 AD), the Archbishop of Seville and an accomplished theologian and scholar of the early Middle Ages. Isidore sought to preserve the integrity of the Church in a turbulent time characterized by cultural decay, illiteracy and violence. His response was to organize and publish in 600 AD an encyclopedia of classical and modern knowledge that consisted of twenty volumes comprising 448 chapters. Isidore's *Etymologiae* "gathered, systematized, and condensed, all the learning possessed by his time" and introduced Western schoolmen to the Arabic translations of the works of Aristotle and the Greeks. So great was its popularity that "[t]hroughout the greater part of the Middle Ages it was the textbook most in use in educational institutions" (O'Connor, 1910,

The *Etymologiae*, or *Origenes* as it is sometimes called, addressed the trivium in Books I and II. Book I discussed grammar and Book II, rhetoric and dialectic. Books III dealt with the four mathematical branches of the quadrivium, largely based on the translations of Boethius and of Cassiodorus' treatment of arithmetic. Books IV-X discussed medicine, jurisprudence, theology, linguistic material, etymologies, and a miscellany of useful information. Books XI -XVI focused on natural history and geography. The remaining books discoursed about agriculture, war, games, food, clothing, house furnishings and ships (Seth, 1910, sec. Works, para. 1).

IX – HUMANISM

1 - Overview. The 1599 *Ratio Studiorum* proposed a curriculum for Jesuit colleges that adhered to the Renaissance practice of prioritizing the study of Latin and Greek grammar and literature. While there has been discussion about this influence on Loyola and his group, most likely flourishing humanist schools in the Netherlands were the source of many of the ideas proposed in the *Ratio*. Also, several Jesuits who assisted in drafting the document were familiar with the teaching methods of the Strasbourg educator Johannes Sturm who developed a teaching system based on his experiences in Liège, Louvain and Paris. The curriculum and pedagogical practices proposed by the *Ratio* incorporated the studies and best methods of humanist education (“Ratio Studiorum,” 2003).

Humanism and Eloquentia Perfecta

2 – Origin of Renaissance Humanism. The humanist movement traces its origin to northern Italy where it later spread to Western Europe. City-states of Florence, Naples, Rome, Venice and Genoa emerged as centers of humanistic values that prized freedom of intellect and expression. From the 14th to the 16th century interest in the culture and literature of antiquity took on greater importance and came to replace the formal focus of scholastic education. It was a system of thought that attached great importance to human rather than divine matters.

3 - The Renaissance Ideal. The *Encyclopedia Britannica* (2017) states that an ideal that characterized Renaissance Italy was that of the “Renaissance Man,” also called the “Universal Man.” This ideal was expressed by Leon Battista Alberti (1404-1472) -- an Italian author, artist, architect, priest, linguist and philosopher – who asserted “a man can do all things if he will.” The ideal embodied the Renaissance Humanist concept of man as “the centre of the universe, limitless in his capacities for development, and led to the notion that men should try to embrace all knowledge and develop their own capacities as fully as possible.” (“Renaissance Man,” para 1).

The Renaissance scholar “sought to develop skills in all areas of knowledge, in physical development, in social accomplishments, and in the arts. The ideal was most brilliantly exemplified. . . . by Leonardo da Vinci (1452–1519), whose gifts were manifest in the fields of art, science, music, invention, and writing” (para 2).

4– Explanation of Humanism. *Encyclopedia.com* (2005) provides an explanation of Humanism in the Early Renaissance:

The word “humanism,” though, is a modern term created to describe a broad and diffuse movement. There was no intellectual manifesto for humanism, no set of beliefs that all humanists shared, as in modern Marxism or existentialism. Instead humanism describes an intellectual method and a pattern of education that Italy’s *humanisti* or humanists embraced in the fourteenth century. These humanists practiced the *studia humanitatis*, the origin of the modern humanities. They believed that an education rooted in the classical texts of ancient Greece and Rome would help to bring about a rebirth of society. Their interests in Antiquity were wide ranging, embracing both the writers of the pagan and the early Christian world. Humanists desired to revive classical literary style and to create graceful speakers and writers who would encourage their audience to pursue virtuous living. (“Humanism in the Early Renaissance,” sec. Definition)

5 – Humanism vs. Scholasticism. In a discussion of Humanism in the Renaissance, *Encyclopedia.com* (2005) contrasts the scholastic emphasis on logic to the humanistic stress on the language arts:

From the first, the humanists distinguished themselves from the scholastics. They attacked the scholastics for their "barbaric," uncultivated Latin style, and for emphasizing logic over the pursuit of moral perfection. This rivalry at first made the universities resistant to humanist learning. In Italy, the movement developed in the cities, in ducal courts, and in monasteries and other religious institutions before it eventually established a foothold within the universities in the fifteenth century. As humanism spread to Northern Europe in the later fifteenth century, it experienced similar resistance. Universities continued to be dominated by the scholastic study of theology and philosophy. ("Humanism in the Early Renaissance," sec. Definition)

By 1500 universities began to adopt the "New Learning" with its emphasis on the Classics and the Humanities, thus incorporating liberal arts instruction within their programs.

6 - Humanism vs. Dogmatic Religions. H. Lebrun (1973) of the American Humanist Association highlights the difference between modern humanism and organized religions in the following passage:

A feature of modern Humanism that differentiates it sharply from authoritarian religions, such as the Roman Catholic Church or Protestant bodies holding the Bible inviolate, is that Humanism supports unending questioning of assumptions in every field of thought and action – including those of Humanism itself. Humanism affirms free inquiry, in the light of evidence and reason, into all aspects of the human condition and the cosmos, without any external limitations imposed by religious, political, economic, or other authorities. And this includes the freedom to apply the principles of Humanism according to one's own lights. (para. 9)

7 - Humanitas. Renaissance Humanism was an expression of the "ancient pedagogical ideal of *humanitas*" (Casalini & Pavur, 2016, p. 33). In a short essay on Jesuit education, the Jesuit Community of Boston College (BCJC) provides an explanation of *humanitas*:

[This term] translated the Greek word *paideia*, which had come to mean both the process and the studies that developed moral goodness, devotion to truth, and a disposition to act for the civic good: languages, poetry, history, rhetoric, and logic, along with mathematics, the sciences, and philosophy of nature. For the humanists these were the subjects that opened the mind, sharpened wits, deepened human sympathy, developed clarity of thought and force in expressing it. They gave students an adroitness of mind in meeting new questions, and laid a foundation from which to explore the more important questions they would come to later in their studies. (BCJC, 2008, p. 41)

8 – The Scope of Studia Humanitatis. The term *studia humanitatis* identified a form of education that developed desirable human attributes which the Church understood led to "piety." Both humanists and the Church had cause to work hand in hand to provide the moral foundations upon which proper human action was based (Rüegg, 1992a, p. 449).

The humanist program of studies was built on the foundation of medieval education. It added new areas of study that contributed to personal intellectual freedom and the development of a noble character characterized by dignity, fairness and a respect for others. According to Paul Kristeller (1965):

Early Italian humanism, which in many respects continued the grammatical and rhetorical traditions of the Middle Ages, not merely provided the old *trivium* with a new and more ambitious name (*Studia humanitatis*), but also increased its actual scope, content and significance in the curriculum of the schools and universities and in its own extensive literary production. The *studia humanitatis* excluded logic, but they added to the traditional grammar and rhetoric not only history, Greek, and moral philosophy, but also made poetry, once a sequel of grammar and rhetoric, the most important member of the whole group (p. 178).

Humanist Education

9 - Humanism and Philosophy. The humanist movement redefined the study of philosophy. Lorenzo Casini (2005) observes that

[t]he humanist movement did not eliminate older approaches to philosophy, but contributed to change them in important ways, providing new information and new methods to the field. Humanists called for a radical change of philosophy and uncovered older texts that multiplied and hardened current philosophical discord. Some of the most salient features of humanist reform are the accurate study of texts in the original languages, the preference for ancient authors and commentators over medieval ones, and the avoidance of technical language in the interest of moral suasion and accessibility. Humanists stressed moral philosophy as the branch of philosophical studies that best met their needs. They addressed a general audience in an accessible manner and aimed to bring about an increase in public and private virtue. Regarding philosophy as a discipline allied to history, rhetoric, and philology, they expressed little interest in metaphysical or epistemological questions. Logic was subordinated to rhetoric and reshaped to serve the purposes of persuasion (sec. Humanism, para. 1)

10 - Humanism and Theology - The humanists, just as the scholastics, valued the study of theology. Among their favorite authors were the Church Fathers, especially Saint Augustine. The humanists “edited their writings, wrote commentaries on them, and, if necessary, translated them. They addressed issues of moral theology, and existential questions often constituted the substance of their theological arguments. Issues such as the divine providence and free will and the critical interpretations of the New Testament occasioned ‘deeply penetrating theological discussions.’” (Ruegg, 1992a, p. 458).

11.- Humanist Schools. Humanist schools were secondary-level institutions that first appeared in Renaissance Italy. Casalini and Pavur (2016) note that humanist or literary schools “started to proliferate during the fifteenth century, especially in the Italian peninsula” (p. 3). The schools were at first small and consisted of a celebrated master who instructed students in grammar, rhetoric and the humanities. Latin and Greek authors of important textbooks were the sources for much of the instructional content. By the early 16th century this type of school could be found in countries throughout Western Europe.

The focus of the humanist curriculum was the development of the moral character of the student and his efficacy as a communicator. A signature characteristic of the curriculum was the incorporation of ancient works of poetry, drama, oratory and history alongside works of philosophy. Through these texts the schools sought to cultivate character by exposing their students to noble and uplifting ideals, and by developing eloquence in oral and written communications. John O'Malley (2000) writes: “The purpose of this schooling was not so much the pursuit of abstract or speculative truth, which is what the universities pursued, as the character formation of the student, an ideal the humanists encapsulated in the word *pietas*-

-not to be translated as piety, though it included it, but as upright character." If properly taught, the student would become "a better human being, imbued especially with an ideal of service to the common good, in imitation of the great heroes of antiquity--an ideal certainly befitting the Christian" (p. 3).

12 - Vittorino da Feltre. The concept of a classical education emerged from northern Italy in the first half of the 15th century. Foremost among the Italian schoolmen who advocated this form of education was Vittorino da Feltre (1378-1446). Schwickerath (1903) summarizes Feltre's approach thus: "He modified considerably the medieval school system of the *Trivium* and *Quadrivium*. Although the classics, carefully selected, formed the groundwork of this course, other branches, as mathematics and philosophy, were not neglected. Due attention was devoted to the physical development of the pupils, riding, fencing, and other gymnastic exercises were greatly encouraged. . . The secret of his wonderful influence lay in his lofty moral principles and his deeply religious spirit" (p. 127).

13 - Erasmus of Rotterdam. Erasmus of Rotterdam (1466-1536) was a Christian humanist who is considered "the greatest scholar of the northern Renaissance." He was a Dutch Catholic priest who is credited with codifying the humanist system of education adopted by the Netherlands Brethren of the Common Life and later by the Jesuits in their colleges. Erasmus adopted the philological methods employed by Italian humanists and thus "helped lay the groundwork for the historical-critical study of the past, especially in his studies of the Greek New Testament and the Church Fathers. His educational writings contributed to the replacement of the older scholastic curriculum by the new humanist emphasis on the classics" (Tracy, 2019, para. 2).

Erasmus prepared important Latin and Greek editions of the New Testament, which raised questions that would influence the Protestant Reformation and Catholic Counter-Reformation. He also wrote *On Free Will*, *In Praise of Folly*, *Handbook of a Christian Knight*, *On Civility in Children*, *Copia: Foundations of the Abundant Style*, *Julius Exclusus*, and many other works ("Erasmus," *Wikipedia*).

13.1 - According to Scaglione (1986), Erasmus in his *De Ratione Studii* (1511) and other secondary works proposed school reform

that would base the curriculum on the direct reading of the Latin and Greek classic texts in the original. All the disciplines would be imparted through the reading of the eloquent authors, ranging the best Fathers of the Church, such as Origen, John Chrysostom, and Basil, alongside Plato and Aristotle for philosophy, Ptolemy and Pliny for geography, and so forth, always drawing on good literature for information about all the sciences and arts. Grammatical and rhetorical rules as such should be kept to minimum, and eloquence should be learned by reading orators and imitating them by writing original compositions and dialogues on free subjects of the students' own choosing, to make sure that they would find such subjects interesting. Similarly, the classical epics would come alive when the students were asked to act out on a stage little dramas they would derive from important episodes. Exercises should be constant and Christian charity should begin by being kind toward the students and praising them willingly for their good achievements. Moral instruction should come neither from sterile disputations nor from Aquinas' dry definitions, but from the Bible (pp. 16-17).

14 - Johannes Sturm. Johannes Sturm (1508-1589) was a renowned German educator of the Reformed Church and founder of the Strasbourg gymnasium. He was instrumental in making the study of the classical languages an essential condition for understanding the great ideas of antiquity (Graves, 1910, pp. 27-32). For a century his school was a model of humanistic education throughout Europe. The ideal that guided Sturm was the formation of an intelligent and useful citizen who is able to persuasively communicate his thoughts and sentiments to others. Sturm gave great import to the mastery of eloquence and the art of rhetoric espoused in the works of Cicero and Virgil, Latin grammar and poetry, as well as Demosthenes and other Greek rhetoricians ("Johannes Sturm," *Wikipedia*).

Petrarch, Cicero and Quintilian

15 - Petrarch. The Italian poet Francesco Petrarca (1304-1374), commonly anglicized as Petrarch, is a seminal figure of the Renaissance. He is considered one of the great love poets of world literature. Petrarch was a specialist of classical antiquity who wrote scholarly works, essays, letters and poetry in Latin ("Petrarch," *Wikipedia*). The History Department of Hanover College characterizes Petrarch's work:

Probably best known for his creation of the sonnet form of poetry and for his love poems to Laura, he was also a prolific scholar and writer. He wrote theological and philosophical treatises, epic poems, and polemical works directed against those whom, he believed, had corrupted learning and religion in Christendom. He also played a leading role in rehabilitating the literary genre of the epistle, a letter addressed to a private individual but intended for a public audience. Most of Petrarch's letters are addressed to living human beings, but he did write several addressed to authors of the ancient world. ("Francis Petrarch," para. 1)¹⁷

Historians consider Petrarch the "Founder of Humanism."¹⁸ Ancient literature was not widely known before his time. Petrarch read Virgil and Seneca. He also discovered a cache of Cicero's works that revealed the Roman poet to be a man who was deeply involved in politics during the Roman Republic. So impressed was Petrarch with Cicero that he composed a letter to the legendary and esteemed poet. Petrarch's discovery of Cicero's letters is often credited with initiating the Renaissance movement in the 14th century.

15.1 - The event that led Petrarch to seek insights from the Romans classics was "his attendance at various schools and universities," which "left him with a skeptical view of the pedantry and narrow-mindedness of the schoolmen" and their rigid reliance on a restricted number of philosophical and theological works. His aversion to scholastic education led him to shun university studies (Morris, 2014, para.6). As explained by the historical texts project of Hanover College:

Petrarch was highly critical of the learning of his own age. He criticized scholasticism, the dominant method of learning in the schools and universities, as arid and useless, focusing too much on hair-splitting logic and on abstract and abstruse subjects. Petrarch instead looked to the

¹⁷ The analysis of the Hanover College Historical Texts Project was based on the following work: Robinson, Harvey (Ed. and Trans.). 1898. *Francesco Petrarca: The First Modern Scholar and Man of Letters*. New York: G.P. Putnam.

¹⁸ This designation appears in a recent review of Carol Quillen's *Rereading the Renaissance*. See "Petrarch," *Wikipedia*.

ancients for guidance, and especially to Cicero. Marcus Tullius Cicero (104-43 B.C.E.) appealed to Petrarch and to subsequent humanists because his writings provided (in elegant Latin) an overview of all of Greek and Roman learning and specifically because Cicero was a prophet of a humanities-based liberal arts education favored by the humanists. ("Francis Petrarch," para.2)

16 - Petrarch and the Latin Language. Petrarch's passion for the Latin language stemmed from his belief that "Latin was not merely a self-justifying discipline, but the means to re-enter the realms of classical thought and imagination, to find new ways of thinking and investigating oneself and the world at large" (Morris, 20014, para. 6). Petrarch's commitment to the classics led him to spend a great part of his life "seeking out, transcribing, editing, elucidating and making available the surviving works of Roman classical literature, and it was for this and his letters and his biographies of famous Romans written in Latin that he himself above all expected to be remembered" (para. 7) His attempts to "revive the classics primarily for this purpose, not to mention his attempts to reconcile an admiration of the pagan past with Christian doctrine, amply justify his being considered the first fully-fledged humanist" (para. 6).

17 - The Ciceronian Age. Walter Rüegg (1992a) writes in his commentary on the rise of Humanism towards the end of the late Middle Ages that two great authors influenced medieval education: Aristotle and Cicero. Rüegg advances the argument framed by Etienne Gilson – an accomplished student of scholastic philosophy -- that the "Age of Aristotle" (*aetas Aristotelica*) of the 13th and 14th centuries was replaced by the "Age of Cicero" (*aetas Ciceroniana*) in the 15th and 16th centuries.

According to his [Gilson's] argument, the philosophy which was represented by the name of Aristotle and which dominated scholasticism had yielded to humanistic writings and, hence, to Cicero, *orator noster*. The centre of gravity of the image of the world and of human beings shifted from the nature of things to the nature of human beings, who as social beings, were defined by the use of language. One typically Ciceronian element in humanism was the definition of man as *homo loquens*. Accordingly, the *orator* was granted the highest position in the hierarchy of human beings and in the classification of types of knowledge. Instead of ranking them in accordance with the greater or lesser capacity to comprehend the real world, individuals and the various branches of knowledge were classified by their value as instruments for the employment of words as the "bonds and norms of societies." (Rüegg, p. 448)¹⁹

The importance of the meaning of words in the Ciceronian Age was evidenced in university graduates who labored as secular and papal officials, notaries, teachers, bankers, authors and their publishers, lawyers, merchants, and members of religious orders and the ecclesiastical hierarchy (Rüegg, p. 449). Because written and oral communication were the currency of their occupations, these individuals confirmed the historical necessity for the Humanist Ideal in education.

18 - The Ciceronian Ideal. Nederman (2012) in the abstract of his article on Cicero's approach to oration writes that the humanists were not only credited with the rediscovery of classical texts but also with promoting the Ciceronian Ideal of "the orator as the man who employs both reason and eloquence in order to serve the common good." This oratorical viewpoint "is closely aligned with [Cicero's] teaching that human association arises from the awakening of an implicit human gregariousness by means of the

¹⁹ See Etienne Gilson, "Le message de l'humanisme" in F. Simone (ed.), *Culture et politique en France à l'époque de l'Humanisme et de la Renaissance*, Turin, 1974, p. 4.

eloquence and wisdom of a primitive orator.” Nederman argues that “the Ciceronian idea of oration was a recurrent feature of stochastic thought from the 12th to the early 14th century rather than an innovation of the Renaissance.” He contends that prominent humanists derived from the writings of Cicero “the lesson that the foundation and maintenance of communal bonds requires the presence of a wise and eloquent orator who will place the public interest above his own ends. In the Ciceronian ideal of oration, such medieval authors found a model for their conception of community and a framework for the determination of the responsibilities of rulers and citizens.”

19 – Cicero and Latin Eloquence. The citizen who was the product of the *studia humanitatis* was idealized as an emancipated and enlightened participant in civic affairs; an individual who valued goodness and was adept at persuading others to be virtuous and prudent in their actions (Casalini & Pavur, 2016, p. 33). Humanist studies attributed great importance to eloquence in written and oral communications. Early Jesuits embraced this idea.

John Donohue (1963) writes that the aim of literary studies in the *Ratio Studiorum* was to develop men of “intellectual culture” and that in the 16th century this was defined in “the usual Renaissance terms of Latin eloquence.” He notes that “‘perfect eloquence’ had wide and admirable connotations for Renaissance educators. It was supposed that one necessarily developed character and intelligence in achieving this eloquence.” Logic therefore dictated that “[f]or the sixteenth century pedagogues, good style was Latin style and good Latin style was that which imitated Cicero as perfectly as possible – used his phrases in the way he used them and with the same rhythm.” Donohue further observes that this concept of culture looked backward to Mediterranean classics as “absolute models of expression” (pp. 120, 124).

20 – Quintilian and the Ideal of Eloquence. The Roman educator Marcus Fabius Quintilianus (35-100 AD) was a teacher of Latin whose work on rhetoric, *Institutio Oratoria*, was a major contribution to educational theory and literary criticism. It was widely consulted in medieval schools. Codina (2000) writes: “*Quintilianus Noster*, the master of the Renaissance pedagogues, was proposed as the supreme ideal of eloquence” (p.40).

If Cicero (106-43 BC) furnished the substance of the literary program, Quintilian provided the teaching method. Koch (1939) comments that he held “strong convictions on educational method and ideals” (p. 2) when he argued that command of the Latin and Greek languages was necessary for mastering the art of eloquent persuasion. For the humanists, “the study of grammar, Latin, Greek was all oriented toward the attainment of eloquence” (Codina, p. 40).

Quintilian posited that eloquence could only be achieved if one acquired the skills associated with rhetoric, which many schoolmen considered “the art of arts, and the science of sciences, the culmination of all literary studies.” (Codina, p. 40). In his *Institutes of Oratory*, Quintilian defined rhetoric with this oft-quoted phrase: “*Sit ergo nobis orator quem constituimus is qui a M. Catone finitur vir bonus dicendi peritus*” (“Therefore, let the orator be for us as it was for Marcus Cato: a good man speaking well”). The ideal end product of Quintilian education is the *bonus dicendi peritus* or a good man skilled in speaking (Koch, 1939, p. 20). Eloquent speech, he averred, is insufficient if it is not complemented by good character. The concept of the orator as a “good man” was first posited by Aristotle about 330 BC in his work *The Art of Rhetoric*.

According to Quintilian, rhetorical skills alone do not define eloquence. Quintilian believed that to become skilled in eloquent expression a student must master “down to the minutest detail all the

mechanics of teaching and learning grammar, rhetoric, and the fundamentals of speech, such as carriage and gesticulation" (Koch, 1939, p. 19). The ideal product of Quintilian education is the *bonus dicendi peritus*. For Quintilian, the words "*bonus dicendi peritus*" express the ideal of rhetoric as the art of persuasion, skillfully employed by a just and righteous man. Koch notes that "above all he [the orator] must possess the quality which Cato places first and which is in the very nature of things the greatest and most important, that is, he must be a good man" (p. 20).

21 – Aristotelean Rhetoric. The art of public discourse rhetoric in all its forms addresses rhetorical topics, parts of speech and the effective use of style. Aristotle identified three genres of rhetoric: *forensic* or *judicial*, or discussions of past actions; *deliberative* or *political*, which persuades an audience to engage in or avoid actions; and *epideictic* or *ceremonial*, which focuses on "praise-and-blame" when debating activities at formal events. Aristotle also proposed three means of persuading others: *ethos* or the credibility of the orator; *pathos* or the stirring of the emotions; and *logos* or persuading other through reasoned argument (McKay & McKay, 2015, sec. Rhetoric in Ancient Greece: Aristotle). The ultimate purpose of rhetorical devices is that they lead to eloquence in communication.

For Aristotle, however, eloquence as the goal of rhetoric is not of itself sufficient. Rather, it is only important when it is demonstrated by a person of good character. The concept of a "good man" was sketched by Aristotle in *The Art of Rhetoric*, in which he rejected the Greek sophist schools, the most famous being those led by Gorgias and Isocrates. The Sophists promoted a rhetorical style that persuades by defeating others in disputes, even if arguments ignore or manipulate the truth. Sophists excelled in winning debates "through the use of confusing analogies, flowery metaphors, and clever wordplay. In short, the Sophists focused on style and presentation even at the expense of truth" (McKay & McKay, 2015, sec. Rhetoric in Ancient Greece: the Sophists, para. 3)

Aristotle, on the other hand, disagreed with this interpretation of the purpose of persuasion. He countered that a good man uses rhetorical skills to search for truth, to understand himself and the world around him, as well as to counter the sophistry and untruths spread by despots.

22 - Quintilian and the Ratio. The thesis of Joseph Koch (1939) is that early Jesuits "enlarged upon and systematized" the pedagogical ideas of Quintilian. He asserts that "[t]he words, *dicendi peritus*, describe the Ideals of both Quintilian and the *Ratio Studiorum*" (p. 26). For the Roman educator this means eloquence or the power of expression through speech. This principle was represented in the *Ratio Studiorum*. Gabriel Codina (2000) commemorates this fusion when he writes that "[f]or Erasmus, as for all the humanists, the study of grammar, Latin, Greek was all oriented towards the attainment of eloquence. It is not strange, then, that the Jesuits proposed eloquence as the ideal of their formation – *eloquentia perfecta* as it is called in the *Ratio studiorum*" (p. 40).

The *Ratio* also had as its objective, although not exclusively, the development of the *dicendi peritus*. The *Ratio* understands by this that the power of written and spoken expression can be achieved by combining rhetoric and philosophy: "rhetoric, in so far as the expression should be correct, clear, forceful and ornate; philosophy, in so far as there should be substance of thought in that which is expressed and not just a drivel of fine-flowing phrases" (Koch, 1939, pp. 19-20).

Koch goes on to note that "[t]he *Ratio* supports all that the *Institutio Oratoria* advocates; it agrees with Quintilian's precepts for the careful training of the boy from his youngest years; it follows closely his principles and method of teaching; it insists that its product be helpful to the neighbor." But again, Koch observes that the *Ratio* differs from Quintilian in an important regard: "It raises aloft on this peak in

educational systems a tower, which is the supernatural life of God, whose beacon, the Light of the World 'enlighteneth every man who cometh into the world'" (pp. 25-26).

The early Jesuits expanded and systematized the pedagogical model proposed by Quintilian by identifying the knowledge, skills and dispositions necessary for achieving *eloquentia perfecta* and the status of *dicendi peritus*. Koch asks: "Why did the framers of the *Ratio* wish to add eloquence to their ideal, to their perfect Christian? Because they wished their pupils, not only to preserve and foster the faith, but to spread it. The Jesuits wanted to produce educated men, who, as themselves, were apostolic" (p. 25). Hence, persuasiveness was a complimentary feature of the Jesuit concept of the educated man, the "perfect Christian," who was committed to an apostolic mission (Koch, p. 25; Codina, 2000, p. 40). The Jesuit mission requires that an individual not only be persuasive but also of good character; that is, endowed with Christian virtues and a fine-tuned moral compass. Diego de Ledesma, in this sense, had even imagined of redefining the study of persuasion rarified through the prism of virtue as a "Christian rhetoric" (Codina, p. 40).

23 – Eloquentia Perfecta and Jesuit Education. The Ideal of *dicendi peritus* was an objective of the Jesuit educational system, but it was not an end in itself as it was for Quintilian. Koch (1939) points out that the study of Latin and Greek grammar, literature and rhetoric was the first stage of a curricular sequence designed to prepare students for more advanced studies in the university. For the Jesuits, *eloquentia perfecta* described the capacity of a novitiate to express substantive thought in a clear and forceful manner. This substance was acquired through the study of the philosophy of Aristotle and comprised the second stage of the educational sequence. In this post-humanist program, mastery of Aristotelian propositions could only be demonstrated through effective forms of written and spoken communication (pp. 19-20).

Rhetorical skill and eloquence of expression were as important in the third stage in the curricular sequence: i.e. the study of theology. After having mastered Aristotle, the novitiate studied the ideas of Thomas Aquinas in his *Summa Theologiae*. The program prepared the young Jesuit for his apostolic mission. Novitiates were expected not only to understand the canons of the Church, but also to preserve and spread the faith throughout Europe and abroad. Preparation in effective communication was essential for this mission. As for lay students, the *Ratio Studiorum* makes clear that "[t]he Jesuits wanted to produce educated men, who, as themselves, were apostolic" (Koch, p. 25).

24 - Eloquence and God. Why was eloquence so highly valued and essential to Quintilian's and the Jesuits' educational system? Scaglione (1986) explains that eloquence was perceived "as the necessary instrument for the efficacious communication of the Word of God, just as God has been truly eloquent in speaking to man through the Scriptures" (p. 10).

Books and Classical Authors

25 – Overview. During the Renaissance books were revered. The "authority of books," came to rival and compliment the "authority of the church." Renaissance Humanism advocated a new approach to learning, one that rejected the "narrow pedantry" of medieval scholasticism and in its place offered a program of studies that exalted the cultural and literary legacy of classical antiquity (Farrell, 1938).

26 - Rediscovery of Classical Authors. Humanism appeared in Italian universities a century before it surfaced in universities elsewhere. The limited attention given to theology and the heightened interest in law and business and the *artes dictandi* was paralleled by the introduction of pagan authors in university studies. The narratives in the classical works became models in the use of language (Rüegg, 1992a, p. 453)

Walter Rüegg (1992a) in his essay on the rise of humanism in the European university observes that the traditional characterization of Renaissance Humanism is that it was a social and intellectual movement that was based on classical authors who had fallen into oblivion. These “re-discovered” pagan works “helped secular notions of the ancients make their way against Christian religious sentiment and against the scholastic philosophy” (p. 444). The culture promulgated by resurrected voices from classical antiquity challenged the formal and literal attention to details and rules that characterized the scholastic approach to education.

Humanists refocused the attention of university discourse from logical determinism to personal exploration. The analyses of classical texts were not as concerned with ascertaining the truthfulness of propositions through dialectical reasoning as it was with the historical contexts that shaped them and their relevance to one’s personal circumstance. The importance of this viewpoint in the university curriculum led to the deeper exploration of topics on moral philosophy, theology, pedagogy, politics and natural science. To this end, the range of literature consulted broadened to include letters, speeches and written dialogues along with traditional sentences, *summae* and tractates (Rüegg, 1992a, p. 450). The introduction of these new literary genres and their amalgamation with traditional genres generated conflicting viewpoints that stimulated dialogues and debates.

27 – Books and Humanist Schools. Humanist education relied on classical texts that were not customarily consulted by scholastic philosophers. Humanist pedagogy was characterized by the study of texts in the original languages, the preference for ancient authors and commentators over medieval ones, and the avoidance of technical language in the interest of moral suasion and accessibility. Classical works were essential to achieving the aim of humanist education as noted in the following passage:

The textbooks were the writings of the Greek and Latin authors whom the master considered the most eloquent. Quintilian’s (c.35-c.100) expression for the perfect orator – *vir bonus dicendi peritus* (a good man skilled in speaking) – was often quoted as the motto for humanistic education. It directly joins good expression with good character. Communicational abilities necessarily entailed moral considerations. So humanistic schools aimed to form their students’ characters by developing their powers of eloquence rather than sharpening their intellectual abilities by cultivating their powers of disputation. This is made clear by the titles of the Latin textbooks that humanists such as Lorenzo Valla (1407-57), Erasmus (1467-1536), and Juan Luís Vives (1493-1540) produced: *colloquia*, *elegantiae*, and *elegantiolae*. These were anthologies of classical texts that introduced the students to Latin by means of good moral examples. (Casalini & Pavur, 2016, pp. 3-4)

28 – Book Printing and Humanism. The printing press was invented in Germany by Johannes Gutenberg circa 1440. The creation of metal movable type in large quantities guaranteed the success of the new invention. The first printed edition of a 42-line Bible left the press in 1455. By the end of the century, 30,000 incunabula were printed, with almost half being editions of the Bible, breviaries, and

liturgical and religious works. Another thirty per cent were classical and contemporary literary creations, and ten percent were legal tracts and natural science works (Ruegg, 1992a, p. 465).

The diffusion of humanistic ideas through printed works accelerated in the 16th century. The printing press ensured that texts and documents disseminated more rapidly. This meant that books and pamphlets were no longer the exclusive province of scholastic pedagogues. The effect of book-printing on the university milieu is summarized by Ruegg:

Teaching in the Middle Ages was dominated by the spoken word in lectures and in disputations, as well as by the ideas which were presented and elaborated in those oral forms. When the ordinary student began to buy books, the written word became dominant in university teaching. Not only were the sources more immediately and more comprehensively accessible, but commentaries, textbooks, and polemics ceased to be monopolized by teachers and could be purchased in the market. Thus, diverse views and new insights could speedily become objects of intensive discussions and of individual debates within the larger scientific community. It was not only the physical universe which expanded so vastly by the end of the fifteenth century. Thanks to humanism and its connection with book printing, the world of knowledge and ideas in the universities expanded in all its historical depths and its diverse manifestations to an extent which could only be fully developed in subsequent centuries. (1992a, p. 467)

29 - Erasmus and Book Printing. The most successful thinker to make use of the printing press was the Catholic priest, social critic, teacher and theologian, Erasmus of Rotterdam (1466-1536). The famed Dutch humanist understood the effect of the printed word and “praised the art of book-printing as the highest of all arts because it permitted a continuous dialogue with the most educated and most pious men of all time” (Ruegg, 1992a, pp. 466-467). Erasmus individually published more than 160 humanistic works and received royalties, thus making him the first successful free-lance writer.

Erasmus’ commitment to scholarship and writing singled him out as one of Europe’s greatest and most influential thinkers: “His translation to Greek of the New Testament brought on a theological revolution, and his views on the Reformation tempered its more radical elements” (“Erasmus Biography,” 2016, sec. synopsis). Endowed with a great intellect, Erasmus defined the Christian humanist movement in Northern Europe and became a powerful voice in the intellectual debates underlying the Protestant Reformation and the Catholic counter-reforms of the 16th century (Ruegg, 1992a, p. 466).

X - THOMAS AQUINAS

Aquinas

1 - Life of Aquinas. St. Thomas Aquinas [or Thomas of Aquino] was born circa 1225 in the county of Aquino in the Kingdom of Sicily to the ruling family of Count Landolf. After his early education at the monastery of Monte Casino, Aquinas studied for six years at the University of Naples where he came under the influence of the Dominicans. After he completed his university studies he joined the Dominican Order and then enrolled in the school in Cologne where he studied under the great scholar and lecturer Albertus Magnus. Aquinas accompanied Albertus Magnus to Paris in 1245 and received his Bachelor of Theology degree from its acclaimed university. He accompanied Albertus back to Cologne three years later and was appointed "second lecturer and *magister studentium*."

Aquinas was awarded the title of Doctor of Theology in 1257. The degree authorized Aquinas to instruct others on Church doctrine during his travels to Paris, London, Rome, Bologna and locals in Italy. While he was discharging his ecclesiastical duties and responsibilities, he was also active in writing homilies, lectures, disputations and in conducting research for his *Summa Theologiae*. In 1274 Aquinas undertook a journey to attend a council in Lyon convened by Pope Gregory X. During the trip he fell ill and after lingering for seven weeks he died on March 7, 1274. Thomas Aquinas was canonized in 1323 by Pope John XXII and after was named one of four great Latin Fathers in 1567 by Pope Pius V (Lindsay, 1902, paras. 1-3).

2 - Aquinas and the Empire of Science. The medieval spirit viewed the world as one of hierarchical authority and external rule. Local lords and lieges were responsible for caring for their subjects. The Holy Roman Empire dictated secular affairs. The Catholic Church gave spiritual guidance. Acquiescence to worldly authorities induced scholastics to seek one system of thought that dominated all others. They believed that an undisputed and sovereign body of knowledge would constitute "an empire of science," as explained by Lindsay (1902):

The medieval spirit, in all its various manifestations, aimed at universal empire by way of external and visible rule. Its idea of the State was the Holy Roman Empire actually embracing and dominating over all the countries in Europe; its idea of the Church, that visible and tangible catholicity which existed before the great Reformation; and in the department of knowledge it showed its characteristic quality in its desire to embrace in one system, under one science, the whole of human thought. It so happened that, in the break between the old world and the new, the sole institution which survived was the church, and the only science which was preserved was philosophy. Hence, when scholasticism arose, the science which it found ready to its hand was theology, and its task became that of bringing all departments of knowledge under the dominion of this one sovereign science. All through the period of scholasticism, . . . this aim of establishing an empire of science was kept in view, . . . (para.4)

Thomas Aquinas was uniquely prepared for this intellectual challenge because "he, more than any other, was trained by nature and education to do the most that could be done to realize the scholastic ideal, and present a condensed summary of all known science, under the title of *Summa Theologiae*." He was in, Lindsay's words, "the spirit of scholasticism incarnate." (para.4)

2.1.- In preparation for his *magnus opus* Aquinas published a preliminary work titled *Summa Catholica Fidei Contra Gentiles* which argued that Christian theology is the ultimate science. Later and after exhaustive preparation, Aquinas composed his *Summa Theologiae*, which was “meant to be the sum of all known learning, arranged according to the best method, and subordinate to the dictates of the church,” and based primarily on the philosophy of Aristotle (Lindsay, 1902, par. 5). Aquinas’s deliberations, enshrined in the *Summa*, can be said “to be for human thought what the Holy Roman Empire was for the bodies, and the Catholic Church was for the souls of men.” In other words, its theological dicta achieved the Scholastic Ideal of a “‘visible empire of thought,’ exhaustive, all-embracing, and sovereign” (Lindsay, 1902, para. 5).

3 - Aquinas the Empiricist. Vernon J. Bourke (1999) in the Introduction to Saint Thomas’s *Commentary on Aristotle’s Physics* comments on Aquinas’s concept of inductive and deductive reasoning and their relationship to sensory experience:

Thomas Aquinas’ notion of a science of nature owes a great deal to Aristotle’s *Posterior Analytics*. He is in full agreement with the view that man has no knowledge, on earth, which does not originate in sense experiences. In this, St. Thomas is essentially an empiricist, completely rejecting innate knowledge and the sort of thing which will later will *be called a priori* forms of understanding. He adopts Aristotle’s suggestion that the manifold of sense experience (*emperia*) suggests certain universal judgments to the human understanding. These first items of intellectual knowledge (principles of understanding, such as that of non-contradiction of some of Euclid’s axioms) then function as self-evident premises for further demonstrative reasoning. The origin of these intellectual principles is inductive on the level of sensory presentation but the consequent movement of human reasoning is viewed as deductive. His view of discursive reasoning is akin to the procedures of geometry. However, Thomistic science is not purely deductive: even after the initial induction of premises there is a constant effort to refer to additional information coming through further sense experience. (p. xxvii)

4 – Aquinas’s Knowledge of Aristotle. Kenneth Thomas (1999) writes that “[n]o commentator comes to his text with a blank mind.” Thomas Aquinas was a scholar who studied Aristotle and penned a respectable number of commentaries on the philosopher’s works. Aquinas was acquainted with the writings of Plato and he was an avid student of Aristotle, who he considered the greatest representative of philosophy. He referred to Aristotle as “The Philosopher.” Aquinas’s penchant for organization and order attracted him to Aristotle’s writings and led him to write commentaries on the content and method of inquiry demonstrated in *On Interpretation*, the *Posterior Analytics*, the *Metaphysics*, *On the Soul*, the *Physics*, as well as lesser psychological and physical writings. One of his more important commentaries discussed Aristotle’s *Physics*, which provided an explanation of the structure of the universe that later shaped the cosmologies of medieval theologians. The book’s cosmology also served as the starting point for new ideas of physics and astronomy proffered by Copernicus, Kepler, Galileo and Newton (p. xx).

5 - Aquinas’s Debt to Aristotle. Thomas Aquinas believed that much of theology “can be expressed and codified in a comprehensive and rational system.” Driven by an imperative to reconcile reason with faith, Aquinas articulated his beliefs by drawing from the writings of Aristotle. He adopted Aristotelian views on “the origin, operation, and purpose of the entire universe and the role that everything in the

universe plays in the attainment of that purpose” (SparkNotes Editors, 2005b, sec. Summa Theologica: Structure, Scope, and Purpose: Analysis, para. 2). He reveals an “indebtedness and allegiance to Aristotle, who had maintained that reason is the essential quality of humanity” (para 3). More specifically:

Aquinas enlists Aristotle not for his aid in the unbiased critical examination of the tenets of Catholic belief but rather for the explication and defense of those tenets. At the same time, though, Aquinas’s enlistment of Aristotle reveals Aquinas to be a remarkably fair, open minded, and indeed tolerant medieval thinker. He apparently believes that the fruits of the exercise of reason are not necessarily corrupt if the thinker is a non-Christian. This suggests that Aquinas believes that every human being, regardless of his or her beliefs, shares in humanity through the possession and use of reason. (para. 3)

In incorporating Aristotelean philosophical concepts and principles in his propositions, the extent of Aquinas’s debt to “The Philosopher” is summarized by McNerny and O’Callahan (2015):

He [Aquinas] adopted Aristotle's analysis of physical objects, his view of place, time and motion, his proof of the prime mover, his cosmology. He made his own Aristotle's account of sense perception and intellectual knowledge. His moral philosophy is closely based on what he learned from Aristotle and in his commentary on the *Metaphysics* he provides a cogent and coherent account of what is going on in those difficult pages. Quite often deep insight into Thomas' philosophical thought can be gained from a close attention to the ways in which he comments upon and interpretively clarifies difficult passages in Aristotle that can be otherwise very obscure. (sec. Thomas and Aristotle, para. 1)

Philosophy and Theology

6 - Philosophy vs. Theology. John Marenbon (1987) writes that “[f]rom the time of Aquinas medieval thinkers accepted the differences that made both philosophy and theology unique areas of inquiry: Aquinas and Scotus were indeed theologians, and it is valuable to study their theology; but they were also philosophers, and their philosophy should be studied separately from their theology” (p. 84). The speculative theologians understood that there were different focuses of the two sciences and that each was pursued for distinct and exclusionary reasons: “As philosophers, they devoted their endeavours to the constitution of a doctrine explanatory of reality, by the light of reason. As theologians, they gave a systematic exposition of Catholic beliefs. This confirms the view that philosophy appeared in a double role in the Middle Ages; it had an autonomous value, and it inspired the speculative method in theology” (Wulf, 1952, p. 284).

7 – Speculative Method in Theology. As early as 400 A.D. St. Augustine engaged in philosophical speculation when addressing questions of theology. The relationship between the two areas of thought became clearer by the end of the 11th century and the 12th century. Philosophy gave theologians the tools to formulate rational arguments when contemplating theological issues, leading to the creation of what Wulf (1952) calls a “metaphysis of dogma” (p. 281).

The effect of rational argumentation when examining dogma resulted in the method identified as “speculative” or “scholastic.” Whereas the study of theology originally was based on the literal interpretation of Scripture and the writings of the Church Fathers, it gradually incorporated the

speculative method to prove "previously determined doctrine by reason or at any rate of elaborating its rational aspect. It is a rational and metaphysical systematization of the data of the faith" (Wulf, p. 282).

The philosophical method as applied to theology substantiated the authority of articles of faith. Yet throughout this methodological transformation, the exegetical analysis of sacred documents continued to hold primacy. Dialectics were employed to demonstrate the "scientific character" of theological arguments. In the mind of the scholastics, "Revelation is sovereign, so that at no moment may reason contradict faith" (Wulf, p. 284).

8 - Contribution of Philosophy to Theology The dialectical method of philosophy influenced theological discourse. First, it encouraged theologians to collect and organize materials for study. These ranged from simple collections of quotations (*flores, excerpts*) to fully developed texts and expositions by acknowledged authorities (such as Isidore of Seville). There were also the *sententiae*, which assembled quotations for critical examination and the *summae*, which assembled quotations and tracts with contrary points of views. The most recognized of the *sententiae* was that of Peter Lombard and the most celebrated *summa* was that of St. Thomas Aquinas (Wulf, 1952, p. 281).

A second effect of the method of philosophical inquiry on theological discourse was the "triadic" method of argumentation. This form of debate was conducted around positions *for* and *against* a proposition for the purpose of arriving at a *solution*. The adoption of this syllogistic form of argumentation benefitted theological reflections "by differentiating between probable and necessary arguments, by applying logical categories to dogmatic concepts, and by using the techniques of the *quaestio* and the *disputatio*" (Wulf, p. 282).

9 - Aquinas, Philosophy and Theology. Many scholastics accepted the proposition that philosophical speculation was distinct from theological assertion. Thomas Aquinas, however, did not entirely acknowledge this difference when he wrote the *Summa Theologiae*. He believed they were distinct, yet complementary. For Aquinas, reason applied to theological issues compliments revelation. Through engagement with the systems of thought of the pagan philosophers, especially the ideas of Plato and Aristotle, Aquinas believed that one can come to know the existence of the Divine. Philosophical systems of thought, when addressing theological issues, are a revelatory experience. Ultimately, reason and faith are one in their common pursuit of the knowledge of God. It is this "compatibility of philosophy and theology which was the fundamental axiom of scholasticism, and which led to the writing of the *Summa Theologiae*, which can also be considered a *Summa Philosophiae*" (Lindsay, 1902, para. 6). Aquinas's view of the relationship between philosophy and theology is explored in the following passage:

Aquinas is a theologian who employs philosophy in an attempt to provide, insofar as possible, a rational explanation of doctrines that are revealed knowledge, or matters of faith. Although the *Summa Theologica* is in some respects a work of philosophy, its primary purpose is as a work of theology. This distinction was important to Aquinas and his fellow Scholastics, who held that theology and philosophy proceed according to different paths. Theology concerns itself with knowledge that has been revealed by God and that man must accept on faith. Philosophy, at least as defined by Aristotle, is concerned with knowledge that man acquires through sensory experience and the use of the natural light of reason. In other words, philosophy attempts to arrive at general principles through a consideration of that which is perceived by the senses and then rationally evaluated. While some subjects, such as knowledge of the existence of God, are common to theology and philosophy, theology also encompasses subjects that reason cannot

fathom, such as the mystery of the Holy Trinity. (SparkNotes Editors. 2005b, sec. Themes, Arguments, and Ideas, para. 1)

Summa Theologiae

10 – Scholastic Ideal and the Summa Theologiae. The Scholastic Ideal embodied in Thomas Aquinas's *Summa Theologiae* conceives of two distinct sources of knowledge: Christian faith and human reason. Aquinas understands that personal revelation of the Divine is the more important of the two and that this is acquired through faith grounded in the reading of Scripture and the writings of theologians and the Church Fathers. Through faith and contemplation of sacred literature, knowledge of the Divine can be experienced by the prepared mind.

Aquinas relied at first on the authoritative statements of the Church Fathers that were compiled and organized by Peter Lombard in his *Sentences* (*Quatuor Sententiarum P. Lombardi libros.*). He next addressed unresolved points of theology in several published works, *Quodlibeta Disputata* and *Questiones Disputata*. He followed with a comprehensive summary of the teachings of Church Fathers and of commentaries based on his studies of Scripture. This latter work prepared him for his exhaustive examination of Christian theology in the *Summa*.

11 - Organization of the Summa. Beaumont (2010) in his explanation of how to cite the *Summa Theologiae* first explains its organization. He writes:

The *Summa* has three main divisions called *Parts*:

Part I (*Prima Pars*) deals with God

Part II (*Prima / Secunda Secundæ*) is in two parts dealing with Humanity and Morality

Part III (*Tertia Pars*) deals with Christ

Each *Part* is composed of *Questions*:

Part I has 119 Questions

Part II has 303 Questions total:

The First Part of Part II has 114 Questions

The Second Part of Part II has 189 Questions

Part III has 99 Questions

Questions are dealt with in *Articles*, each made up of five sections:

The topic of the article is given in the form [of] a question.

Plausible responses are listed as Objections (the *adversus*).

A contrary response (reflecting Thomas's thinking) from some authority is cited (indicated by *sed contra* – "On the contrary").

Thomas argues for his response [the *respondeo* – "I answer that" (aka *corpus*)].

Brief replies are given to the initial objections.

12 – Overview of the Content. The *Summa Theologiae* is the crown jewel of Scholasticism. It is a written affirmation that philosophy can complement theology in the search for religious certainty. It is also a comprehensive survey of Church theology and doctrine. The *Summa* explores the relationship between Man and God and the role that Christ and the sacraments play in reconciling Man with God. A summary of its contents is as follows:

Part 1 deals primarily with God and comprises discussions of 119 questions concerning the existence and nature of God, the Creation, angels, the work of the six days of Creation, the

essence and nature of man, and divine government. Part 2 deals with man and includes discussions of 303 questions concerning the purpose of man, habits, types of law, vices and virtues, prudence and justice, fortitude and temperance, graces, and the religious versus the secular life. Part 3 deals with Christ and comprises discussions of 90 questions concerning the Incarnation, the Sacraments, and the Resurrection. Some editions of the *Summa Theologica* include a Supplement comprising discussions of an additional 99 questions concerning a wide variety of loosely related issues such as excommunication, indulgences, confession, marriage, purgatory, and the relations of the saints toward the damned. (SparkNotes Editors. 2005b, sec. Themes, Arguments, and Ideas, para. 1)

12.1 - The *Summa Theologiae* relates Catholic doctrines and beliefs on the relationship between God and man and explains how man's reconciliation with the Divine is made possible through Christ. Aquinas offers a rational view of all existence and to this end he begins by citing proofs for the existence of God and by speculating on His nature and activities. Approximately half of the *Summa* then examines the nature and purpose of man. Finally, Aquinas explores the nature of Christ and the role of the sacraments in creating a bridge between God and man. Within these broad topical boundaries Aquinas also examines questions such as how angels act on bodies, the union of body and soul, the cause and remedies of anger, cursing, and the comparison of one sin with another, to name a few of the issues.

13 – Format. In the *Summa Theologiae* Thomas Aquinas “employs techniques of argument that he learned in the *disputatio* to state, defend, and elaborate [its] tenets. The grandiose scope of the *Summa Theologica* derives from Aquinas's belief that a very significant portion of theology can be expressed and codified in a comprehensive and rational system” (SparkNotes Editors, 2005b, sec. Structure, Scope and Purpose, para. 3). The disputation exercise adopted by Saint Thomas was based on the formulation of a controversial question that debaters argued for and against. Scholastic authors often adopted this format in their written works. They generated lists of questions that they presented in the form as a “script” of how a disputation might proceed. A question was posed and arguments against the question presented, followed by arguments in defense of a position. Finally, a resolution of the issue was offered by the author. An exemplar of this form of written dialogue is the *Summa Theologiae* of Thomas Aquinas. The tome addresses hundreds of questions, each with favorable and unfavorable responses and a final resolution by Aquinas (Maurer, 1962, p. 91).

13.1 - McNerny (1963) states that the style of the *Summa Theologiae* reflects public disputations. The *Summa* exhibits in written form the dialectic approach of the Scholastic method of the medieval university:

A *quaestio* of the *Summa theologiae*, for example, is first articulated into a number of subsidiary questions or articles. An “article” of the *Summa* begins with a question and is followed by an answer which is the thesis for what follows. Immediately after the statement of the thesis a number of reasons for not accepting it are given; these are terminated by the *sed contra*. There follows the *respondeo*, or sustained answer, to the question, after which each objection to the initial thesis is taken up in turn. Debate is easily controlled in writing, of course, but when we consider that this literary style reflects the debate of the classroom or open disputation, we get some inkling of what the medieval university was like. (Vol. II, Pt. IV, Ch. I, sec. Universities, para. 8)

13.2 – Thomas Aquinas adopts the *quaestio* format in addressing the theological issues in the *Summa Theologiae*. As an example, in raising the question of whether God exists Aquinas writes the following “It is asked whether God exists.” He then responds with a statement of the contrary position: “It seems that God does not exist,” followed by arguments from authorities and/or reasons to support this position. Next, he presents arguments for the commonly accepted or preferred position that God exists. He cites texts from the Bible, as in the book of *Exodus*, to defend this position. Aquinas finally offers his solution to the problem of the existence of God, as supported by authority or reason. Here he draws heavily from the “authoritative” writings of Aristotle. He ends by raising possible arguments against his position and refutes them logically one by one (Marenbon, 1987, pp. 28-29).

14 – Table of Contents. There are four parts of the *Summa Theologiae*. These are listed below with the number of questions (QQ) addressed in each of the subdivisions.²⁰

First Part (QQ. 1-119)

- Treatise on Sacred Doctrine (Q. 1)
- Treatise on the One God (QQ. 2-26)
- Treatise on the Most Holy Trinity (QQ. 27-43)
- Treatise on the Creation (QQ. 44-49)
- Treatise on the Angels (QQ. 50-64)
- Treatise on the Work of the Six Days (QQ. 65-74)
- Treatise on Man (QQ. 75-102)
- Treatise on the Conservation and Government of Creatures (QQ. 103-119)

First Part of the Second Part (QQ. 1-114)

- Treatise On The Last End (QQ. 1-5)
- Treatise on Human Acts: Acts Peculiar to Man (QQ. 6-21)
- Treatise on the Passions (QQ. 22-48)
- Treatise on Habits (QQ. 49-54)
- Treatise on Habits in Particular (QQ. 55-89) Good Habits, i.e. Virtues (QQ. 55-70)
- Treatise on Law (QQ. 90-108)
- Treatise on Grace (QQ. 109-114)

Second Part of the Second Part (QQ. 1 - 189)

- Treatise on the Theological Virtues (QQ. 1 - 46)
- Treatise on the Cardinal Virtues (QQ. 47-170)
- Treatise on Fortitude and Temperance (QQ. 123-170)
- Treatise on Gratuitous Graces (QQ. 171-182)
- Treatise on the States of Life (QQ. 183-189)

Third Part of the Summa Theologica (QQ. 1 - 90)

- Prologue
- Treatise on the Incarnation (QQ. 1-59)
- Treatise on the Sacraments (QQ. 60-90)

²⁰ The summary is based on *The Summa Theologica by St. Thomas Aquinas*, translated by the Fathers of the English Dominican Province. Benziger Bros, 1947, <http://www.sacred-texts.com/chr/aquinas/summa/index.htm#contents>.

Supplement: to the Third Part of the Summa Theologica (QQ. 1-99)

- Editor's Note (QQ. 1 – 68)
- Treatise on the Resurrection (QQ. 69-86)
- Treatise on the Last Things (QQ. 86-99)

Appendix 1: Outline; Appendix 2: Indexes and Index of Scripture References

XI -- THE SOCIETY OF JESUS

Ignatius of Loyola

1 – Overview of Ignatius as a Student. Ignatius of Loyola became a student in 1524 at the age of thirty-three. He studied grammar in Barcelona for two years then continued his instruction in philosophy at the Universities of Alcalá and Salamanca. He deepened his knowledge in these disciplines when he attended the University of Paris. There he reviewed grammar, humanities and philosophy for three and a half years, after which he received his Masters of Arts degree in 1533. He next pursued his studies in theology for two years before withdrawing from the University of Paris in 1535 due to ill health (Fitzpatrick, 1933, p. 7).

2 - Ignatius' Life Journey. Ignatius was born Inigo Lopez in 1491 in the village of Loyola in the municipality of Azpetia in the Basque Country, northern Spain. He is known by the name of the village where he was born. Ignatius of Loyola was a member of the local aristocracy who by the age of eighteen served as a soldier in the army of the Viceroy of Navarre and later as a commander of his own troops. In 1521 Ignatius was severely wounded in both legs while defending the city of Pamplona against a French attack, resulting in the amputation of one of his legs and the mangling of the other. While he was convalescing he read books on the lives of the saints and was particularly impressed with a piece titled *De Vita Christi* (*The Life of Christ*). The work suggested activities in which one visualizes accompanying Christ during different episodes in His life. This work inspired Ignatius to write his *Spiritual Exercises*, a collection of Cristian meditations and prayers, which was completed in 1524.

During his convalescence Ignatius was imbued with an apostolic fervor to convert non-Christians to the Church. Upon his recovery he committed to the Benedictine Order in the monastery of Santa Maria de Montserrat. As a mendicant, he walked among the poor and preached his faith and worked in a hospital in the town of Manresa. He also dedicated his time to prayer and contemplation and recorded his thoughts in a journal that later provided the substance for his *Spiritual Exercises*.

Ignatius made a brief pilgrimage to the Holy Land to convert non-believers in 1523. He stayed only a fortnight because Church officials were concerned about his effect on the people of the region. This and previous experiences convinced Ignatius that he needed to further his education. He returned to Barcelona and entered a grammar school for young children and learned Latin under the famed teacher Jeronimo Ardevol, and upon completing his studies traveled to the cities of Alcalá and Salamanca where he studied philosophy in the universities.

Ignatius often entered into lengthy conversations with other students on spiritual matters. These conversations attracted the attention of officials of the Inquisition who were alerted to the heretical act of Ignatius's preaching on theological issues although not formally educated as a theologian. The authorities questioned Ignatius three times, yet after each inquiry he was exonerated of the charge due to a misunderstandings of his statements.

Ignatius did not complete his study of philosophy at Alcalá and Salamanca. Instead, he entered the College of Saint-Barbe of the University of Paris. Although he was thirty-eight years old at the time, he earnestly dedicated himself to studying grammar, humanities and philosophy for three and a half years. Ignatius completed his studies and received his Masters of Arts degree in 1533 at the age of forty-four. He continued with his studies in theology for two years before he withdrew from the University of Paris in 1535 due to ill health.

At the University of Paris Ignatius befriended Francis Xavier, Diego de Laynez, Alfonso Salmeron and Nicholas Bobadilla, all Spanish; Peter Faber, a Savoyard, and Simão Rodrigues, a Portuguese. Ignatius and his companions referred to themselves as the "Friends in the Lord" (Fitzpatrick, 1933, pp. 7-8). Loyola and his group were inspired by the historical and critical methods applied to ancient sciences and philosophies. The Ignatian friends were educated in philosophy and theology, based on the readings of Aristotle and Thomas Aquinas. They engaged in disputations and perfected their technique of structured public debate. All of their academic exercises were conducted in Latin, which was the language of the Church and the educated and political elites (Giard, 2001, p. 95). These and many other experiences later found expression in the *Ratio Studiorum*, the educational manifesto of the Society.

The Loyola Jesuits read Ignatius' *Spiritual Exercises* and shared his dream of traveling to the Holy Land to engage in apostolic work. Conflict between Venice and the Turks, however, prevented them from achieving this aim. Instead, the group traveled to Rome and presented itself to Pope Paul III as the "Company of Jesus." The Pope was impressed with their religious zeal and envisioned a role for them in countering the turbulence of the Reformation. In 1540 the Pope authorized the small group to function as a religious order under the name "Society of Jesus." Unlike the Franciscans, Dominicans and Augustinians who dedicated themselves primarily to a life of contemplation, the new order presented itself as an active community committed to instructing others in the beliefs and practices of the Church throughout Christendom and beyond.

3 - Ignatius and Enlightenment Values. According to Allan Deck (1993), Ignatius and Enlightenment thinkers held certain dispositions in common: a "devotion to Greek classical literature," "insistence on sobriety and clarity of expression", "urbane secularity," and a "conviction about the universal accessibility of the messages of classical writers." These values and the commitment to clarity and logic were "enhanced by the modern scientific/technological and industrial revolutions" of the 18th century (p. 175).

Founding of the Order

4 - Council of Trent. The Council of Trent convened between 1545 and 1563 in Trento, Italy, in response to the reform movement sweeping Europe in the 16th century. During the eighteen years that the nineteenth ecumenical council met, it weighed such matters as how to counter the Lutheran Protestant Reformation, enact disciplinary reforms in the Church and more explicitly define dogma and key tenets of Roman Catholicism. Among its pronouncements, the council declared the authority of both Scripture and tradition. It underscored the need for the seven sacraments instituted by Christ and good works in achieving salvation. It elevated the importance of sacramental grace and condemned those who believed that man could be saved by faith alone. The council also confirmed the belief in transubstantiation during the act of communion (the Eucharist) and the need for baptism to begin a new life, while denying that salvation is determined by predestination.

The council also addressed the criticisms of the reformists that Catholic clergy was unenlightened and incapable of attending to the needs of the masses. It recognized that there was "widespread ignorance and unpreparedness for the priests themselves." In response, the council ordered that parish priests establish "schools for the diffusion of Christian doctrine." (Scaglione, 1986, p. 58). As Scaglione puts it, there was "the need to take prompt action to obviate the deplorable situation of an ignorant clergy, since there was no hope that such shepherds could assume the role of educating the masses." The shepherds themselves would first need to be educated and this task fell to the Jesuits. The Society of Jesus was

authorized by papal bull to administer tridentine seminaries, beginning with the Collegio Germanico (p. 59). Its apostolic activities were subsequently extended to colleges and universities that educated Jesuit novitiates and lay students.

The educational plan of the Jesuits came about as a response to the need to train the clergy, especially during the time of the challenges presented by the Reformation. Its first objective was to educate priests, and this subsequently expanded to educate the ruling classes (Scaglione, p. 2). Putting it in different terms, "the colleges were first conceived by Loyola chiefly as seminaries (*seminaria*) for Jesuit novices (see, especially, the text of the *Formula Instituti* and the *Constitutiones*), whereas after the first generation they quickly developed into a major 'public', educational system" (p. 66). Scaglione muses that during this evolution, "the Jesuits were committed to a philosophy of education that aimed at focusing all learning towards the formation of loyal members of the church" (p. 4).

4.1 - The Council of Trent defined the mission of the Order in 1545. The council acknowledged the Order as the guardian of Christian tradition and morality and the caretaker of the integrity of the Catholic Church. To these ends, the crowned heads of Europe supported the Jesuits' efforts to administer educational institutions that preserved the spirit of Catholicism. From its inception the Society of Jesuit was perceived as a counter-force to the reform movement in the Catholic Church, making it one of the vanguards of the Counter-Reformation. The method that the Jesuits wielded in this struggle was education: "The colleges were the Jesuits' foremost weapon and means of social influence" (Scaglione, 1986, p. 61). The Jesuits were also successful in founding and shoring up universities in order to counteract the effects of heretical ideas spreading throughout Europe. Their efforts were intended to strengthen anti-reformist sentiment within elite academic communities. While their apostolic fervor was directed at the Christians of Europe, many of the early Jesuits traveled to faraway lands that had not been touched by Catholic teachings, such as Goa which received its first Jesuit contingent in 1542 (Giard, 2001, p. 95).

5 - Educational Mission of the Jesuits - The Jesuits' educational mission was to develop the "whole man." For the Jesuits the Ideal Man has knowledge and love of God as expressed in a commitment to the Catholic faith in daily activities. This requires disciplining and directing the capacities of the body and the personality: the senses, memory, imagination, intellect and will (i.e. volition to act towards the good). The *Ratio Studiorum* affirms that "[t]he development of the student's intellectual capacity is the school's most characteristic part. However, this development will be defective and even dangerous unless it is strengthened and completed by the training of the will and the formation of the character" (McMahon, 2008, p. 5).

6 - First Teaching Order. Several orders that preceded the Society of Jesuits were engaged in educational activities. The Benedictines provided instruction in their celebrated monasteries in Ireland and the Dominicans and Franciscans administered and taught in European universities. The Society, however, is identified as the "First Teaching Order," even though it appeared centuries after the mendicant orders had established their reputations as educators. John O'Malley (2000) in his discussion on the first Jesuits involvement in education explains this apparent contradiction:

What is meant by the expression "the first teaching order within the Catholic church?" What about the monasteries of the Benedictines in the Middle Ages, and what about the great Dominican and Franciscan teachers at the medieval universities? The Jesuits differed from these

and similar prototypes in three significant ways. First, after a certain point; they formally and professedly designated the staffing and management of schools a true ministry of the order, indeed its primary ministry, whereas in the prototypes it never achieved such a status. Second, they actually set about to create such institutions and assumed responsibility for their continuance. Third, these institutions were not primarily intended for the training of the clergy but for boys and young men who envisaged a worldly career. No group in the church, or in society at large, had ever undertaken an enterprise on such a grand scale in which these three factors coalesced. (pp. 1-2)

7 - Organization of the Society. The Society expanded rapidly in Europe and abroad. It created "provinces" in Europe and in lands where the Jesuits had established missions. A province included all of the Jesuit institutions in a geographical area. Jesuit provinces were established in Portugal (1546), Spain (1547), Italy (1551), France (1552) and Germania (1556). The number of followers of the Order also increased in proportion to its geographical expansion. There were close to a thousand members, many in training, in 1553 (Giard, 2001, p. 95). In short order, Jesuits were sent abroad: four arrived in the Congo in 1547 and six landed in Brazil in 1549. The first Jesuits arrived in New Spain in 1572. In South America the Province of Mexico included Guatemala and Cuba (Brading, 2001, p. 106). The Jesuits placed each province under the authority of a Superior.

A General, aided by a five-member council elected by the General Congregation, administered the Order. The Provincial was the superior responsible for overseeing the province. A group of provinces constituted an "assistancy." At first, five assistancies were formed, each comprised of its constituent provinces: Italy, Germany (Austria, Galicia, Belgium and Holland), France, England and North America, and Spain (which included Portugal) (Schwickerath, 1903, pp. 101-102).

8 - Jesuit Career Path. Part of the training of the young Jesuit required several years of teaching in Jesuit colleges. This activity followed the completion of studies of the humanities and philosophy. From the Society's perspective, this sequence developed character by contributing to the young Jesuit's intellectual and religious maturity. The normal progression of Jesuit training was the following: two years of novitiate, two years of study of the humanities, three years of study of philosophy, three years of teaching experience in a college, three years of study of theology, ordination to the priesthood, an additional year of study of theology, and a third year of probation called "tertianship." This final year renewed and deepened the Jesuit's religious spirit and commitment to his apostolic mission (Farrell, 1970, p. 117).

8.1 - Hellyer (2005) describes the Jesuit's education and career path in his work *Catholic Physics*. He writes that a member of the Society would complete his humanist education and then study the philosophy. Masters who concluded their philosophical studies but were not priests taught the five humanities classes of Latin, Greek, and Rhetoric. They would then complete their theological training and be ordained. This would be followed by a "rotation through the triennium as professor of philosophy." Hellyer explains that this requirement "aimed at ensuring that philosophy stood in harmony with theology" (p. 66). From then on, professional responsibilities varied: "undertaking missions within Europe and overseas, teaching in a faculty of theology, acting as a confessor to a prominent personage, performing pastoral [teaching catechism, hearing confessions, preaching at parishes, and serving as confessor to the accused] or a combination of several of these" (pp. 65-66).

9 - Culture of the Jesuit Teacher. Paul Grendler (2016) in his article on the Jesuit teacher from 1548 to 1773 lists certain characteristics of his vocation. First and above all the Jesuit was a teacher. He tried to be the best teacher that he could be. Teaching was essential to the identity of every Jesuit (except for the brothers). Second, he was the leader and manager of a large group of students. This required a good deal of skill, determination and self-confidence. Third, he was an integral part of a highly competitive academic culture. He encouraged competition in his students. Fourth, he believed that he could improve civil and ecclesiastical societies by fostering eloquence, wisdom and virtue in their future leaders. Fifth, he recognized the social hierarchy by giving preference to well-born students in the classroom and by attending to the needs of the lowborn and academically weak students. The educational culture led many Jesuit teachers to feel compassion for less-privileged students and ensure that they received as much attention as possible (p. 41).

Jesuit Schools

10 - Jesuits in Portugal. The expansion of the Society of Jesus in Europe was accompanied by its rise in Portugal. Some five years after the Society was formed the first contingent of Jesuits disembarked in Portugal at the request of King João III. Two of Ignatius's first companions, Simão Rodriguez and Francis Xavier, intended to continue on their way to the Indies. While in Portugal their preaching so impressed the king that he requested that they remain. Ignatius and the Crown reached an accommodation: Francis Xavier continued on to India while Simão Rodrigues stayed on as the King's confessor. .

Under the direction of Rodrigues and with an endowment by the Dom João III, the Society established its first college in 1542 in the north-central city of Coimbra, famed for its university founded in 1290. The college immediately undertook the preparation of Jesuit educators and missionaries for the Indies. Shortly thereafter the Jesuits founded two other colleges, one in Lisbon and the other in the east-central city of Évora. The three colleges were the main secondary institutions administered by the Jesuits in Portugal. By 1544 the Society had established seven residential colleges, with that in Coimbra being the most financially stable and successful. It also enjoyed the most notoriety.

The college in Coimbra at first was a residence for Jesuits who studied at the university; classes and academic instruction were not offered on the premises. A dozen students enrolled when its doors opened in 1542 and four years later that number rose to one-hundred. Dom João renamed the institution the Royal College of Arts and Humanities in 1547 and staffed it with "quality teachers of grammar, language, history, geography and mathematics, rhetoric, the humanities, and philosophy" ("Jesuit Institutions in Portugal," para. 3). It was a timely act since Portuguese applicants to the University of Coimbra did not have access to institutions that prepared them for superior studies. The Royal College addressed this deficiency by offering an educational program intended to be on par with the prestigious Royal College of France.

At first the Royal College in Coimbra functioned independently of the university. Eventually, it was incorporated into the institution as a faculty of arts under the governance of the Jesuits. The Crown further decreed in 1561 that students could only enroll in the university's faculty of law upon presentation of a certificate of completion from the arts faculty. This requirement effectively gave the Jesuits control of secondary and superior education in the country until 1759 when the Order was banished by the Marques de Pombal ("Jesuit Institutions in Portugal," para. 4).

11 - Jesuits and Humanist Colleges. Renaissance Humanism was the inspiration for the lower studies of the Jesuit educational system as outlined in the *Constitutions* and rules of the *Ratio Studiorum*. The word "college" used by Ignatius in the *Constitutions* denoted a school where grammar, the *litterae humaniores*, or humane letters, and rhetoric were taught. The university, in the understanding of the early Jesuits, offered programs of studies in the arts, i.e. philosophy, and in theology. The philosophy course encompassed studies in logic, natural and moral philosophy, and metaphysics whereas the theology program included studies in Sacred Scripture and scholastic and positive theology (Cesareo, 1993, p. 23).

The Jesuit college resembled the Renaissance humanist schools of the era. Its curriculum emphasized training in the humanities: it developed oral and written skills and immersed students in the study of the classical languages of Latin and Greek. The pedagogy adopted by the Jesuits in their colleges also followed the traditions of Latin schools of the period. Professors delivered lectures, stressed composition, and engaged students in formal debates called disputations. What made the Jesuit college and university unique was their religious mission to "to train leaders who will make a positive difference in the world by bringing to it a Christian outlook, thereby giving greater glory to God" (Cesareo, p. 29).

Jesuits perceived education as a means to an end. The curriculum was conceived as an instrument designed to develop the spirit and the intellect of the student; to develop him as a whole man (Cesareo, p. 28). Cesareo writes that "[t]he curriculum adopted by Ignatius for his schools had a twofold purpose: first, to teach students how to live meaningful Christian lives while exerting influence upon their society and, second, to prepare students to earn a living so that they would be in a position to play a significant role in society." The insertion of training in a livelihood into the curriculum was essentially a "theistic outlook that gives meaning to life" (p. 26).

12 - Challenges to the Jesuit Educational System. Marcus Hellyer (2005) in his discussion of Jesuit education in early Germany provides insights into the relationship between Jesuit colleges and universities throughout Europe. Colleges largely remained separate from universities in Italy and Spain because of faculty opposition to Jesuits teaching in their institutions (pp. 55-56). In Germany the Society's colleges were similarly autonomous and independent from the universities. Yet, over time, Jesuits were invited to teach in and administer existing universities at the bequest of princes and bishops. Also, some Jesuit colleges with humanist curricula and philosophy faculties were incorporated into the universities by replacing the arts faculties. The college became an administrative entity that was integrated into the university structure (p. 57). This "amalgamation of the Jesuit college with the university distinguished Jesuit education in the empire" (p. 56).

Accompanying this larger responsibility, the Society insisted that the Jesuit provincial have exclusive right to appoint professors to the institutions that he administered. This would guarantee uniformity since all educational entities would be governed by the *Ratio Studiorum*. The Princes, interested in Jesuit participation in the universities, granted the Society the responsibility of determining the curriculum and the make-up of the faculty of arts (Hellyer, p. 58).

The involvement of the Society in education at both the college and university level at times created dissension and confusion. The college, "as a graft onto an older, larger institution, the university, its precise status was open to debate. The question of how a Jesuit college legally and intellectually fit into the university was constantly disputed by the Society and the universities" (Hellyer, p. 58).

13 - The Roman College. The preliminary draft of the *Ratio Studiorum* of 1586 recognized the need for young teachers to employ effective teaching methods. The document, however, did not advocate any

special preparation. Rather, it implied that prospective teachers who had not demonstrated mastery of instructional techniques before entering the classroom would have to learn them on the job. Hellyer (2005) relates the situation in the philosophy program in Germany. Jesuit teachers only experienced Aristotle's physics when they were students in the program. Once they assumed their teaching responsibilities they "were usually teaching it for the first and only time. They often had very little exposure to contemporary developments in natural philosophy, other than what they had encountered in scholastic compendia" (p. 66). Inexperienced faculty depended upon senior faculty and especially the prefects of studies for guidance in completing their duties as outlined in the *Ratio Studiorum*.

Farrell (1970) opines that Rule 30 of the *Ratio* related to the Provincial "is probably the earliest public recognition in educational history that special preparation is necessary for effective teaching" (p. 125). Farrell states: "In order that teachers may be well prepared for their work when they enter the classroom, it is very important that they have practice sessions under expert guidance. It is strongly recommended that the rector diligently attend to this in the manner described in his ninth rule" (p. 10).

Ignatius acknowledged the significance of this desideratum when he founded the Roman College in 1551. His goal was to "to make it the most renowned institution of the Society of Jesus." He resolved that in addition to its traditional academic mission, the Roman College would serve as a "training" center for young Jesuits assigned to colleges throughout Europe. In this regard, the institution became a magnet for European youth. By 1559 there were 600 students enrolled in the college, "of which 50 were in theology, 200 in philosophy, and the remainder in the humanities." By 1561-1562, enrollment had grown to approximately 900 students, with "80 in theology, 300 in philosophy, 530 in letters" (Scaglione, 1986, p. 62). Bright and promising young men from Sicily, Spain, Portugal, Belgium, Germany and Italy responded to Ignatius's call and learned through example the teaching methods employed by their talented mentors. Later, many assumed teaching responsibilities. Important Jesuit graduates included "the rhetorician Pedro Juan Perpinyá (1530-66), the historian Juan de Mariana (1536-1624), the theologians Francisco de Toledo (1515-82) and Francisco Suárez (1548-1617), and the great mathematician and astronomer Christopher Clavius (1538-1612)" (Casalini & Pavur, 2016, p. 15).

From its inception, the Roman College's "regulations, procedures, textbooks written by its teachers, and the views expressed by its theologians were held up as models for all the other Jesuit schools and teachers. The Roman College thus carried a special aura as the center of Jesuit education located in the heart of the Catholic universe" (Casalini & Pavur, p. 15). It should be noted, though, that many schools struggled, often unsuccessfully, to emulate the College and fully implement its program of studies.

14 – Ignatius and the Roman College. Farrell (1970) in his work *The Jesuit Ratio Studiorum of 1599* comments on the steps Ignatius took to realize his vision of the Roman College:

When the Roman College (now the Gregorian University) was opened in 1551, Ignatius decided that it should become the center for training future Jesuit teachers for the schools which were being established in many European countries. So he brought to the Roman College the more promising among the young Jesuit students. Eleven came from Messina, others from Spain, Portugal, Louvain, Germany, and Italy. At the same time he staffed the college with the most gifted professors of the Order. The purpose he had in mind was to form the younger students in sound pedagogical principles by observing the teaching methods of their professors and by having the methods explained to them. Thus what they had learned at the Roman College would through them become operative in other Jesuit schools. (pp. 25-26)

15 - Expansion of Jesuit Colleges. The first Jesuit colleges were simple enterprises. Students were often quartered in abandoned or dilapidated houses. Ideally, the Jesuits began teaching the lower studies of Latin, Greek and Rhetoric, and introduced the three-year course in Philosophy in a few successful institutions (Hellyer, 2005, p. 54). The number of schools founded by the society increased rapidly. Jesuit elementary and secondary schools were established in European cities such as Brussels, Antwerp, Colon and Augsburg and abroad in China, Japan, Africa and the Americas.

Farrell (1970) describes the rise of Jesuit educational institutions. The first Jesuit school was founded at Messina, Italy, in 1548, and soon followed by the Roman College and numerous provincial colleges, the most prestigious being that of Parma. Upon Ignatius's death in 1556, thirty-three schools were fully functioning in Sicily, Italy, Spain, Portugal, Austria, Bohemia, France and Germany -- with six waiting to be inaugurated. By 1581 there were 150 schools in operation and by 1599 that number had increased to 245. In 1626 there were 441 Jesuit-run schools; in 1710 the number rose to 610 and by 1749 a total of 669 colleges and 176 seminaries operated in Europe and abroad. By this latter date, one must also include Jesuit schools established abroad in India, the Philippines, Cuba, Mexico and Brazil (Farrell, 1970, p. iii; see also Scaglione, 1986, pp. 61-62).

The Jesuits also founded universities, although at first the number was small. Of prominence were the University of Gandia, Spain, in 1549; the University of Coimbra, Portugal, and the Roman College, Italy, in 1551; and the University Pont-au-Mousson, France, in 1575 (Farrell, p. iii). Coinciding with the escalating number of colleges and universities, the number of followers of the Order also increased. By 1553 there were close to a thousand members, many in training, and by 1565, this total swelled to 3500 (Giard, 2001, p. 95).

16 - Early Enrollment Numbers. Farrell (1970, p. iv) records the number of students enrolled in key Jesuit colleges in the latter part of the 16th century. He observes that during this period the number of schools and student enrollment increased sharply. He provides the examples below:

Country	School	Year	Enrollment
Portugal	Evora	1585	1,400
	Lisbon	1586	1,800
	Coimbra	1582	1,600
France	Billon	1563	1,600
	Clermont	1585	1,500
Germany	Cologne	1581	1,000
	Treves	1581	1,000
Italy	Roman College	1567	1,000
		1594	1,500

It was not unusual to find between 500 and 800 students enrolled in Jesuit colleges in small towns and between 800 and 1500 students in cities. In France, alone, 40,000 students enrolled in 92 Jesuit institutions (Farrell, p. iii).

17 - Success of Jesuit Colleges. The colleges of the Society earned a reputation for excellence. It was said that in the Jesuit-run college a student could learn in ten months what would normally take two years to learn at a non-Jesuit school. So prestigious was Jesuit education that even Protestants clamored to enroll their children in the Society's schools.

One reason for the success of the Jesuit experiment was that no other religious order was dedicated solely to education. The Benedictines success in monastic education and the Dominicans and Franciscans presence in universities was well established by the 1500s. However, the Jesuits' commitment to secondary education and its mission separated the Society from these religious Oorders. The founding of colleges allowed the Society to establish itself locally and create relationships with the elites of civil society and the middle class, and educate those who would be responsible for social and political transformations.

Suppression of the Society

18 - Suppression in Portugal and Brazil. In 1757 the Society of Jesus was expelled from Portugal and its colonies and its holdings seized. The Marques de Pombal enacted this measure for political, economic and educational reasons.

The royal decree also applied to Brazil where the Society was active in what are known today as the states of Pará, Maranhão, Piauí, Ceará, Paraíba, Pernambuco, Bahia, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina. When the Order was expelled from Brazil a total of 590 Jesuits were affected, 316 of whom were priests active in education (Leite, 1965, p. 42). The Society left behind its missions, parochial houses, seminaries, and seventeen colleges that at the time tended to hundreds of students .

19 - Papal Suppression. Following the suppression of the Society in Portugal and its colonies, King Charles III of Spain (1716-1788) acted on his suspicion that the centralized governance structure of the Jesuits was a threat to the authority of the Bourbon State. Ministers of the Crown reminded the King that the General of the Society acted as an "absolute monarch" who appointed all provincials and rectors and demanded unqualified obedience from members of the Order. The perception was entertained that the Society of Jesus was an institutional body that superseded the authority of the Crown. It was argued that the Order, in the eyes of its members and of many citizens, was beyond the reach of the monarchy (Brading, 2001, p. 106).

Anti-Jesuit forces were successful in urging the Pope to suppress the Society. On August 16, 1773 Pope Clement XIV issued a Papal decree that definitively suppressed the Society of Jesus. Jesuit schools were closed and all holdings of the Society confiscated throughout Europe and missionary territories primarily in Central and South America and India. The governments of Prussia and Russia, however, ignored the decree and continued to allow the Jesuits to conduct their activities within their borders. Pope Clement's decision resulted in the closing of 546 schools in Europe and 123 schools abroad. The effects were devastating.

20 - Jesuit Exodus from New Spain. The Jesuits were successful in introducing and expanding secondary education in Nueva España. After a mere thirty years of activity eleven colleges were established by the end of the 16th century. All the colleges offered programs in the humanities and six included primary level instruction. A hundred years later there were seventeen colleges with ten

elementary schools. Of this total, eleven colleges offered studies in the humanities, with three also offering advanced studies in the arts or philosophy, and three with theology programs.

Jesuits in New Spain were successful in integrating the "new science" in their teaching. They were able to create an intellectual environment that prepared their students in the sciences by encouraging discussions of modern scientific ideas. Jesuit colleges not only cultivated the humanities and encouraged scientific research, they also served as repositories for information gathered by explorers, chroniclers and missionaries. They elaborated on that information and gave it a solid academic grounding (Aizpuru, 2001).

There was a total of twenty-two colleges, seven of which housed primary reading schools, when the Jesuits were expelled from New Spain in 1767. Twenty of the colleges offered humanistic studies, twelve with programs in the arts and ten in theology (Aizpuru, p. 101). A total of 678 priests and brothers who administered and taught in forty colleges and houses and 114 missions summarily abandoned their schools and missions and returned to Europe where most died in exile (Padilla, 2001, p. 109).

The exodus of the Jesuits from New Spain was an "unmitigated disaster." Brading (2001) relates the case of the Province of Mexico (which included Guatemala and Cuba) in which one of the most prestigious institutions in Mexico City, the College of San Ildefonso, closed its doors after having serviced some three hundred "well-born" students who later became distinguished judges, politicians, canons, bishops and professors of superior faculties (p. 106).

21 - Reinstatement. On August 7, 1814 Pope Pius VII reinstated the Society of Jesus, "as an Order in the universal Church, with all the rights, privileges, and consultations hitherto granted and approved" (Farrell, 1970, p. v). The Order began the arduous task of rebuilding its brotherhood and of reopening its educational institutions. By 1832-1833, the period when the experimental version of the revised *Ratio Studiorum*, was rolled out, forty-five schools and seventeen seminaries were functioning and a total of 2,495 Jesuits committed to the Order. Only in 1930 the Society of Jesus achieved a membership commensurate with that prior to its suppression in the late 1700s (Farrell, p. vi).

XII - The Ratio Studiorum

Origin

1 – Overview. In 1599 the Society of Jesus adopted as its official educational manual the *Ratio atque Institutio Studiorum Societatis Iesu* (*Method and System of the Studies of the Society of Jesus*), or in its abbreviated form the *Ratio Studiorum*. Schwickerath (1903) states that the “*Ratio*, as applied to studies, more naturally means *method* than principle, and the *Ratio Studiorum* is essentially a practical method or system of teaching. Hence the name is altogether appropriate” (pp. 111-112). The Jesuit approach to education was influenced by two streams of thought during the Counter-Reformation: Scholasticism and Humanism. The educational system that evolved from these two intellectual strains was explained in the Jesuit educational manifesto, the *Ratio Studiorum*.

2 – The Ratio and Aquaviva. When Ignatius of Loyola died in 1556, thirty-three schools were functioning in Sicily, Italy, Spain, Portugal, Austria, Bohemia, France and Germany (Grendler, p. 19). By 1581 there were 150 institutions in operation and by 1599 the total had increased to 245. The steady expansion of the network of Jesuit schools prompted a call for regulations that would standardize their organization and operations.

Claudio Aquaviva was elected fifth general of the Society in 1581. He promptly named a six-man delegation to codify the rules governing practices in Jesuit educational institutions. The group produced a trial document in 1586 that according to the *New Catholic Encyclopedia* (2003) “consisted mainly of essays on the conduct of classes, repetitions, and disputations; on teacher formation and the various curricula, vacations, time-orders, prizes, and degrees” (“*Ratio Studiorum*,” sec. Origin, para. 1). After a review of the document by Aquaviva, his advisers and committees from the Jesuit provinces, a second copy was drafted in 1591, and after further changes the final version was approved in 1599. The *Ratio* was slightly modified in 1616 and remained in effect until the Society was suppressed in 1773. An unsuccessful attempt was made to update the *Ratio* in 1832.

The *Ratio Studiorum* of 1599 was the product of the efforts of experienced administrators and teachers of more than a hundred Jesuit colleges in Spain, Portugal, Italy, Belgium and Germany. It incorporated ideas from Part IV of the Jesuit *Constitutions* written by Ignatius; from Jerome Nadal’s plan, the *Ordo Studiorum*, for the college at Messina, Sicily; and Diego de Ledesma’s document on the Roman College, *De Ratione et Ordine Studiorum Collegii Romani* (Farrell, 1970, p. i).

3 – The Constitutions. The *Constitutions* of the Society was a document drafted by Ignatius in collaboration with Juan Alfonso Polanco, the secretary of Ignatius and one of his closest advisers. It was completed under the generalate of James Lainez after Ignatius’s passing in 1556. The *Constitutions* is divided into ten parts, the fourth and longest of which focused on education. It was approved during the papacy of Pontiff Paul IV.

The Jesuit Community of Boston College (BCJC) states that “[t]here is no Jesuit theory of a university, but there are principles in Ignatian spirituality and Jesuit practice that suggest a characteristic point of view towards education. One source is the plan of a university that Ignatius sketched out in the last two years of his life, in Part IV of the *Constitutions of the Society*, modeled on his vision of the preeminent educational institution of the Society in his day, the Collegio Romano, now the Gregorian University” (2008, p. 40). Ignatius wrote the final draft of the *Constitutions* at the same time he was

approving new schools. The work was the outgrowth of his reflections memorialized in the *Spiritual Exercises*.

The *Constitutions* is divided into ten parts, with Part IV being the most relevant to the educative process.²¹ Part IV includes Ignatius' original directives on educating young men of the Order. This section is a credible presentation of "the explicit and direct thought of Ignatius on the apostolate of education," even though subsequent works on education were developed as the Jesuits gained more experience in the schools (Duminuco, 2000, p. 225). The preamble of Part IV makes clear Ignatius's idea about the goal of the Society and confirms his interest in education: "The aim which the Society of Jesus directly seeks is to aid its own members and their fellowmen to attain the ultimate end for which they were created. To achieve this purpose, in addition to the example of one's life, learning and a method of expounding it are also necessary" (as cited in Duminuco, p. 225).

Much of what Ignatius wrote in the *Constitutions* is based on his experiences at the University of Paris. Its organization and methods shaped his views. In Duminuco's work (pp. 225-226), major points of the *Constitutions* are summarized along with their pages referenced in brackets:

The priorities in the formation of the Jesuits became priorities of Jesuit education: a stress on the humanities, to be followed by philosophy and theology [p. 307], a careful orderly advance to be observed in pursuing these successive branches of knowledge [p. 366], repetition of the material and active involvement of the students in their own education [pp. 375 and 378]. Much time should be spent in developing good style in writing [p.381]. The role of the Rector, as the center of authority, inspiration and unity, is essential [pp. 421 and 439].

3.1 – Part IV of the *Constitutions* dealt with the organization and curriculum of Jesuit schools and student behavior; it did not comment on Jesuits as teachers. The document

envisioned Jesuit education as a seamless whole beginning with Latin grammar and culminating in Scholastic theology. In practice Jesuit schools were divided into a lower school and an upper school. In almost every Jesuit school, the lower school could be found to advance studies of Latin, the humanities and rhetoric based on Latin and Greek classics. The complete upper school curriculum could be found in large colleges and consisted of studies of logic, natural philosophy or science, metaphysics, including mathematics, and scholastic theology. Advanced institutions like the Roman College also offered courses in Hebrew, moral philosophy and the study of Holy Scripture. (Casalini & Pavur, 2016, p. 13).²²

The *Constitutions* also prohibited the establishment of elementary schools because there was insufficient manpower for these institutions. Farrell (1970) notes, "that [this] prohibition referred to

²¹ The notes and citations on the *Constitution* are taken from the work of Vincent Duminuco (2000). However, in the appendix to his work the excerpts are taken from *A Pilgrim's Testament: The Memoirs of Ignatius of Loyola*, trans. Parmananda R. Divarker. Rome: Gregorian University Press, 1983. Duminuco's book recounts the proceedings of a conference held at the Graduate School of Education of Fordham University in 1999 to commemorate the four hundredth anniversary of the publication of the *Ratio Studiorum*. Prominent Jesuit scholars present historical scholarship on Jesuit education and includes *The Characteristics of Jesuit Education* (1986) and *Ignatian Pedagogy: A Practical Approach* (1993). See Worldcat at <http://amzn.com/0823220478>. A summary and review of Duminuco's book can be found at <http://www.collegium.org/node/115>

²² For more information on the contents see *The Constitutions of the Society of Jesus and Their Complementary Norms*. St. Louis: The Institute of Jesuit Sources, 1996.

Europe, not to foreign missions; for from the beginning it was a Jesuit principle that schools were to be opened as soon and as widely as possible in all missionary territories" (p. vi).

4 - Distinguishing Features of the Constitutions. Four distinctive features characterize the educational plan suggested in the *Constitutions*. The first feature was "to educate those, especially teachers, who will have more influence in the world of civil and religious affairs." A second was the commitment to incorporating the humanities disciplines in the core curriculum in Jesuit colleges. The third "was the integration and order that Ignatius envisioned among the subjects to be studied, leading from lesser to more important ones, culminating in the study of theology." A fourth feature can be inferred from the history of the Society's schools. The Jesuit education system "was a network that transcended boundaries of language, culture, and nationhood, one that was intercultural and global in perspective" (BCJC, 2008, pp. 40-41).

5 - Importance of Theology. Ignatius took note of the orderly way that the study of languages and humanities at the University of Paris preceded the study of the sciences and philosophy, followed by the study of theology. Following the scholastic tradition, Ignatius considered theology

the culmination of the intellectual enterprise . . . that integrated all the parts of the intellectual life. This principle flowed out of the central theme of his spirituality, that the whole world discloses God at work. All the academic disciplines, therefore, contribute to the intelligibility of the world in their own proper ways and play a key role in making theology intelligible. Theology, focusing on the questions at the center of the mystery of God's self-disclosing activity, completes and integrates the knowledges developed by all the other disciplines of the university. (BCJC, 2008, p. 41)

6 - The Constitutions and Lay Students. Duminuco in his work *The Jesuit Ratio Studiorum* (2000) comments on Part IV of the *Constitutions*. He notes that lay pupils should be "well instructed in Christian doctrine" and that they be exempt from school fees. The document also advocates the pragmatic application of rules when it states that the specifics of their implementation should accommodate local circumstances: "Since there must be a great variety in particular cases in accordance with the circumstances of place and persons, this present treatment will not descend further to what is particular, except to say that there should be rules which come down to everything necessary in each college" (as cited in Dominico, p. 227). A little further on the *Constitutions* states that colleges may adopt and adapt the rules of the Roman College when it suits them. Ignatius promised that more specific rules would be forthcoming when additional information about the schools, their curricula and pedagogy become available. He never completed this task due to his passing on July 31, 1556 (p. 227).

7 - Ratio Studiorum and Modus Parisiensis. The first Jesuits based their educational system on the *modus Parisiensis*. This decision was based in part by their exposure to the organization and curricula of the University of Paris. It was also influenced by their experiences at universities in Padua, Bologna and Rome. The Jesuits were disillusioned with the lack of systematization in the structures and administration of the universities and the power that students wielded over the masters and administrators. The Loyola Jesuits thus sensibly embraced the centralized and organized system of studies at the University of Paris (Codina, 2000, p. 32).

The *Ratio Studiorum* followed the Parisian model and grouped students in cohorts that studied the same subjects in a fixed progression. Students did not study individually, but in groups; nor were they free to choose the subjects they would study and the terms in which they would enroll. These were dictated by the institution. The *Ratio* also adopted the practice of administering an entrance examination to applicants to the college to determine which class they should be assigned (Duminuco, 2000, p. 34). Furthermore, no student could move on from the five disciplines of the humanist program -- with its focus on Latin and Greek -- to the three-year program of philosophy without passing a qualifying exam in Letters (Hellyer, 2005, p. 72). The morning and afternoon schedules of two to three hours of instruction followed the Paris model, as well as the school year, which began October 1 with the feast of St. Remi, and the dates for vacations and for Christmas, Easter and Pentecost breaks (Duminuco, pp. 35-36).

The *Ratio* identified, as analogs of the university administration, the head of the college as the *Rector* and his second in command, the *Prefect of Studies*, and provided extensive lists of their responsibilities and the rules that they were expected to enforce. The disciplinary code for students both in and outside of the Jesuit College suggested punishments and rewards and followed, with modifications, the practices of Paris (Duminuco, pp. 34-35). Following the Parisian tradition, 461 articles were grouped in thirty sets and, prior to the final draft of the *Ratio* in 1599, a reference document was published in 1551 titled *Rules for the Rector of the Roman College*.

Content and Rules

8 – Three Curricular Areas of the Ratio. The *New Catholic Encyclopedia* (2003) summarizes the curricular areas proposed by the *Ratio Studiorum* in the following passage:

This document is a collection of 30 sets of practical regulations for administrators, teachers, and students of Jesuit establishments. When fully developed, these institutions offered instruction in three faculties or curricular areas, and the *Ratio*'s rules referred to one or all of these. In the faculty of letters or classical language studies, the program was divided into five main sections: three grammar classes, whose readings and exercises the *Ratio* gave in detail; humanities, which emphasized poetry; and rhetoric. The arts faculty provided a three-year course in philosophy together with some science and mathematics. Studies in the theology faculty covered four years and were normally pursued only by candidates for the priesthood. Not every Jesuit college possessed each of these faculties but all had at least the faculty of letters, which constituted a secondary or middle school between the abecadarian exercises of elementary education and professional specialization in such university faculties as theology, medicine, and law. The prestige of 16th- and 17th-century Jesuit educators was chiefly associated with these middle schools, and the *Ratio* deals principally with their work or that of the arts curriculum. ("*Ratio Studiorum*," sec. Organization)

9 – Four Content Areas of the Ratio. Alan Farrell (1970) in his commentary on the *Ratio Studiorum* summarizes its content in the following passage:

There are four principal areas contained in the *Ratio Studiorum*, namely, administration, curriculum, method, and discipline. It begins with administration by defining the function, interrelation, and duties of such officials as the provincial, rector and prefects of studies. It outlines a curriculum by placing in their proper sequence and gradation courses of study in theology, philosophy and the humanities. It sets forth in detail a method of conducting lessons

and exercises in the classroom. It provides for discipline by fixing for the students norms of conduct, regularity and good order. (p. x)

10 – Theoretical Principles. The *Ratio Studiorum* set down directives for the curriculum and teaching methods in each of the three levels of the educational system. It did not discuss curricular or pedagogical principles. It was a practical document meant for practitioners. Father Donahue (1963), however, suggests that principles governing the programs of study outlined in the *Ratio* can be inferred from the Rules. A few of them are explicit in supporting documents. The *New Catholic Encyclopedia* (2003) states that while few theoretical principles are enunciated in the *Ratio*, some theory is implied in the curricular and pedagogical details of its educational system.

The aim is both moral and intellectual formation, with primacy of honor going to the former and most attention to the latter. The letters and arts curricula center on a Renaissance Christianization of the Greco-Roman tradition of literary and philosophical culture directed toward writing Latin like Cicero and thinking like Aristotle. In theology St. Thomas is the prescribed author. The chief methodological emphasis is on student activity, and the *Ratio* prescribes an abundance and variety of written and oral exercises. One of its few general statements is: Variety is good because satiety is bad. . . . He is advised to motivate pupils not by chastisement but by the attraction of honor and the rewards of scholastic success. This Renaissance accent on glory, however, is counterbalanced by the assertion on the first page of the *Ratio* that the whole of schooling should be designed to bring students to the knowledge and love of God. (“*Ratio Studiorum*,” sec. Contents, para. 1)

10.1 - Farrell (1938, p. 404) identified a number of the curricular and pedagogical principles implied in the *Ratio Studiorum*. The most important are the following: (1) Subject matter should be sequenced from the least to the most important; (2) Objectives should be organized sequentially to guarantee student mastery of content; (3) The student’s knowledge and skills should be regularly assessed to determine his level of achievement. Satisfactory performance is required for moving on to the next stage in the academic program; (4) Objectives and content should be hierarchically organized; (5) Classical texts should be the objects of inquiry; (6) The substance of analysis should be the thoughts memorialized in classical writings; (7) The purpose of the analysis is to inculcate in students a Christian perspective on virtuous behavior; (8) Memorization should be based on repetition in order to ensure that a student acquires important content; (9) Multiple techniques should be employed to develop the student’s powers of reason and communication; and (10) There should be close cooperation between the teacher and the student to ensure the latter’s moral and ethical development.

11 – Rules of the Ratio. The *Ratio Studiorum* consists of thirty Rules that encompass 461 articles that regulate the various components of the Jesuit educational system. The Rules under Section I apply to the Superiors who govern the college: the Provincial, the Rector or President, and the Prefect of Studies or Superintendent. Section II addresses the content, responsibilities and teaching methods of the theological faculty. Section III deals with the content and duties of the faculty of arts or philosophy. Section IV treats the faculty of the humanities, and Section V deals with an assortment of diverse rules.

The list of Rules presented below is based on Farrell’s 1970 work, *The Jesuit Ratio Studiorum of 1959*. The number of directives indicated for each Rule appear in parentheses.

- I. Rules of the Provincial (1-40)
 - Rules of the Rector (1-24)
 - Rules of the Prefect of Studies (1-30)
- II. Common Rules of the Professors of the Higher Faculties (1-20)
 - Special Rules for Professors of the Higher Faculties:
 - a) Scripture (1-20)
 - b) Hebrew (1-5)
 - c) Theology (1-14) d) Cases of Conscience (1-10)
- III. Rules of the Professor of Philosophy:
 - a) General Rules (1-8)
 - b) Courses, Texts, etc. (9-20)
 - c) Moral Philosophy (1-4)
 - d) Mathematics (1-3)
- IV. Rules of the Prefect of Lower Studies (1-50)
 - Rules for the Written Examinations (1-11)
 - Rules for Prizes (1-13)
 - Common Rules for the Teachers of the Lower Classes (1-50)
 - Special Rules for the Teachers of the Lower Classes:
 - a) Rhetoric (1-20)
 - b) Humanities (1-10)
 - c) Grammar I (-10)
 - d) Grammar II (1-10)
 - e) Grammar III (1-9)
- V. Rules for the Scholastics of the Society (1-11)
 - Instruction for Those Engaged in the Two-Year Review of Theology (1-14)
 - Rules for the Teacher's Assistant or Beadle (1-7)
 - Rules for Extern Students (1-15)
 - Rules for the Academies (cf. below):
 - a) General Rules (1-12)
 - b) Rules of the Prefect (1-5)
 - c) Academy of Theology and Philosophy (1-11)
 - d) Moderator of the Academy (1-4)
 - e) Academy of Rhetoric and Humanities (1-7)
 - f) Academy of Grammar Students (1-8)

12 - Studia Inferiora and Studia Superiora. The core of the *Ratio studiorum* proposes curricular and pedagogical principles for a three-tiered course of studies: humanities, philosophy and theology. The tiered sequence was divided into two parts. Section IV referred to the *studia inferiora* or lower division of studies. The classical studies of the humanist program correspond to "high school and part of college" and consist of five classes: the study of basic (rudiments) and advanced (accidence) grammar, syntax, humanities and rhetoric. Sections II and III consist of rules of the *studia superiora* which encompass two or three years of philosophy, and after its completion a four-year program of study of theology. As noted

by Schwickerath, "The *Ratio Studiorum* treated languages, mathematics and sciences not simultaneously, but successively; hence the distinction between Philosophy (Arts) and *Studia inferiora*" 1903, (p. 118).

12.1 - Scaglione (1986) describes the superior and inferior classes in the following passage: "In the *Ratio* the 'superior courses' are designed especially for the priest (Theoretical and Moral Philosophy – Aristotle; Theology – St. Thomas Aquinas: Scriptures; Hebrew; Mathematics). The 'inferior courses' are Grammar, Humanities, and Rhetoric. Christian Doctrine is interspersed throughout the curriculum, in the approved form of the Tridentine Catechism" (p. 84). The Jesuits adopted the catechism composed by the Jesuit Father Canisius and sanctioned by the Council of Trent; and for doctrine the (common Latin) Vulgate Bible translated by Saint Jerome in the 4th century and authorized by Pope Clement VIII in the 16th (p. 84).

13 - Lege, Scribe, Loquere. Every Jesuit college ascribed to the motto *lege, scribe, loquere*. Students were expected to master written and oral communication in Latin. In their expositions they based their arguments on acknowledged authorities. Recitation of Latin verse and performance of Latin plays were routinely scheduled. Latin was spoken both within and outside of the college. Greek was largely ignored as was mathematics, music and mother tongues (Browning, 1902).

14 - Latin and the Jesuits. There were pragmatic reasons for teaching Latin in Jesuit colleges. It was the language of classical and religious texts and of sermons, orations, addresses and scholarship. McMahon (2014) comments on the importance of the language in medieval Europe:

Nine-tenths of everything was taught in Latin. There were some schools in which you couldn't speak in the vernacular, even outside of the classroom. The language of the school was Latin. They believed Latin to be the principle vehicle and instrument in forming the mind, and the key to opening the door to holy Mother Church and classical culture. They believed that you couldn't possibly become a cultured man, get the true classical studies and penetrate to the true mind of the Church unless you really knew Latin and were capable of speaking and writing it fluently. This was not an impossible goal; it was done. As they often frequently stated, "*Greek was for the gifted student, Latin for everyone!*" (p. 9)

Farrell (1970) points out that Sommervogel's *Bibliothèque* confirms the predominance of the language in Jesuits publications on literature, history, geography, astronomy, mathematics, philosophy and theology (pp. 120-121).

14.1 - Eloquence in expression could only be achieved once the student mastered oral and written Latin. The Jesuit historian Camille de Rochemonteix comments on the elevated position of Latinity for scholastics and Jesuit educators:

Then Latin was held in honor. They did not try to form mathematicians or doctors, artists or agronomists or specialists; rather, they prided themselves on knowing, writing and speaking Latin because this knowledge was indispensable for the study of philosophy, the crown of a classical education; because it was the idiom of both the Church and of science; because it was the language of the past in religion, literature, philosophy and theology; and because no one thought an education could be liberal without Latin (as cited in McMahon, pp. 8-9).

15 - The Ratio of 1832. The 1599 *Ratio Studiorum* was lightly amended in 1616. The revised version remained in effect until the suppression of the Jesuits in 1773. After the Society was restored in 1814, an attempt was made to update the *Ratio* by taking into account modern languages and literature, and mathematics (Casalini & Pavur, 2016, p. 20). A revised edition of the *Ratio Studiorum* was drafted in 1832 in response to the changing dynamics of education in Europe. The amended document, however, was never adopted due to a lack of consensus among Jesuit authorities regarding its appropriateness.

The *Ratio Studiorm* of 1832 provided new guidance on how to teach in the colleges. Much had changed during the previous two-hundred plus years. France, Germany, England and other countries had established public secondary schools that offered a variety of courses. The revised *Ratio* reflected changing perceptions about the importance of the natural and social sciences in the primary and secondary school curricula. It further distanced itself from the original version by acknowledging the greater need for studying mathematics, the natural sciences, history and geography. These disciplines in the predominantly literary curriculum were identified as accessory studies, rather than credible branches of study in their own right. Even though advanced mathematics and natural sciences were recommended in the 1832 document, they continued to be assigned to the philosophy course. (Schwickerath, 1903, p. 192).

The 1832 *Ratio*, however, retained its core vision of a humanist foundation upon which higher studies were built. It gave importance to the study of vernacular languages and literature while continuing to give preference to the study of the Latin and Greek languages. The rules governing dramatic performances were omitted and less attention was given to public exhibitions of a literary sort. The texts of new grammarians were introduced to accompany the standard texts of Cicero as well as the preferred works of Sallust, Curtius, Livy, Caesar and Cornelius Nepo.

The most visible change in the 1832 rules addressed the teaching of Aristotle and the natural sciences. Schwickerath (1903) notes that the revised *Ratio Studiorum* no longer mentioned the works of the great philosopher in the curriculum, even though questions of logic and general metaphysics were expected to be taught according to the Aristotelian paradigm. His dialectical principles were still considered the basis for the teaching of logic. In sharp relief, the revised edition required that "physics, chemistry, physiology, psychology, astronomy, geology, and cosmology are taught according to the established principles of modern science." This stands in contrast to the peripatetic tradition of the 1599 *Ratio*. Furthermore, masters who taught physics, theories, systems and hypotheses were expected to discuss the degree of certitude and probability of new scientific knowledge, thus guaranteeing that the content was updated and at the forefront of instruction. As for the advanced studies of mathematics, these were to be taught in two or three years in the philosophy program, instead of one year as the 1599 *Ratio* dictated (p. 194).

16 - Thirtieth General Congregation. As late as 1957 the Thirtieth General Congregation held that the direction provided by the original *Ratio Studiorum* should be followed in the preparation of young men. In this regard, Casalini and Pavur (2016) conclude: "Thus, this sixteenth-century plan rode the entire course of modernity, stretching all the way from the seminal experiences of Ignatius and the founders of the Society (1520s and 1530s) into the second half of the twentieth century. It lived on especially in the formation plans for Jesuit scholastics, which, until about 1965 and shortly thereafter, followed the broad lines of the old schema: letters, philosophy, and theology" (p. 20).

XIII – JESUIT CURRICULA

1 – Overview of the Sequence of Studies. The *Ratio Studiorum* proposed three programs totaling thirteen years of study. The lower studies of the Humanist Course required six years to complete, after which the higher studies entailed three years of Philosophy and then four years of Theology.

With regard to the novitiate: "First admission to the novitiate occurred, therefore, after the lower classes of liberal arts, at 16-18 years of age, and since every new Jesuit was then expected to teach for approximately three years before becoming a full-fledged father, the whole novitiate involved 13 years of training after the necessary years of Grammar, Humanities, and Rhetoric; that is, 10 years plus three of teaching" (Scaglione, 1986, p. 61).

1.1 – Aldo Scaglione (1986) explains the academic path of the Jesuit students through this sequence thus:

Loyola envisaged a complete educational system starting immediately after the elementary levels and comprising all the grades and disciplines through the secondary levels and the baccalaureate (his "colleges") on to the establishment of true Jesuit universities, which would only have two faculties of Arts and Theology, since he would not consider Law and Medicine. The ages for college would be between 9 at the earliest or 14 at the latest, and 21 for completion of the requirements leading to the "licentia." (p. 69).

One typical pattern (illustrated by the academic preparation of Canisius, Bellarmine, Lessius, Corneille and Calderón) involved "elementary education (with private tutors) from the age of 5 through 9, then Jesuit college for languages from 10-13, arts from 14-16, finally theology from 17-21" (Scaglione, p. 69).

The Humanist Course

2 – Influence of the Netherlands. Section III of the *Ratio Studiorum* proposes classical studies in a humanist program that corresponds to "high school and part of college" (Schwickerath, 1903, p. 118). While there has been discussion about the sources that influenced Ignatius and his group when developing the document, most likely flourishing schools in the Netherlands were the origin of many of the ideas advanced in the *Ratio*. On this point, several Jesuits who assisted in drafting the *Ratio* were natives of the Netherlands and familiar with the teaching methods of the Strasburg educator Johannes Sturm who developed a teaching system based on his experiences in Liège, Louvain and Paris. Clearly, the system of studies and pedagogical practices proposed by the *Ratio* incorporated the best methods and educational insights of its age.

3 – Influence of Paris. Farrell (1970) places less emphasis on the pedagogical practices of the humanist schools of the period and instead makes the argument that the prime source of the Jesuit system of education was the University of Paris. His argument, presented below, was that the University had incorporated humanist ideals as espoused by Quintilian in its organization and functioning. Since this proved efficient, the early Jesuits found practical reasons for positively responding to the curriculum, pedagogy and administrative practices of the institution. In response to the larger question of the sources of the *Ratio Studiorum*, Farrell writes:

When the early Jesuit schools began to spread from Italy, Spain and Portugal to France and Germany, claims were made by several headmasters of rival schools, especially by Johann Sturm, headmaster at Strassburg, that the Jesuits had copied their pedagogical practices. As a matter of fact, however, when the manuscript of Quintilian's *Institutio Oratoria* was discovered at St. Gall by the humanist Poggio in 1410, Quintilian soon became the favorite source of most of the school programs in the late fifteenth and early sixteenth centuries--at Liege, Strassburg and elsewhere. This was prior to the opening of the first Jesuit school. Ignatius of Loyola and his early followers, on the other hand, took as their chief authority the University of Paris, their Alma Mater. Their preference for Paris resulted from their interest, at that time, in the practice rather than in the theory of education. The University of Paris undoubtedly absorbed a great deal of its pedagogy from Quintilian or from humanist adaptations of Quintilian, but it had reduced these ideas to order and to practice. The early Jesuits were engaged in the actual labor of the classroom and hence were looking for specific and serviceable pedagogical guidance. (pp. ix-x)

4 - Influence of the Brethren. Gabriel Codina (2000) argues that the approach to education by the Brethren of the Common Life, a Catholic pietist religious community founded in the Netherlands in the 14th century by the educator Gerard Groote, played a role, albeit indirectly, in influencing the *modus parisiensis* and ultimately Jesuit educational practices and pedagogy. A number of policies adopted in the schools of the Brotherhood made their way to the University of Paris via the College of Montaigu and from there ultimately to the *Ratio Studiorum*. Codina reminds us that there were "important points of influence, direct or indirect, that the Brethren of the Common Life exerted not only in Paris but also on Jesuit pedagogy" (p. 42). He goes on to explain: "Montaigu introduced hitherto unknown elements to Paris, elements whose origins can be found in the Brethren. We might list among these the previously mentioned division of students into classes, the *decuriae*, examinations and promotions from one grade level to the next, the *rapiarium* or vocabulary notebook, [and] the office of *notator* or student prefect" (p. 43). Codina asserts that "there exists undeniably a parallel between the Rule of Montaigu and the constitutions of the Society of Jesus." He continues: "At any rate, it is certain that various pedagogical formulae of the Common Life entered into Jesuit Pedagogy through the College of Montaigu (p. 44).

5 - Jesuits and Humanitas. The Jesuits adhered to the "ancient pedagogical ideal of *humanitas*" in their system of education and the values of freedom of inquiry and instruction that it supported (Casalini & Pavur, 2016, p. 33). The humanists produced a great number of works that addressed pedagogy and the methods of educating the youth. Important figures such as Vittorino da Feltre, Guarino Guarini, Erasmus, Johannes Sturm and Juan Luís Vives stand out because of their thoughtful publications and educational contributions (pp. 29-30). The great Roman authors Cicero, and to a lesser degree Seneca, were held in high esteem by the humanist schools. The core of the Jesuit humanistic curriculum was based on their texts

6 - Scope of the Humanist Course. The 1599 *Ratio Studiorum* proposed a humanist curriculum for Jesuit colleges that adhered to the Renaissance tradition of prioritizing the study of Latin and Greek grammar and literature. The *Ratio* detailed a six-year curriculum for the humanist program, i.e. the *studia inferiora* that progressively deepened knowledge and skills in language, literature and oratory. The sequence of the five classes comprising the curriculum was as follows: one year each of Lower, Middle and Superior Grammar; followed by one year of Humanities and then two years of Rhetoric (Quick, 1894, p. 40).

It was a narrowly defined curriculum because of its emphasis on classical languages and literature. Farrell (1938) notes that the limited scope of the curriculum can be attributed to factors such as the lack of organized studies of vernacular languages and modern history, and the rudimentary state of modern scientific literacy. In addition, he points to the fundamental belief that underlies the Jesuits' particular vision of education: "The conscious narrowing of the curriculum had its basis in the conviction that education's purpose was to preserve and hand down a cultural heritage. It also had its basis in the sound pedagogical principle of emphasizing a few primary branches of knowledge and of treating others as subordinate and accessory, that is, as contributing to a fuller understanding and mastery of the primary studies" (p. 348).

7 - Seven-Year Sequence. Some institutions extended the Humanist program to seven years by including an extra year of advanced grammar. This would then be followed by three years of Philosophy and four years of Theology. The total number of years of study would then be increased to fourteen. The College at Evora, Portugal, and Bahia, Brazil, for example, adopted the following sequence in the Humanist program (Franca, 1952):

Table 1: Studia Inferiora Program of the *Ratio*

Level	Class	Year
1	Rhetoric	7
2	Humanities	6
3	Superior Grammar	5
4	Middle Grammar A	4
5	Middle Grammar B	3
6	Inferior Grammar A	2
7	Inferior Grammar B	1

8 - Four-Year Sequence. Scaglione (1986) informs us that the *Ratio* presumed that the young Jesuit would study three years of grammar after having completed his preparation in reading, writing and computation in an elementary school. Some institutions adhered to this arrangement. Yet, Scaglione notes: "In order to offer a complete curriculum and avoid the necessity of any schooling on the outside, the principal colleges instituted a separate elementary school (*scuolaletta*) of approximately four years. This reduced the proper courses of Grammar in the College to two years, which were then followed by one year of Humanities and one of Rhetoric." This arrangement was followed by an additional three years of Philosophy and four years of Theology, thus totaling eleven years for the entire sequence (pp. 84-85).

9 - Scheduling Flexibility. The *Ratio Studiorum* set the daily schedule of classes. It stipulated that the Lower, Middle and Upper Grammar classes, as well as the Humanities classes, would meet two and a half hours both in the morning and in the afternoon, every day except Sunday. For the Rhetoric class the time was reduced to two hours both in the morning and in the afternoon, from Monday to Saturday. However, the architects of the *Ratio*, beginning with Ignatius, acknowledged that the customs of particular locals and regions might require slight changes in the curriculum and modest deviations from the schedule. Ignatius was aware that for the Society to achieve its educational mission of perfecting Latin eloquence,

the curriculum would need to adapt to local needs and exigencies. He admitted as much in his statement that "Although the order and hours devoted to these studies may vary according to the regions and times of the year, there should be such conformity that in every region a procedure is used which is there judged most expedient for greater progress in learning" (as cited in Donohue, 1963, p. 141).

10 – The Study of Grammar. The study of grammar in the *studia inferiora* was based on ancient and medieval grammarians such as Donatus and Priscian. As part of the grammar studies, classical authors were read such as Virgil, Seneca, Horace, Terence and Juvenal, as well as Christian authors like Orosius, Gregory of Tours and Boethius (Wulf, 1952, p. 54). The grammar program was organized in three levels.

The *Inferior* or *Lower Grammar* class introduced students to the rudiments of Latin by referring to the letters of Cicero, and to concepts appropriate for a beginner's knowledge of Greek. According to Schwickerath (1903), "The aim of this class is a perfect knowledge of the rudiments and elementary knowledge of the syntax – In Greek: reading, writing and a certain portion of the grammar. The work used for the prelection, will be some easy selections from Cicero, besides fables of Phaedrus and Lives of Nepos" (p. 118).

The *Ratio* states that the objective of the *Middle Grammar* class "is a complete though not exhaustive knowledge of grammar. The teacher explains the matter from the beginning of the second book [of the Grammar of Alvarez] down to figures of speech, including only the easiest exceptions, or, according to the Roman method, from the syntax of verbs down to figures of speech, with the addition of the easier exceptions Greek in this class includes contract nouns, circumflex verbs, verbs in *mi*, and the easier verb formations" (Farrell, 1970, p. 88). Knowledge of Latin is achieved through the reading of some of the more accessible letters of Cicero and poems of Ovid. Greek was taught using catechisms and the *Tabula* of the philosopher Cebes of Thebes.

As described by Schwickerath (1903), "The aim is a knowledge, though not entire, of all grammar; and, for the prelection, only the select epistles, narrations, descriptions and the like from Cicero, with the commentaries of Caesar, and some of the easiest poems of Ovid. – In Greek: the fables of Aesop, select dialogues of Lucian, the Tablet of Cebes" (p. 118).

The *Ratio Studiorum* defines the purpose of the *Superior Grammar* class thus: "The aim of this class is to achieve a complete and perfect knowledge of grammar. The teacher shall therefore review syntax from the beginning, adding all the exceptions. Then he shall explain figures of speech and rules of prosody. In Greek, however, he shall cover the eight parts of speech or whatever is embraced under the name of rudiments except dialects and the more unusual variations" (Farrell, 1970, p. 84). In the first semester, the student read Cicero's letters *To Friends*, *To Atticus*, *To Brother Quintus* and selections from the *Epistles* and *Elegies* of Ovid. In the second semester, he read Cicero's *On Friendship*, *On Old Age* and the *Stoic Paradoxes*. Poetry studies included selections of the works of Catullus, Tibullus and Propertius, basic readings in Virgil's *Eclogues* and *Georgics*, and books five and seven of Virgil's *Aeneid*. Upper study in Greek focused on the rudiments of the eight parts of speech, followed by readings of the works of John Chrysostom, Aesop and Agapetus, among others (Farrell, 1938, pp. 344-345).

11 – The Study of Humanities. The Humanities Class laid the foundation for the study of rhetoric by furthering the student's knowledge of language. In the first semester, vocabulary was expanded and correctness of expression was enhanced through daily readings of the works of Cicero, especially those that dwelled on standards of right living. Erudition was acquired through the study of the historical works of Caesar, Sallust, Livy and Curtius. An appreciation of poetry was fostered through the reading of

Virgil's *Aeneid*, the *Odes* of Horace and elegies, epigrams, and poems of approved authors. In the second semester the moral philosophy of Cicero was replaced by the simpler speeches of Cicero, such as *Pro Lege Manilia*, *Pro Archia Poeta*, *Pro Marcello* and other orations he delivered before Caesar. For the study of the Greek language, the student achieved an appreciation of its prose by reading the works of John Chrysostom, Basil, Isocrates, Plato, and Plutarch. Regarding Greek poetry, the teacher explored the works of Homer, Phocylides, Gregory of Nazianzus and others. The humanities class concluded with an introduction to the *De Arte Rhetorica* of Cyprien Soarez (Farrell, 1938, pp. 344-345).

12 – The Study of Rhetoric. The third and final class of the Humanist Program dealt with “the art of rhetoric, the refinement of style, and erudition.” The purpose of the Rhetoric Class was to develop the student’s power of self-expression through oratory and poetry -- with oratory taking precedence -- by developing an understanding of the orations of Cicero, supplemented by the insights of Aristotle and Quintilian. Rhetorical style took as its model Cicero and a few select historians and poets. The class also cultivated erudition through the study of the authoritative views of scholars. The study of Greek continued with the readings of Plato, Thucydides, Homer, Hesiod, Pindar and the Christian works of Basil, Chrysostom and Gregory of Nazianzus (Farrell, 1938, pp. 344-345).

13 – Aristotle’s The Art of Rhetoric. McKay and Mc Kay (2015) in their discussion of Aristotle’s *The Art of Rhetoric* (*Ars Rhetorica*) state that the work had a marked influence on the development of the study of rhetoric for the next 2,000 years. Roman rhetoricians Cicero and Quintilian frequently referred to Aristotle’s work and universities required students to study the *Rhetoric* during the 18th and 19th centuries” (sec. Aristotle and the *Art of Rhetoric*, para. 5).

For Aristotle, eloquence as the goal of rhetoric is not of itself sufficient. It is only important when it is demonstrated by a person of good character. The concept of a “good man,” as part of the understanding of rhetoric was sketched by Aristotle in *The Art of Rhetoric* when he rejected the Greek sophist schools, the most famous being those led by Gorgias and Isocrates. The Sophists promoted a rhetorical style that persuades proponents to defeat other in debates, even if arguments ignore or manipulate the truth. Sophists, McKay and Mc Kay point out, excelled in winning debates “through the use of confusing analogies, flowery metaphors, and clever wordplay. In short, the Sophists focused on style and presentation even at the expense of truth” (sec. Rhetoric in Ancient Greece: The Sophists, para. 3). Aristotle, on the other hand, argued that rhetorical skills should be used to counter sophistry and untruths spread by despots.

13.1 - Aristotle’s The Art of Rhetoric addresses rhetorical topics, parts of speech and the effective use of style. He identifies three genres of rhetoric: forensic or judicial, i.e. discussions of past actions; deliberative or political, which intends to persuade an audience to complete or avoid actions; and *epideictic* or ceremonial, which focuses on “praise-and-blame” in debating activities at formal events. Aristotle also proposed three means of persuading others: *ethos* or the credibility of the orator; *pathos* or the stirring of the emotions; and *logos* or reasoned argument. A defining characteristic of these rhetorical devices is their emphasis on eloquence in communication (sec. Rhetoric in Ancient Greece: Aristotle and *The Art of Rhetoric*, para. 4).

14 - Jesuit Argument for Rhetoric. Fulvio Cardulo was a Jesuit who, at the request of Ignatius, studied at the university in Padua under the famed humanist Lazzaro Bonamico. He taught humanities in Venice and Bologna and later rhetoric at the Roman College in 1552. He was a skilled orator who had preached at the Sistine Chapel during the pontificates of Paul IV, Pius IV and Pius V.

In an essay promoting humanistic studies, Cardula (2016) sought to elevate the status of the humanities which at the time took second place to the study of theology. He noted that rhetoric was neglected and held in low esteem by his superiors and by students who were more interested in studying and teaching philosophy (p. 220). Casalini & Pavur (2016) believe that Cardula was responding in part to parents' requests that their children be educated in language and communication arts and classical culture. They considered this knowledge the signature of an educated person, especially one who was seeking employment of a prestigious nature. Jesuit scholastics, on the other hand, saw philosophy and theology as the most important studies in the student's academic sojourn. Thus, the mixed population of scholastics and lay students in the colleges required a reconceptualization of the role of rhetoric in the Jesuit educational system (p. 217).

Cardulo argued that the teaching of grammar and Latin should not be haphazard. These subjects should be taught in such a way that they form good citizens who contribute to society through their work in pulpits, senates, secretariats and embassies. Jesuit education could respond to this need and serve "the Christian commonwealth and produce good preachers, senators, secretaries, nuncios, ambassadors, and others who serve the common good" (Casalini & Pavur, p. 218).

He then proposed some ideas on methodology and the desirable characteristics of teachers needed for this task. First, the teacher should develop in students those qualities that achieve the aforementioned "Christian moral and political goal." This begins by "inculcating the proper dispositions from the earliest and lowest classes of grammar, and follow this in the upper classes of humanities with methodical and diligent practice in 'rhetoric, oratory, declamation, history and poetry.'" Cardulo then opines that students should extend their studies of rhetoric beyond the upper studies for three years, during which "They should practice verse and prose of every kind, ordering all the literary exercises to the office of a good preacher, senator, ambassador, secretary, and so on, making use of commonplaces, subjects, maxims, and indifferent collections, as stated" (Casalini & Pavur, pp. 218-219). A proficient teacher is necessary to achieve these objectives. He should have a natural talent for his chosen area of study and be well-informed and possess the ability to transmit his knowledge. The teacher should schedule two-hours sessions during which he requires students to "compose, repeat, recite their own composition, and so forth" for two hours each day.

Cardulo also notes that during vacation times, many external students abandon their studies and return to their homelands, or take up "another state or manner of life, or of going back to their homeland, or going to the country for vacation, or of studying something else." He proposes that lessons should not be given during vacation time (Casalini & Pavur, p. 220).

The Philosophy Course

15 - Philosophy and Liberal Arts. In the beginning of the Middle Ages the study of philosophy was not systematically organized. The body of available knowledge from the 4th to the 8th century consisted of assortments of ideas assembled in encyclopedic publications called *sententiae*. These were collections of sentences on philosophical and theological topics assembled by numerous authors. They showed "no clear line of demarcation, either between philosophy and theology, or between philosophy and the liberal arts" (Wulf, 1952, p. 259).

In the 9th century philosophy and the liberal arts assumed autonomy as separate branches of knowledge; philosophy *de facto* became independent of the trivium. In the 11th century philosophy became *de jure* an area of study that was considered superior to the seven liberal arts but subordinate to the canons of theology (Wulf, p. 259). By the 12th century the propaedeutic function of the liberal arts was clearly established as well as the hierarchical arrangement of its seven disciplines (p. 55). Philosophy was considered superior to the study of liberal arts and an intermediate area of study leading to theology. This is represented in the Cathedral of Ivrea where a mosaic exists that shows Lady Philosophy in the center surrounded by seven seated Arts (p. 56).

16 – Curricular Relationship of Philosophy and Theology. The *Ratio Studiorum* proposed an educational sequence in which the study of philosophy preceded the study of theology. It is axiomatic in the Jesuit theology curriculum that comprehending the ideas of Thomas Aquinas can only be achieved after first understanding Aristotle's concepts of science, and in particular his *Physics*. The relationship of the ideas of the two luminaries is evidenced in the Jesuit three-tiered educational system: Humanist studies in the first tier, followed by Aristotelean philosophy in the second tier as a prerequisite for the study of Aquinas's theology in the third tier.

The distinction between philosophy and theology was well established before the *Ratio* was published in 1599. In his work, *Later Medieval Philosophy (1530-1350)*, John Marenbon asserts that "From the time of Aquinas medieval thinkers accepted the differences that made both philosophy and theology unique areas of inquiry: Aquinas and Scotus were indeed theologians, and it is valuable to study their theology; but they were also philosophers, and their philosophy should be studied separately from their theology" (p. 88). Speculative theologians understood that there was a difference in focus of the two sciences and that each could be pursued for different and exclusionary reasons. Wulf (1952) writes: "As philosophers, they devoted their endeavours to the constitution of a doctrine explanatory of reality, by the light of reason. As theologians, they gave a systematic exposition of Catholic beliefs. This confirms the view that philosophy appeared in a double rôle in the Middle Ages; it had an autonomous value, and it inspired the speculative method in theology" (p. 284).

17 - Philosophy Curriculum. The *Ratio Studiorum* specifies that the philosophy curriculum was to be divided into three years called Logic, Physics, and Metaphysics, and that these studies were to be structured primarily around the works of Aristotle (Farrell, 1970, pp. 40-43). The *Ratio* goes on to outline in Rules 7-11 of the Professor of Philosophy the content to be taught and the texts to be adopted in each of the three disciplines of the philosophy program. Continuity among the disciplines was guaranteed by assigning one professor to a cohort of students that accompanied them during the triennium (Hellyer, p. 72).

Farrell (1970) observes that Rules 1-5 of the Professor of Philosophy proposed "sciences" that groomed students for the study of theology. These secular subjects were intended to "prepare the intellectual powers" of the student and assist him in the "perfect understanding and practical application of religious truth." The disciplines delved into the writings of Aristotle, but with care to ensure that the arguments of the commentators on Aristotle did not present objectionable views on faith that might adversely influence students. This particularly applied to the writings of Averroes and others like him, and who were referred to as Averroists and Alexandrists (p. 40).

18 - First Year: Logic. The first year of the Philosophy Program consisted of an introduction and the study of Logic. Sections 1-4 of Rule 9 of the Professor of Philosophy states that instruction should focus on explaining the principles of Logic by “devoting the first two months to a digest of it, not by dictating but by discussing pertinent passages from Toledo or Fonseca.” Here the *Ratio* is alluding to the works of Francesco Toledo (1532-1596) and Pietro da Fonseca (1528-1599), both professors in the Roman College. In his introduction to Logic, the Jesuit teacher should discuss such topics as “its claim to be a science, its proper subject matter, and the general concept of universal ideas. He should postpone the full discussion of universals until metaphysics, being contented here to give no more than a general idea of them.” Similarly, he should discuss the easier of Aristotle’s *predictables*, postponing a more in-depth treatment to the second year. The teacher should also explain as fully as possible “the notions of analogy and relations, since these very frequently occur in philosophical discussions.” In these preliminary deliberations he should “cursorily cover the second book *On Interpretation* and both books of the *Prior Analytics*, except the first eight or nine chapters of the first book. Even in these chapters he should explain what is pertinent and treat only very briefly the notion of contingency and not at all the question of free will” (Farrell, 1970, p. 41).

Section 5 of Rule 9 of the Professor of Philosophy states that in the latter part of the year students should be prepped for the following year of study of natural philosophy:

In order to give the whole second year to the physical sciences, he [the teacher] should begin a fuller discussion of science at the end of the first year and in it he should include the major topics of the introduction to physics, such as the divisions of science, abstractions, theoretical and practical science, subordination, the difference of method in mathematics and physics, which is treated by Aristotle in the second book of the *Physics*, and finally what Aristotle says about definition in the second book *On the Soul* (Farrell, pp. 41-42; Hellyer, 2005, p. 73)..

19 - Second Year: Physics. Aristotelean physics was taught in the second year and was based on the eight books of the *Physics*, the second, third and fourth books of *De Caelo*, and the first book of *De Generatione*. Parts of book eight of the *Physics* dealt with a number of intelligences and the infinite nature of the Prime Mover and were taught in the third year metaphysics course, along with Aristotle’s *Metaphysics*, *De Anima* and the second book of the *De Generatione* (Farrell, 1970, p. 42). The professor was directed to avoid anatomical questions when he explored issues raised by *De Anima* because these would be addressed later by the medical faculty (Hellyer, 2005, p. 73). The *Ratio* also states that “[t]he text of the second, third, and fourth books of *On the Heavens* should be summarized and for the most part omitted. In these books the teacher should deal only with the elements and with the substance and influences of the heavens. The rest can be left to the professor of mathematics or reduced to a summary” (Farrell, p. 42).

19.1 - According to Hellyer (2005), the second year course in philosophy in German Jesuit colleges opened with a definition of physics and an explanation of the division of the sciences into the practical and the speculative. The practical sciences included ethics and politics and taught “precepts for action.” The speculative sciences contemplated the nature of truth and were divided into three branches: Metaphysics, Physics and Mathematics. These disciplines were sequentially organized with Metaphysics contemplating “being” removed from matter, Physics reflecting on natural bodies, and Mathematics dealing with quantity removed from the physical body. In this sequence, Physics was based on reflection and logical syllogisms, rather than on experimentation and systematic observations of nature.

Experimentation and the manipulation of materials were considered the province of the mechanical arts and therefore had no place in the program of studies (p. 79).

20 - Second Year: Mathematics. Rules 1-3 of the *Ratio Studiorum* with respect to the Professor of Mathematics outline a program of mathematical studies for students of physics and a few brief suggestions on how the content should be handled. Farrell (1970, p. 45) lists the rules as follows:

1. He should spend about three quarters of an hour of class time in explaining the elements of Euclid to the students of physics. After two months, when his students are somewhat familiar with the subject, he should add some geography or astronomy or similar matter which the students enjoy hearing about. This added material is to be given on the same day with Euclid or on alternate days.
2. Every month, or at least every second month, he should have one of the students solve some celebrated mathematical problem in the presence of a large gathering of students of philosophy and theology. Afterwards, if he wishes, the solution may be discussed.
3. Once a month, generally on a Saturday, the class period should be given over to a review of the subject matter completed that month.

20.1 - Grendlar (2014) summarizes the mathematics content proposed by the *Ratio Studiorum*:

[T]he *Ratio* said very little about the teaching of mathematics. It told teachers to teach Euclid's *Elements*, "something about geography and the Sphere or about those things that are usually of interest." (The "Sphere" was *De sphaera*, written about 1220 by Johannes de Sacrobosco (John of Holywood, d 1244 or 1250). It summarized Ptolemaic astronomy and was the most used and commented on astronomical work in medieval and Renaissance universities.) Thus, the *Ratio* told Jesuit mathematicians to teach three things: Euclid, astronomy, and "things [...] of interest." (sec. Schools after Ignatius, para. 12)

20.2 - The importance and place of the study of mathematics in the philosophy curriculum is explained by Father Clavius, a Jesuit mathematician christened the "Euclid of his Age." Clavius writes that

without mathematics the teaching of natural philosophy is defective and imperfect. – In the second place it is necessary that the pupils understand that this science is useful and necessary for a correct understanding of philosophy, and, at the same time, complements and embellishes all other studies In order to accomplish this it will be necessary for the students of physics to study mathematics at the same time; this is a custom which has always been kept up in the schools of the Society. (as cited in Schwickerath, 1903, p. 133).

Clavius then identifies the scientific topics that arithmetic and geometry supported, such as physical phenomena associated with comets, tides, winds, rainbows and the distances and movements of heavenly bodies. Schwickerath (1903) notes that Jesuit colleges were advanced in their inclusion of pure and applied mathematics in the philosophy curriculum (p. 134). He also observes that the study of mathematics and natural science, i.e. natural philosophy, ran parallel to the study of philosophy and that the successive arrangement of literary and scientific subjects and its assignment to a latter stage in the curriculum "secured concentration and unity in instruction" (p. 132).

21 - Natural History Instruction. The Jesuits, in general, did not teach in the medical courses of the universities. They limited their teaching activities to the philosophy and theology programs. Because natural history was taught in the medical faculties, the Jesuits did not include natural history as a unified body of knowledge in the philosophy curriculum. However, they did incorporate natural history concepts in their discussions of natural philosophy. For example, concepts related to the mineral kingdom were mentioned when discussing the “elements of earth,” or characteristics of animals and plants were introduced when discussing the differences among vegetative, animate and intellectual souls. No attempt was made to discuss the contents of Aristotle’s books on biology. The focus remained on natural philosophy (Hellyer, 2005, p. 84).

22 - Third Year: Metaphysics. The final year of study consisted of Special Metaphysics, Psychology and Ethics. In the course, Aristotle’s *Metaphysics*, *De Anima* and the second book of the *De Generatione* were adopted. The professors were advised not to entertain anatomy questions when they discussed the *De Anima* since such issues would be addressed in the medical program along with other texts that cover anatomical and physiological content (Hellyer, 2005, p. 73).

The Conimbricenses

23 - Meaning Conimbricenses. Grendlar (2014) characterizes the *Conimbricenses* as “volumes of texts and commentaries on the works of Aristotle that a group of Jesuits at the college at Coimbra prepared and published between 1592 and 1598, with the volume on logic appearing in 1606. They were often reprinted, because many Jesuit and non-Jesuit schools and universities across Europe used them until the middle of the seventeenth century and sometimes beyond” (sec. The Schools after Ignatius, para 15).

The Coimbra commentaries refers to a five-volume set of important philosophical works of Aristotle. Jesuits at the University of Coimbra prepared the commentaries between 1592 and 1606 under the title *Comentarii Collegii Conimbricencis Societatis Iesu* (*Commentaries of the College Conimbricense of the Society of Jesus*). The *Commentaries* were intended to be base material for the philosophy program of the College of the Arts as prescribed by the statutes of the University of Coimbra (Martins, 2006, pp. 3-4). They were highly valued in the 17th century and went through multiple editions in major cities in Catholic and Protestant Europe.

António Manuel Martins (2006), in an introductory note to the *Commentaries*, informs us that in addition to the published compendiums, “[t]he term was sometimes used more loosely to designate the Jesuit professors of philosophy at Coimbra and Évora during the second half of the 16th Century and the first decades of the 17th” (p. 2).

24 - Purpose of the Commentaries. The *Conimbricenses* was conceived as a set of commentaries of Aristotelian texts and related questions prescribed by statutes of the University of Coimbra and utilized in the Philosophy Course (Martins, 2006, p. 3). The *Commentaries* were developed with the input of Jesuits in educational institutions in Europe, the Americas and Asia (India, China and Japan). The volumes were widely disseminated in Jesuit schools throughout Europe and known and read in academic centers during the Reformation. Their publication marked this period of Jesuit education on the Iberian Peninsula as one of the most culturally significant developments in Portuguese history.

The *Conimbricenses* was a project launched by the Jesuits at the universities at Coimbra and Évora to address the problem of students devoting an inordinate amount of time transcribing the lectures

by the masters, thus depriving them of opportunities to ask questions and engage in disputations. As was the practice in 16th century colleges, students dedicated themselves to writing down the content dictated by the masters in lieu of asking questions and engaging in oral debates about key issues. Faced with this reality, Jerónimo Nadal in 1561 gave instructions that a set of compendia be developed that was accessible to both masters and pupils. The Superiors of the Society were in agreement that professors and students would be better served if they were in possession of compendia that contained the dictations of the professors on content judged acceptable for the study of philosophy. According to Nadal, two instructional goals would be achieved: " 1) to significantly alter the teaching and learning process by putting the emphasis on assimilation of contents through the more active methods of interpretation and the discussion of themes; 2) to guarantee with more efficacy the doctrinal unity in the sense of excluding preliminarily that which was judged incompatible with church doctrine" (Martins, pp. 2-3).

25 - Authorship of the Commentaries. The College of the Society of Jesus, also known as the College of Arts in Coimbra, is cited as the author of the volumes of the *Curso Conimbricense*, even though a number of clerics contributed to the project. The documented history of the development of the *Curso*, however, reveals the names of several influential Jesuits who were involved in the development and completion both successful and unsuccessful attempts at completing the project.

Among the first and foremost was Pedro da Fonseca (1522-1599), an expert in the Greek and Arab languages and a distinguished philosopher whose expertise in Aristotelean logic and metaphysics earned him the title of the "Portuguese Aristotle." Fonseca was asked to preside over a commission assigned to draft the *Curso*, but he did not fully meet expectations and was only partially successful in developing the compendia. He did, however, publish a complimentary text titled the *Dialectical Institutions* in 1564. This introductory text on Aristotelean Logic was "hugely successful in many European universities centers until the middle of the 17th century. As a matter of fact, the *Dialectical Institutions* would serve as a compendium for the introduction of Logic in Jesuitical schools" (Martins, 2006, p. 4)

Another Jesuit of note was Cipriano Suárez (1524-1593): an "author of a vast work in the field of Rhetoric and the Holy Bible, he composed *De Arte Rhetorica Libri tres ex Aristotele, Cicerone et Quintiliano, praecipue deprompti* (1562) which constituted the official manual for the study of Rhetoric in Jesuit Colleges" (Martins, p. 5). Suárez was widely acknowledged as a pedagogical authority because of his extensive teaching experience in colleges in Lisbon, Coimbra, Évora and Braga, and his administrative role in the latter two schools.

Circa 1580, Fonseca was replaced by Manuel de Góis (1543-1597), who was assigned the task of editing the final draft of the *Curso Conimbricense*. Father Góis was an experienced teacher of philosophy at the University of Coimbra from 1574 to 1582; he had prepared a reputable set of commentaries on Aristotle's *Physics* and *On the Heavens* (Martins, p. 7). Manuel de Góis is widely associated with the development of the *Curso* because of his successful efforts in collecting and organizing the contents of the compendia. His success in this endeavor led to him be identified as the author of the initial volumes of the *Conimbricenses*.

26 - Content of the Commentaries. The curriculum of the four-year course in philosophy for the colleges at Coimbra and Évora was structured around the

texts of the Corpus Aristotelicum that were considered to be the most significant and which were supplemented by Porphyry's introductory texts. During the four years of the course, the student had to read and attend the lectures on the interpretation of the whole of the *Organon*, *Physica*, *De coelo*, *De anima*, *Metaphysica*, *Parva Naturalia*, *De generatione et corruptione* as well as a synthesis of the material broached in *The Nicomachean Ethics* and in the *Meteorologica*. In 1565 the College of Arts received new statutes which arranged the materials of the Course in Philosophy in the following fashion: 1st year: Dialectics; 2nd year: Physics and Ethics; 3rd year: Metaphysics and *Parva Naturalia*; 4th year: 1st semester: *De anima*; 2nd semester: review and preparation for the degree exam. (Martins, 2006, p. 2)

The *Conimbricenses* organized the content in five compendia that were published in three stages. The content addressed primarily, but not exclusively, Aristotle's physical, astronomical and natural science writings. In 1592 and 1593 commentaries on Aristotle's *Physics*, *Of the Heavens*, *Meteorology*, *Short Treatises on Nature (Parva naturalia)* and *Nicomachus' Ethics* were edited. This was followed in 1597 by the commentary on *Of Generation and Corruption*, concerning life and death, and in 1598 by *Of the Soul*, concerning psychology. This latter work included treatises by Cosme de Magalhães on the five senses and by Baltasar Álvares on the separate soul. The last stage, 1606, conclude with commentary on the *Dialectic Universe (Universam Dialecticam)*. Of note, a treatise on Logic based on Aristotle's *Organon* and authored by Sebastião do Couto was also published in 1606.

The content in the works of Álvares, Magalhães and Couto consisted, in most of the treatises, of commentary on Aristotle's text, which appeared in the center of the page in its Latin version or, in some editions, mostly foreign, in the Greek original. But in several places, questions were raised, which led to the resolution of problems, following the scholastic method of presentation of evidence and refutation of objections (Martins 2006).

The Theology Course

27 - Overview. The *Ratio Studiorum* delineates forty-nine Rules for Professors of Theology. These include rules on Sacred Scripture (r1-20), Cases of Conscience or Moral Theology (r1-10) and Scholastic Theology (r1-14) which constituted the bulk of the program of studies. Hebrew was also studied (r1-5).

28 - Sacred Scripture. Farrell (1970, pp. 29-32) relates the twenty rules of the *Ratio Studiorum* that govern the teaching of Sacred Scripture. According to Rule 2 of the 1599 document, the foremost objective in teaching Holy Writ is the defense of the version approved by the Church. To accomplish this end, Rule 3 directs the teacher to "note the idiomatic expressions and figures of speech peculiar to Scripture. He must skillfully compare the passage he is reading not only with that which precedes and follows but also with other passages where the same phrase will have sometimes the same, sometimes a different meaning." Rule 4 adds that he should also cite relevant examples from the Hebrew and Greek versions, but "only when some discrepancy between them and the Vulgate must be harmonized, or when idiomatic expressions of the Hebrew or Greek versions afford clearer meaning and insights." In the study of Latin, Chaldaic and Syriac versions of Scripture, Rule 5 states that the teacher "should take up for discussion and refutation only outstanding errors and those which have seeming plausibility. On the other

hand, he should not omit any evidence that strongly supports the Vulgate and the mysteries of the faith" (Farrell, 1970, pp. 29-32).

With respect to the canons of the Popes or General Councils, the professor of Holy Scripture should focus on the literal sense of any passage. However, Rules 6 to 8 caution that "if the Popes or Councils explicitly adduce any text to establish a dogma of faith, he should teach that sense, whether literal or mystical, as certain." Furthermore, the teacher should not differ from the Fathers of the Church when they agree on a literal or allegorical interpretation, especially when explicitly referring to the Scriptures or dogmas. He should also avoid challenging the Church Fathers or theologians when they attempt to prove a dogma of faith from Holy Write.

Rules 9 and 10 address rabbinical literature. The teacher is instructed to cite "anything in the rabbinical writings of the Jews that is of any value in supporting the Vulgate or Catholic dogma," without attributing too much prestige to it (r9). Also, "[h]e should not concern himself with searching out other rabbinical lore, or with attacking their errors, unless the authors be of very high repute."

Rules 13 to 16 address Sacred writings. In general, the professor is advised to "not use the scholastic method in questions peculiar to Holy Writ." He should point out allegories and moral passages "if they are obviously suggested by the wording of the passage, and especially if they present a striking observation of profound import. If he comes across a passage that is disputed by the Church and heretics "he should merely explain the passage in a dignified yet vigorous manner, especially if he is disputing against heretics."

The teacher should discuss the Old and the New Testament in alternate years and avoid carrying over from one year to the next the explanation of a Book (r18).

Finally, Rule 20 states that "[i]n place of the usual lecture, from time to time one of the pupils should be chosen to expound fully and in literary style some more famous passage of Holy Writ. When he has finished, one or two of his fellow students should argue against him. The objector should draw his material only from Scripture itself or from the peculiarities of the language of Scripture or from the interpretations of the Fathers."

29 - Cases of Conscience or Moral Theology. The *Ratio Studiorum* of 1599 listed ten rules for the "Professor of Cases of Conscience." This course may be rephrased as "Lessons in Morals" since it focuses on resolving moral problems. The emphasis is on distinguishing "right" from "wrong" when confronting moral dilemmas. Farrell (1970) notes that the subject should more aptly be called "Moral Theology" since both principles and cases are studied. The *Ratio* of 1832 uses this term (p. 124).

The objective of the two-year program was to prepare competent pastors and administrators of the Sacraments (r1). As conveyed by Farrell, the *Ratio* designated two professors to teach in the program: "One professor should spend two years on the explanation of all the sacraments, the censures, and the different states of life and their duties. The other professor should likewise spend two years on the ten commandments, including under the seventh the subject of contracts, but always touching only lightly on matters of less importance and those not pertinent to the course, such as removal from office, loss of rank, magic, and similar topics" (r2). The teachers were advised to "refrain entirely from treating of theological questions which have no essential connection with cases of conscience" (Farrell, 1970, pp. 37-38).

When dealing with moral issues, rule 4 states that "each difficulty is to be handled by proposing a difficulty and resolving it. The solution should be based on not more than two or three arguments, and authorities for it should not be heaped up. Three particular cases will suffice to illustrate a general precept or rule" (r4). The teacher should ensure that he clearly logically supports his arguments. He "should

substantiate his own opinions in such a way that if another opinion seems probable and is supported by good authority, he shall recognize it as also probable" (r5). The teacher should use both the lecture and disputation formats (Farrell, 1970, p. 39). Rule 6 states:

Every Saturday the lecture shall be dropped and a disputation on proposed solutions of cases will be held before the teacher for a period of two hours, or a little less, depending on the decision of the provincial and the size of the class. The disputation should be conducted by means of questions, that is, by asking the solution of some difficulty, by proposing a new case with some changed circumstances, by citing a canon or the opinion of a noted authority against some conclusion. Sometimes a short discussion pro and contra may be introduced to lend more dignity to the occasion, but it should be done with moderation and on a different level from the usual philosophical disputation (Farrell, 1970, p. 38).

Finally, Rules 7 to 10 outline the procedures that the teacher should follow "[i]f he has been appointed by the rector at the provincial's bidding to take charge of the discussion of cases in the community" (Farrell, 1970, pp. 38-39).

30 - Scholastic Theology. The Scholastic Theology course focused almost entirely on the *Summa Theologica* of Thomas Aquinas. Whether quoting tracts from this monumental work or commenting on his explanations and conclusions, the *Summa* established the content of the four years of theological studies. Farrell writes: "The four divisions of theology were based on the *Summa Theologica* of St. Thomas Aquinas, which had three parts, the second of which is subdivided into two, so that in sum there are four divisions" (1970, p. 123).

The *Ratio Studiorum* makes clear that the content of the course should consist of questions addressed in the *Summa Theologica*. Rule 1 of the Professor of Scholastic Theology acknowledges Thomas Aquinas's position on the confluence of reason and faith in achieving the Jesuit's apostolic purpose. The rule states that the master of theology "should understand that it is his duty to combine keenness of mind in disputation with untarnished faith and sincere love of God so that his professional competence will contribute to his progress in the spiritual life" (Farrell, 1970, p. 33). Rule 2 states that the

Society shall expressly follow the teaching of St. Thomas in scholastic theology. They should consider him their own teacher and should make every effort to have their students hold him in the highest possible esteem. Still, they are not to consider themselves so restricted to his teaching that they may not depart from him in any single point. Even those who expressly style themselves Thomists sometimes depart from his doctrine. The members of the Society therefore should not be more strictly bound to him than the Thomists themselves (Farrell, 1970, pp. 33-34).

The *Ratio*, however, acknowledges that some of the assertions of Aquinas could be contested when there were disagreements among scholars about the meaning of statements in the *Summa Theologica*. Rule 4 allows teachers to confront such ambiguities or omissions and "choose either side if Catholic scholars are not in agreement" (Farrell, 1970, p. 34).

31 - The Scholastic Theology Program. The course in Scholastic Theology required four years of study. The *Ratio Studiorum* outlines rules for both two and three professors. As communicated by Farrell (1970, pp. 34-35), the rules for two professors gives an idea of the distribution of content during the quadrennium:

1. The first professor shall explain forty-three questions from the *Prima Primae* [First Part of St. Thomas' *Summa Theologica*] in the first year; in the second year, the matter on the angels and twenty-one questions from the *Prima Secundae* [First part of the Second Part]; in the third year, from Questions 55 or 71 to the end of the *Prima Secundae*; in the fourth year, the matter on faith, hope, and charity from the *Secunda Secundae* [Second part of the Second Part].

2. The second professor shall treat during the first year the questions on justice and right from the *Secunda Secundae* and the principal questions *de religione*; during the second year, the questions on the Incarnation from the *Tertia* [third part], and, if possible, some of the more important articles on the sacraments in general; during the third year, he should treat of baptism and the eucharist and if possible orders, confirmation, and extreme unction; during the fourth year he should take up penance and matrimony.

Rule 7 outlines a program of studies when three professors are responsible for teaching scholastic theology. It is more detailed than the two-professor program as Farrell (1970, p. 35) relates:

3. Where there are three professors of theology, in the first year the first professor shall explain twenty-six questions from the *Prima Primae*; in the second year, as many of the remaining questions as he can; in the third year, whatever he can cover from the *Prima Secundae* to Question eighty-one; in the fourth year, the remainder of the *Prima Secundae*.

4. The second professor shall expound in the first year from the *Secunda Secundae* the controversies on scripture, tradition, the Church, the Council, the Roman Pontiff; in the second year, questions on faith, hope, and charity; in the third year, whatever he can cover on justice and right, on restitution, usury, and contracts; in the fourth year, whatever remains to be treated on contracts, and St. Thomas' treatment on religion and the states of life.

5. The third professor shall deal with, in the first year, questions on the Incarnation; in the second year, questions on the sacraments in general, and on the eucharist and baptism; in the third year, the questions on penance and matrimony; in the fourth year, questions on ecclesiastical censures and on the rest of the sacraments.

32 – Concerns When Teaching Scholastic Theology. Farrell (1970, pp. 35-36) relates Rules 8 and 9 of the Professor of Scholastic Theology. Rule 8 states that each professor is expected to finish his part of the program. If this is not possible and certain content is not addressed, the teacher should "omit it altogether and refer the students to a reliable author." To ensure that instruction proceeds smoothly, Rule 9 notes that there are four types of subject matter that require an element of caution. First, "questions and commentary on Scripture which may be left to the professor of Scripture" are not the purview of Scholastic Theology. Second, when "controversies with heretics" are discussed by St. Thomas "they should be treated in the scholastic rather than the historical method. It will suffice to bolster the conclusions with two or three solid arguments and to expose two or three of the principal calumnies of the heretics. In each instance, however, the teacher should indicate some author who will give further material to those who want it." A third concern refers to philosophical questions, which should be avoided. Instead, the teacher should "indicate where the students may find explanations worked out by himself or others." Finally, the teacher should not enter into a discussion of "cases of conscience," that is casuistry. Rather, he should "merely point out certain general moral principles, which are usually discussed in theological disputations, and pass over the more subtle and minute explanation of the cases."

33 - Treatment of Summa's Questions. Rules 10 to 14 provide instructions to the professor on how questions of Scholastic Theology should be discussed in class. The rules as outlined in Farrell (1970, pp. 36-37) are as follows:

10. When it happens that St. Thomas treats of the same problem in several distinct treatises, the problem should not be studied first in one context and then in another, but the several treatments should be synthesized, or, if the scope of the subject matter permits, reduced to a brief synopsis.

11. The teacher should skim rapidly over the articles that are easily understood. Thus, after reading the title, he should at once indicate in a few words the conclusion of St. Thomas In questions of greater difficulty, he is to proceed somewhat as follows: he should first explain the title of the article in case it is not altogether clear. He should then point out the different elements in the main proposition which may be responsible for the drawing of divergent conclusions. Finally, he should set forth St. Thomas' several conclusions, beginning with the most significant. He should then point out the reasoning process which led up to each conclusion, unless of course they are quite obvious. In this way the students will realize that St. Thomas' logic possesses more cogency than at first sight would appear.

12. After explaining a proposition, he should discuss its various implications, but not at great length, except in such matters as are not treated in St. Thomas or are treated but would profit from a fuller explanation.

13. It is not enough for him to report the opinions of the doctors without committing himself. Let him either defend the views of St. Thomas, as has been said, or omit the question altogether.

14. In the monthly disputations there should be as many disputants as there are teachers. Generally, three should argue in the morning and three in the afternoon. Whosoever pleases may argue against the defendants, and if nothing interferes, the first defendant at the morning session should be second in the afternoon

XIV - JESUIT PEDAGOGY

1 – Definition of Pedagogy. According to a brief that discusses effective and appropriate pedagogy, UNESCO (2018) offers the following definition: “Pedagogy refers to the ‘interactions between teachers, students, and the learning environment and the learning tasks.’ (6, 35). This broad term includes how teachers and students relate together as well as the instructional approaches implemented in the classroom” (sec. Issues and Discussion, para. 1). The first part of this definition (6, 35) quotes Murphy (2008, p. 35).

General Directives for the Lower Classes

2 - Daily Schedule. The Jesuit teacher followed the general class-schedule prescribed by the *Ratio Studiorum*. He taught the lower, middle and upper grammar classes, as well as the humanities classes, for two and a half hours both in the morning and in the afternoon, every day except Sunday. He also taught at least two hours on days dedicated to recreation. For the rhetoric class he allotted two hours of instruction both in the morning and in the afternoon, from Monday to Saturday (Farrell, 1938, pp. 346-347).

3 - Religious Instruction and Practices. An important feature of the Jesuit college was its moral and religious training. Quick (p. 1894, p. 47) draws attention to the fact that the Society not only prioritized academic studies but also the “science and practice of a Christian and religious life.” Farrell’s 1970 presentation of the *Ratio Studiorum* stipulates that in accordance with Common Rules 2 to 4 for the Professor of the Lower Classes the teacher should begin each class with a prayer and the sign of the cross. He should monitor his students to ensure that they attend mass during the week and on feast days and urge them to receive Holy Communion and to go to confession frequently. He was also instructed to take care to teach doctrine in a manner that enabled his students to recite the same during grammar classes. Rules 5 to 9 gave the Jesuit teacher directions on religious instruction and Rule 10 directed him to pray for his students and to be a good example by demonstrating the Christian virtues that the Society valued (pp. 62-63).

4 - Relationship with Students. As presented in Farrell (1970), Common Rules 47 to 50 for professors of the lower classes set parameters on the relationship between the teacher and his students. Common Rule 50 laid out the general disposition that the Jesuit should demonstrate when it states, “Finally, let the teacher, with God’s grace, be painstaking and persevering in every way, interested in the progress of his pupils in their daily lessons and other literary exercises. He must not regard anyone with contempt, but assist the efforts of the poor as much as those of the rich. He should seek the advancement of each and every one of his charges” (p. 72).

The remaining rules were more specific on the teacher-student relationship. The young Jesuit would have had a clear understanding of what was and was not permissible when interacting with his students. Rule 47 instructed him to avoid being “on friendlier terms with one pupil than with another” and to discuss only important matters with the students in open spaces such as “at the door of the classroom or in the entrance hall or at the gate of the college,” and not in the classroom (Farrell, p. 71). Rule 49 made him wary of abusing his position by using a pupil as “an amanuensis,” such as asking him to “perform any task not connected with the customary school exercises.” Nor was it allowed to “permit the pupils to spend money in any way for the school.” Rule 48 encouraged the teacher to seek advice from the rector when he believed that a student needed tutoring (p. 72).

5 - Cohorts. The Jesuit Educational Ideal is partially achieved through the prolonged contact of the Jesuit teacher with his students as they advanced through the humanist program. The Jesuits adopted the practice of the University of Paris of dividing students into classes, or cohorts, each of which was assigned its own teacher and regents, or aides. This innovative practice of dealing with large numbers of students originated with the Brethren of the Common Life and made its way to Paris via the College of Montaigu (Codina, 2000, p. 36).

When class size was inordinately large, as in the grammar sections, the students were subdivided into *decuriae*, or groups of ten, with a student, or *decurio*, designated as its leader. The head student assisted the teacher in transmitting the content of the lectures to his group and monitored them in their studies.

The Jesuit teacher remained with his cohort through their years of study. He lived and worked with the cohort over successive years thus fostering the Christian virtues exemplified by the master in his daily contact with the students, both inside and outside of the classroom. The prolonged interaction or engagement was prescribed by the *Ratio* expressively for the purpose of furthering the moral and spiritual development of the pupils. Catholic thought, tradition and culture were transmitted to the student by instruction, contact, example, guidance and atmosphere (Farrell, 1938, p. 422).

6 - Learning Environment. The *Ratio Studiorum* expressed the Society's concern about classroom decorum. It offered guidance on how to maintain an environment conducive to learning. Common Rules for the Professors of the Lower Classes 38 and 41 to 44 provided suggestions for classroom procedures and routines (Farrell, 1970, pp. 70-71). Following these directives, the Jesuit teacher regularly took attendance and discouraged absenteeism. He created an environment in which students were silent and well-behaved and took measures to avoid interruptions that resulted in a loss of time dedicated to instruction. These included students wandering about, changing seats, or leaving the classroom without permission. If students needed to leave the classroom for confession, the teacher required that they did so one at a time, unless they had permission to leave as a group. He also discouraged students from passing notes, which appears to have been a recurrent problem meriting its own rule

School discipline was essential for maintaining an environment conducive to learning. The *Ratio* expected the Jesuit teacher to discipline students when they misbehaved. Inappropriate pupil behavior in European colleges was common and a major concern at the time. Students were generally unrestrained in their actions and at times rowdy. It was not unusual for them to be physically punished for their transgressions. The Society took note and acknowledged the need for discipline. It identified actions deemed unacceptable, yet adopted a thoughtful and more benign attitude when dealing with behavioral issues. According to the *Ratio*, as presented in Farrell (1970, p. 55), "Punishments were to be as light as possible, and the master was to shut his eyes to offenses whenever he thought he might do so safely." However, grave offenses were to be corrected by corporal punishment, but not by the Jesuit teacher. Rule 38 of the Prefect for Lower Studies states: "A corrector who is not a member of the Society should be appointed for those who fail in application or in good conduct, and for whom friendly advice and admonitions do not suffice. Where no corrector can be had, some other means of punishing delinquents, either at the hands of one of the pupils or in some other suitable way, should be found. Rarely and only for very serious reason should pupils be punished at school for faults committed at home. Jesuit teachers were advised instead to motivate pupils not by chastisement but by bestowing honors and the rewards for scholastic success.

7 - Teaching Experience. Part of the training of the young Jesuit was dedicated to several years of teaching in Jesuit colleges. This activity was scheduled following completion of studies of the humanities and philosophy. From the Company's perspective this sequence developed character by contributing to the young Jesuit's intellectual and religious maturity. The normal progression of Jesuit training was the following: two years of novitiate, two years of study of the humanities, three years of study of philosophy, three years of teaching experience in a college, three years of study of theology, ordination to the priesthood, an additional year of study of theology, and a third year of probation called "tertianship." This final year was intended to renew and deepen the young Jesuit's religious spirit and commitment to his apostolic mission (Farrell, 1970, p. 117).

Instructional Directives for Lower Classes

8 - Overview. Jesuit pedagogy has been described as "active" and "interactive" in the style of the University of Paris. A feature of Jesuit pedagogy that distinguished it from scholastic pedagogy was emphasis on the active participation of the student in the learning process. The word "exercise" characterizes this focus and largely defines Jesuit pedagogy (Codina, 2000, pp. 37-38). The methodology of the *Ratio Studiorum* is based on three techniques: Prelection, Disputation and Emulation. Their effectiveness is enhanced by engagement between master and pupil. Just as the contemporary educator might employ whole group and small group instruction, inquiry activities and cooperative learning strategies, the Jesuits identified what they felt were essential forms of interaction between the instructor and the student. Each technique was designed to achieve the curricular objectives set down in the *Ratio*.

9 - Exercises. Exercises were structured activities that provided opportunities for students to interact with each other and with their teachers. The exercises were distinguished for their variety. There were "disputations, debates, repetitions that were held daily, weekly, monthly and annually, written exercises in imitation of the author being read, public correction of the exercises, original essays in the upper grades." To motivate students the Jesuits also scheduled "contests within and between classes, awards, plays and pageants, and academies" (Farrell, 1970, pp. viii-ix).

10 - Exercises in a Daily Lesson. The exercises were calculated to break the monotony of the lessons by encouraging the student to use all his faculties -- memory, imagination, reasoning -- thereby contributing to the "harmonious training" of his mind. Pavur (1903) describes how exercises were incorporated in the daily lesson:

a short recitation of the memory lesson is followed by the thorough repetition of the prelection of the previous day, or of the precepts of rhetoric, poetry, and grammar. Then comes the principal work of the day, the prelection of the new passage of the author, followed by a brief repetition. Some time is devoted every day to the writing of a little theme; and lastly the contests rouse the pupils to new attention, in case the other exercises should have caused some drowsiness. (sec. Contests, par. 14)

11 - Texts and Interaction. For the Jesuits, "exercising" students, i.e., having them repeat and recite lesson content, write compositions, orate, debate and dispute, were considered more important than their passivity when a teacher lectured. The Jesuits were averse to the practice of dictating in class because they felt it wasted precious time that could be devoted to structured activities. This dissatisfaction was an

impetus that led to the publication of important Jesuit textbooks such as the *Rhetoric* (1568) of Cipriano Soares (1524-93), the *Grammar* (1572) of Manuel Alvares (156-82), and the *Curso Conimbricense*. These texts increased the possibilities of interaction among students and teachers.

12 - Prelection. The preferred instructional method of the Jesuits was the *praelectio*, or in English the "prelection." In the higher studies of the Jesuit system the term was synonymous with *lectio* or lecture. In the lower studies it referred to an "explanation." The technique was at the heart of Jesuit methodology because of its systematic approach to teaching. It not only transmitted content, it also prepared the student for successful out-of-class study.

12.1 - In medieval university pedagogy, the term *lectio* "denoted a class or a single class lecture." However, some authors and the *Ratio Studiorum* adopted Quintilian's term of *praelectio* as a "specific reference to the part of the single class which was taken up by the professor's formal exposition of the text, followed by various supervised exercises and, out of class, by the students' *lectio* or reading of the assigned authors (Scaglione, 1986, p. 16).

12.2 - Laurence Britt (1939) in his explanation of how to introduce students to Cicero's *De Senectute* makes clear that "[t]he Prelection is not simply translation and parsing, nor is it a lecture by the teacher. Rather it is a practical, artistic, analytic study with pupils cooperating under the guidance of the teacher. Necessarily brief, the Prelection favors the intensive study and complete mastery of a limited amount of matter, in preference to less thorough treatment of longer sections" (6). Britt goes on to reference W. J. McGucken (1932) and his operational definition of this instructional method:

[T]he Prelection is the explanation beforehand of the lesson which the pupils are to study. According to the spirit of the *Ratio*, no lesson is to be given without first having been explained, and explained thoroughly, brought down to the pupils' mind, with the difficulties smoothed out, and the road made plain for the pupil, so that when he comes to study his lesson at home he will find it attractive from

12.3 - Father John Donohue (1963) defines the prelection as a comprehensive overview of the lesson. Its purpose was to provide students with an understanding of the fundamentals of the lesson in preparation for further study. For example, in a prelection for a Latin lesson the student comes to understand the purpose of the exercise, background information on the subject to be discussed, clarification and explanation of terminology and writing conventions (pp. 150-153). Throughout his preparation for the study of Latin, the pupil increasingly attains an appreciation of style and thought content: "Quintilian himself would be pleased that the students move on from knowledge of words, phrases and clauses to an insight into order, style and thought" (Koch, 1939, p. 31).

Once the prelection achieves its aim of "understanding" the next step in the learning sequence is mastery of content is demonstrated through activities such as "disputations, debates, repetitions held daily, weekly, monthly and annually, written exercises in imitation of the author being read, public correction of the exercises, original essays in the upper grades. But since successful action calls for motivation, the Jesuits provided contests within and between classes, awards, plays and pageants, and academies" (Farrell, 1970, pp. viii-ix). The learning principle is growth, based on the acquisition of

understanding and the demonstration of mastery of content through diverse activities (Donohue, pp. 150-153).

13 - Prelection and Inexperienced Teachers. Farrell (1970) notes that the prelection was a useful method especially for inexperienced teachers in need of structure. It was a teaching technique that the Jesuits believed would lead the teacher by successive steps to "create the mental situation and stimulate the imminent activity of the student." It compensated for the inadequacies of Jesuit teachers. Farrell writes that the Jesuits

were well aware of the difficulty of the teaching art and of the fact that not many have the essential endowment of the great teacher, the gift of inspiration. Hence they laid down a teaching technique which they believed would lead the teacher by successive steps 'to create the mental situation and stimulate the imminent activity of the student.' The technique was called the prelection. Its aim was to help the teacher to prepare his students for successful out-of-class study. (p. 127)

The *Ratio* presented Common and Special Rules on the prelection for each of the five classes of the humanist program. Prelections dealing with the fundamentals of grammar and prosody in the lower classes differed from those that focused upon authors and the precepts of rhetoric and poetry in the upper classes. The Jesuit teacher would have therefore varied the nature of this activity depending upon the subject matter of the lesson.

14 - Erudition. Another objective of the prelection was to contribute to the erudition of the student. Erudition was understood to be knowledge about archeological, historical, geographical and other critical details of life in antiquity. It was a crucial component of the study of grammar and the humanities. A well-developed prelection broadened a student's knowledge of Roman and Greek cultures as he labored to master their languages and literature. The Jesuit teacher carefully prepared the prelection to include contextual details that he judged important. Pachtler (2001) demonstrates the potential of the prelection in developing erudition with the following example:

Thus, while reading Caesar, Roman military antiquities are explained: the legion, weapons, military roads, etc. Xenophon's *Anabasis* affords an opportunity for giving details on Greek and Persian warfare. Cicero's various works will call for explanations of the Roman constitution, courts, elections, of the different offices of Consul, Praetor, Tribune, Aedile, Pontifex; for descriptions of the forum, villas, family life, etc. Plato's *Dialogues* demand a fair knowledge of Athenian life and manners; Homer's epics can be made interesting by details of the life and customs of the heroic age of the Greeks. (sec. 1. The Prelection or Explanation of the Authors, paras. 75).²³

15 - Jesuits and Disputation. The disputation technique adopted by the Jesuits was a common pedagogical technique used at the University of Paris. Reliance on this form of intellectual interaction was as essential to their educational system as it was to university studies. Disputation was reasoned debate. It was civil and purposeful in that its ultimate goal was to achieve knowledge; it was systematic in that it followed a set of rules that guided the forms of interaction between the advocates of opposing views. The

²³ See <http://www.slu.edu/colleges/AS/languages/classical/latin/tchmat/pedagogy/schw/schw2.html>

rules guiding interaction were legalistic in spirit. The format of making assertions and responding to assertions was rigidly prescribed. Essential to this style of debate was the requirement that assertions and statements of fact and of principle be substantiated by reference to classical authorities. This deference to authority was a primary characteristic of the interactive format of disputation, and the success or failure of a proponent's arguments depended upon his knowledge of classical writings. Its goal, in addition to the acquisition of knowledge, was to sharpen the reasoning and verbal skills associated with successful argumentation.

The *Ratio Studiorum* articulated the reason that disputation was an enduring methodological technique. According to Common Rule 12 for Professors of the Higher Faculties and Common Rule 34 for the teachers of the lower classes, disputation, as explained in the 1586 edition of the *Ratio*, was intended to exercise the "intellectual powers" in the study of theology, philosophy, the humanities, and even grammar. Farrell clarifies this point when he references George Pachtler that one masters philosophy and theology

not so much by listening to lectures as by engaging in disputation; for disputation provides a real test of how much a student understands of what he wrote in his notebook and how much profit he gained from private reflection. What seemed crystal clear in the seclusion of one's room will often be found worthless in the give and take of disputation. Yet, when one is hard pressed by an opponent, he is forced to call upon all the strength and vigor of his mental powers. As a consequence, he will think of arguments in rebuttal that would never have come to mind in the quiet and ease of his study (Pachtler as cited by Farrell, 1970, p. 120).

16 - Emulation. The Jesuits knew "from experience that the instinct to excel, to outdistance, is universal in human nature. They soon found that it is manifested most spontaneously in games and in play. They wondered whether this common instinct could not be used constructively in the classroom. Their experiment with rivalry at the college in Messina was so successful that one after another of the thirty-five Jesuit secondary schools founded between 1548 and 1556 adopted emulation as an essential teaching technique. Eventually, the 1559 *Ratio* emphasized honorably rivalry, *honesta aemulatio*, as 'a powerful incentive to studies'" (Farrell, 1970, p. 130).

The Jesuits believed that emulation or intellectual competition was a stimulus to the "development of ability and of learning" (Koch, 1939, p. 61). Koch explains how this is possible: "Pleasure arising from competitive effort rapidly emerges as a universal stimulus: it is eager, energetic, more powerful; it dispels error and ignorance. Emulation is about the only element in educational training that is exclusively dependent on suasion: it cannot be got by orders and commands. Hence it works on minds that are willing to listen to its call" (62).

In the Jesuit educational system emulation engaged students in a variety of ways. There were organized contests and competitions between individuals, groups of students and classes. Rivalry was encouraged in repetitions, recitations, written work, disputations and debates, competitions for leadership, and in the bestowal of prizes and awards in language studies (Farrell, 1970, 130).

17 - Rivalry and Motivation. A challenge faced by medieval educators was how to motivate students in their studies. For Quintilian and the Jesuits, motivation originated in what comes natural to man: rivalry. There is a natural pleasure derived from competition that serves as a powerful stimulus towards dispelling ignorance (Koch, 1939, p. 62). "Honorable rivalry, devoid of ill" in the learning environment, could awaken a pupil's interest in his studies (p. 58). The energizing spirit of rivalry extends to wherever

there is a clash of rival systems of ideas, whether in the arts or in philosophy or theology. As noted by Koch: "Emulation then is founded on long and solid tradition, on the authority of great figures in human history, on the character of literary studies, on the strong, permanent testimony of our human nature itself. This summarizes Petavius' (Petrarch's) exposition" (p. 63). Koch summarizes some of the applications of the principle of rivalry in Jesuit pedagogy:

Here we see mentioned individual rivalry through an appointment of a boy to check the mistakes of another whether in reading, writing, or reciting. Besides these methods of applying the principle of emulation the Ratio suggests contests between classes of the same grade, and contests between classes of different grades. Public and private awards for good work were insisted on since they were considered a successful spur to further progress. (p. 64)

There was also "public declamation" which was the posting in a public place of the better poems of a student (Koch, p. 64). Throughout this array of competitive engagements, the Jesuits believed that "[i]f the student has been trained to compete fairly, to gain success without yielding to pride, to meet with failure without dejection or despair, he has been educated for life in any field of activity" (p. 65).

18 - Concertationes. A number of the Common Rules of the *Ratio Studiorum* suggested forms of rivalry in their directives. The Jesuits, however, favored formal competitions, or *concertationes*, between students of the same or different classes on subject matter previously learned. These contests had the same objective in the lower classes as that of the disputations in the higher classes: that is, providing the student with an opportunity to speak about the subject matter of the lesson and answer questions about his presentation. Pavur (2001), drawing from Schwickerath's 1903 history of Jesuit education, relates how formal competitions would have been conducted by the Jesuit teacher:

Each pupil may have his *aemulus* or rival. The professor questions A, while B, the *aemulus* of A., is on the alert to correct his rival. Or the boys question each other mutually, while the professor merely presides to see that all goes on fairly. The whole class may be divided into two sides, which are frequently called camps or armies, as boys naturally delight in anything military. Boys of the one camp, let us say the "Carthaginians," question some of the rival camps of the "Romans," and vice versa. The leaders of the two sides keep the record of the points gained, of the corrections made by their respective side. The leaders ought to be pupils distinguished by talent, industry and good character. Different classes may also challenge each other for an extraordinary and more solemn contest, to which other classes may be invited as witnesses. (sec. 5. Contests, para. 5).²⁴

The *Ratio Studiorum* laid out general rules for inter-class competitions. The responsibilities of the teacher include managing, organizing and preparing for competitions (Farrell, 1970, pp. 68-69). The Special Rules for teachers of Grammar, Humanities and Rhetoric classes explained how competitions were to be conducted and specified what was expected of the students (pp. 83, 91).

²⁴See <http://www.slu.edu/colleges/AS/languages/classical/latin/tchmat/pedagogy/schw/schw5.html>

19 - Imitation. The *Ratio Studiorum* attributed great importance to the writings of Cicero. It advanced the idea, prevalent at the time, that a student could achieve *Eloquencia Perfecta* by writing in the style of Cicero. Koch (1939, pp. 41-42) notes that the Jesuits believed that the student achieves mastery of the rules of grammar and syntax for compositions through imitation, and that this leads to eloquence in communication. He quotes Book X of Quintilian's *Institutio Oratoria* on this point: "For there can be no doubt that in art no small portion of our task lies in imitation, since, although invention came first and is all important, it is expedient to imitate whatever has been invented with success."

Hence, the *Ratio* states in Common Rule 30 for Professors of the Lower Classes that "[the topic for writing] should be directed to the imitation of Cicero, as much as possible, to his standard of narration, persuasion, congratulation, admonition, and other forms of that nature" (Fitzpatrick, 1933, p. 233). Fitzpatrick continues on this point when he relates Common Rule 7 for Professors of the Middle Grammar Classes: "The subject for written work is to be dictated generally in the form of a letter in the vernacular language, word for word, which will refer to the rules of syntax and be in imitation of Cicero" (p. 229).

20 - Memorization. The Jesuit historian and teacher of rhetoric Francesco Sacchini (1570-1625), in discussing the Society's Ideal of a humanistic education based on the fusion of Christian virtue and Ciceronian rhetoric, comments on the advantages of "learning by heart." He believes that success and erudition are achieved through the exercise of memory and that strengthening memory through proper instruction leads to an "inestimable advantage in affairs of every kind throughout life." The power of memory in one's life can be seen in complex and even mundane moments: "How often we see and hear eminent men far advanced in life, when in learned and noble company, take a special delight in quoting what they stored up as boys!" (as cited by Quick, 1894, pp. 50-51).

Sacchini notes that what is remembered as a boy often prepares the man later for adult affairs. Clearly, "we only know and possess that which we retain, that this cannot be taken from us, but is with us always and is always ready for use, a living library, which may be studied even in the dark." The Jesuit master should therefore point out the advantages derived from memory and encourage boys to "run over in their minds or to say aloud, what they have learnt, as often as opportunity offers, as when they are walking or by themselves" (as cited by Quick, pp. 50-51). In the classroom, students should "commit too memory choice selections which will forever after be of use to them, in every kind of study, and nearly every pursuit in life" (as cited by Quick, p. 51). This logic, however, must acknowledge that learning through memorization may lose its advantages if the boy does not understand the content that he studies.

21 - Recall and Success. The concepts of Critical Thinking, Originality, Creativity, Reflection, and Problem-Solving -- as we define them today -- were unknown in the Middle Ages. While the Jesuits may have touched upon some cognitive capabilities and dispositions valued today, in the 16th century there was no science of pedagogy or of psychology; nor were there theoretical frameworks that identified and explored cognitive processes. What they did observe, however, was that the accurate recall of facts and propositions contributed to success, regardless of one's purpose, occupation or profession.

Repetition and recitation strengthened and placed great reliance on memory. The ability to recall and accurately transmit essential points of the narratives of recognized authorities was believed to be subordinated to the will and therefore amenable to development through perseverance. Exercising memory when repeating or reciting lesson content was considered essential for preparing students to navigate the labyrinthine arguments in debates.

Quick (1897) would be the first to admit that by today's standards, what the Jesuits proposed in their teaching was not of the highest order. They focused mainly on the receptive and reproductive faculties and capabilities of the students. In skillful disputes, a well-stored memory is displayed through the mastery of the Latin language and the theological and philosophical opinions of one's preceptors. This was in Jesuit thinking the highest point to be achieved through education (p. 50). While mental faculties other than memory were unknown in the pedagogy of the time, the Jesuits "were eminently successful" in what they attempted (p. 51).

22 - Repetition. *Repetition* was an important exercise in Jesuit education; "*Repetitio mater studiorum* was the maxim of the system" (Quick, 1894, p. 45). The *Ratio* insisted on repetitions throughout the humanist course, and particularly in the lower classes. Constant drilling on the same content in the beginning of the student's career ensured a solid foundation for future study. Each daily lesson had two repetitions: one at the beginning and the other at the end of the lesson. Repetition reinforced what was previously learned and what was presently being taught. Hence, the Jesuit teacher would have followed Rule 25: "repetition may be asked as a continuous recitation or in reply to individual questions of the teacher, while each rival corrects the mistakes of his competitor or answers the question himself if his competitor hesitates." The directive notes that repetitions were challenged and corrected by classmates. Rule 26 follows suit and mandates repetitions for lessons taught during the previous week. These were scheduled for Saturdays or any other fixed day (Farrell, 1970, p. 66). As for this weekly review, it focused on the more important topics, especially the rules of grammar, precepts of style and rhetoric. Quick also notes that "[i]n the three lowest classes the desire of laying a solid foundation even led to the second six months in the year being given to again going over the work of the first six months" (p. 46).

23 - Writing Exercises. The written exercise was an essential activity in the Jesuit scheme of education because it demonstrated a student's mastery of content knowledge and his communication skills. It also contributed to character formation. The Jesuit would have taken to heart the Common Rules and Special Rules for the individual classes and entertained the belief that through personal effort and discipline the student could will himself to develop writing competency. For a composition the teacher assigned students a theme that he selected and carefully prepared beforehand, and then systematically corrected the written product. This might have been a free essay, a translation of dictated Latin and Greek works, or a composition that imitated the narrative style and thought processes of Cicero. Short Latin themes were assigned daily and Greek themes once a week.

24 - Dramatic Performances. Farrell (1970) writes that "The theatre played and still plays a conspicuous role in the history of Jesuit education." In the *Ratio*'s instructions for the Rector, Rule 13 states that tragedies and comedies should be scheduled occasionally, meaning about 3 or 4 times a year, and that they should be presented in Latin and observe propriety. They should also address a 'spiritual and edifying theme'" (p. 17). These themes were mostly based on "sacred history, the Latin and Greek classics, the foreign missions, lives of the saints, and local traditions. A distinctive feature of these comedies and tragedies was that the majority were written by the Jesuit professors themselves" (p. 122).

According to Jacobus Pontanus (1542-1626), a Jesuit and Latinist from Bohemia, the benefits of these dramatic performances were the following: “(1) The clever acting of poor students on the stage often moves the wealthy to help them; (2) the plays bring renown to the teachers and to the school; (3) they can be excellent means for exercising the memory; (4) they are a great help to students in mastering Latin; (5) they inculcate lessons of virtue” (Farrell, 1970, p. 122).

Developments in Pedagogy

25 - Jouvency. In response to the concern with teaching methodology, the Fourteenth Congregation of the Order commissioned Father Joseph de Jouvency (1643-1719) to develop a manual in 1696 with suggestions on teaching classical studies. Jouvency completed and published his manual in Florence in 1703 under the title *Magistris scholarum inferiorum Societatis Jesu de ratione discendi et docendi* (*On learning and teaching for teachers of inferior studies of the Society of Jesus*). His work became the official textbook of the Society. European Jesuits responded favorably to its pedagogical suggestions. In France, Austria and Poland Jesuit teachers found his work helpful when reflecting on the instructional requirements of the *Ratio Studiorum*. In Spain, Jouvency stimulated Spanish Jesuits to publish their own works on the teaching of the humanities. Andrés Marcos Burriel published in 1750 his *Apuntamientos para fomentar las letras humanas* (*Guidelines for promoting human letters*) and in 1753 Francisco Javier de Idiáquez published *Prácticas e industrias para promover las letras humanas* (*Practices and Activities for Promoting Human Letters*) (Gómez, 2014, p. 318). As for Portugal, there appears to be no comparable texts on pedagogy.

26 – Rhetorical Ideal Today. Father Donohue (1963) says that although the *Ratio* was developed in the late 1500s it presents “certain key-categories or master themes, rudimentary perhaps or barely implicit, which constitute a portion of Christian educational theory: even though persons, places and time have changed since 1599 (p. 69). He states that there are certain 16th century educational principles that apply to 19th century schools and today, but of course taking into account the changes that the school going populace has undergone. Donohue, for example, points to the “rhetorical ideal” of “Ciceronian verbal grace,” that presupposes that one must possess both wisdom, that is know a thing, and the tools to communicating what is known. One may conclude that “developing the arts of communication and *eloquentia perfecta* are still essential tasks of the secondary school even though the form and content of eloquence changes from epoch to epoch and nation to nation” (p. 121). This Ideal, if relevant today, was just as and even more relevant to secondary school students in the 19th century.

27 - Ignatian Pedagogical Paradigm. Fr. Vincent Duminuco of John Carroll University discusses the Ignatian Pedagogical Paradigm in a number of videos. From an analysis of Ignatius’ *Spiritual Exercises*, particularly the introduction which refers to the facilitator of the exercises, his work-group examined the Ignatian method and developed a paradigm of Jesuit pedagogy as it applies to formal education. Unlike the traditional definition of pedagogy as the art and science of teaching, Ignatian pedagogy is defined as the manner in which teachers accompany students in their growth and development, much as Ignatius’ facilitator participated in the spiritual growth of an individual. Fr. Duminuco (2011a) notes that pedagogy cannot be reduced simply to methodology, it must also include a “worldview and a vision of the ideal person whom we want to educate.” These provide a goal and criteria for the choices and means of the educative process. The end-product is an individual who is competent,

compassionate, committed and who has developed a conscience that allows him to distinguish right from wrong.

Fr. Duminuco (2011b) goes on to identify five components of the Ignatian Pedagogical Paradigm, as explained in a publication titled *Ignatian Pedagogy: a Practical Approach*. Extracting principles from the *Spiritual Exercises*, he identifies the main features of the paradigm. An effective pedagogy takes into consideration the CONTEXT of the students, such as their predisposition to learn, family experiences, sociocultural factors, cultural differences, religious commitment and previous learning. EXPERIENCE pays attention to the cognitive and affective aspects of learning. It alludes to Ignatius' dictum that to experience spiritual growth one must "taste something internally." Students should not only intellectually grasp what is being taught but also take into account their emotional reactions to this experience. The third component is REFLECTION, which Dumunico considers the most important of the paradigm. Students should reflect not only on meaning of what they have learned but also on the significance of the learned content for themselves and for others. The paradigm also envisions ACTION in the sense that over time learning should affect one's external choices. Finally, a sound pedagogy includes multiple forms of EVALUATION to assess the effectiveness of the learning activity and its effect on students.

REFERENCES

- Abelson, Paul. (1906). *The seven liberal arts: a study in mediæval culture*. New York: Columbia University, Teacher's College Press. Retrieved from file:///C:/Users/lorenzk/Downloads/Jhu_TheSevenLiberalArts_Abelson_166pgs.070.pdf
- Aizpuru, Pila Gonzalbo. (2001). Jesuit education in New Spain. In Alfonso Alfaro (Ed.), *Los colegios jesuitas en la Nueva España* (pp.100-102). Mexico, D.F.: Artes de Mexico
- Alden, Dauril. (1996). *The Making of an Empire. The Society of Jesus in Portugal, Its Empire, and Beyond. 1540-1750*. Stanford, CA: Stanford University Press.
- Aristotle (384—322 B.C.E.). (n.d.). *The Internet Encyclopedia of Philosophy*. Retrieved February 25, 2019, from <https://www.iep.utm.edu/aristotl/#H2>
- Ars grammatica. (n.d.). In *Wikipedia*. Retrieved January 7, 2019, from https://en.wikipedia.org/wiki/Ars_grammatica
- Asselt, W. (2011). *Inleiding in de gereformeerde scholastiek [Introduction to reformed scholastics]* (A. Gootjes, Trans.). Grand Rapids, MI: Reformation Heritage Books.
- Astell, Ann W. (Winter 1999). Cassiodorus's commentary on the psalms as an ars rhetorica. *Rhetorica: A journal of the history of rhetoric*, 17(1): 37–73
- Ayer, A. J., & O'Grady, Jane. (Eds.) (1992). *A dictionary of philosophical quotations*. Oxford, UK: Blackwell Publishers.
- Bangert, William V. (1972). *A history of the Society of Jesus*. St. Louis, MO: The Institute of Jesuit Sources.
- Barnes, Jonathan. (1982). *Aristotle*. Oxford/New York: Oxford University Press.
- _____. Trans. (2003). *Porphyry: Introduction*. Oxford, UK: Clarendon Press.
- (BCJC) - The Boston College Jesuit Community. (2008). Jesuits and Jesuit education: A primer. In G. W. Traub (Ed.), *A Jesuit education reader* (pp. 38-42). Chicago, IL: Loyola Press.
- Beaumont, Douglas. (2010, September 21). Citing the *Summa Theologiæ* of St. Thomas Aquinas [Blog post]. Retrieved from <https://douglasbeaumont.com/2010/09/21/citing-thomas-aquinass-summa-theologiae/>
- Bekker Numbering. (n.d.) In *Wikipedia, The Free Encyclopedia*. Retrieved March 14, 2019, from https://en.wikipedia.org/w/index.php?title=Bekker_numbering&oldid=867255510
- Biblical Hermeneutics. (n.d.). *Wikipedia*. Retrieved from https://en.wikipedia.org/wiki/Biblical_hermeneutics

- Bourke, Vernon J. (1999). Introduction. In *Thomas Aquinas: Commentary on Aristotle's Physics*. (R.J. Blackwell, R.J. Spath, & W.E. Thirlkel, Trans.). Notre Dame, IN: Dumb Ox Books. Retrieved from https://books.google.com/books?id=6CD0IRPg4roC&pg=PR3&source=gb_s_selected_pages&cad=2#v=onepage&q&f=false
- Brading, David. (2001). La patria criolla and the Society of Jesus. In Alfonso Alfaro (Ed.), *Los colegios jesuitas en la Nueva España* (pp.102-106). Mexico, D.F.: Artes de Mexico
- Browning, Oscar. (1902). The Jesuits and education. *Encyclopedia Britannica*. Retrieved from <http://www.1902encyclopedia.com/E/EDU/education-10.html>
- Cardulo, Fulvio. (2016). Promotion of humanistic studies (c.1584-90). In C. Casalini & F. Cardulo (Eds.), *Jesuit pedagogy, 1540-1616: A reader* (pp. 217-221). Boston, MA: Boston College Institute of Jesuit Sources.
- Carr, K.E. (2017). What is arete? Virtue in Greek philosophy – Definition of arete. *Quatre.us Study Guides*. Retrieved from <https://quatre.us/greeks/arete-virtue-greek-philosophy.htm>
- Casalini, Crisitano. & Pavur, Claude. (Eds.). (2016). *Jesuit pedagogy, 1540-1616: A reader*. Boston, MA: Boston College Institute of Jesuit Sources.
- Casini, Lorenzo. Renaissance philosophy: humanism. In *Internet encyclopedia of philosophy*. Retrieved from <http://www.iep.utm.edu/renaissa/#H2>.
- Cassiodorus. (n.d). In *Wikipedia*. Retrieved from <https://en.wikipedia.org/wiki/Cassiodorus>
- Cathedral School. (n.d.). In *Wikipedia*. Retrieved July 4, 2018, from https://en.wikipedia.org/wiki/Cathedral_school#Characteristics_and_development.
- Cesareo, Francesco C. (1993). Quest for identity: the ideals of Jesuit education in the sixteenth century. In C. Chapple (Ed.), *The Jesuit tradition in Education and missions: a 450-year perspective* (pp.17-33). London: Associated University Presses.
- Chadwick, Henry. (1986). *Augustine*. Oxford: Oxford University Press.
- Chapple, Christopher (Ed.). (1993). *The Jesuit tradition in education and missions: a 450-year perspective*. London: Associated University Presses.
- Codina Mir, G. (2000). The modus parisiensis. In V. J. Duminuco (Ed.), *The Jesuit Ratio Studiorum: 400th anniversary perspectives* (pp. 28-49). New York: Fordham University Press, 2000.
- Cohen, John Michael & Screech, M. A. (2002). Francois Rabelais. In *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/biography/Francois-Rabelais>
- Cohen, S. Marc. (2016). Aristotle's Metaphysics. In *The Stanford encyclopedia of philosophy* (Rev. ed.). Retrieved from <https://plato.stanford.edu/entries/aristotle-metaphysics/>

- The Constitutions of the Society of Jesus and their complementary norms* (G. E. Ganss, Trans.). (1996). St. Louis, MO: The Institute of Jesuit Sources.
- Corbishley, Thomas. (1963). *The Spiritual Exercises of St Ignatius Loyola*. London/New York: Burnes & Oates.
- Corwin, Victoria. (24 May 2016). Medieval book production and monastic life. Dartmouth Ancient Books Lab. Retrieved from <https://sites.dartmouth.edu/ancientbooks/2016/05/24/medieval-book-production-and-monastic-life/>
- CSPB. (n.d.) The Rule. OSB.ORG. Retrieved from <https://www.osb.org/our-roots/the-rule/>
- Curtius, Ernst Robert. (1973). *European literature and the Latin Middle Ages* (R. Willard, Trans.). Princeton, NJ: Princeton University Press.
- Dallai, Ahmed. (2010). *Islam, science and the challenge of history*. Hartford: Yale University Press.
- Deck, Allan Figueroa. (1993). Jesuit contributions to the culture of modernity. In C. Chapple (Ed.), *The Jesuit tradition in education and missions: a 450-year perspective* (pp.169-181). London: Associated University Presses.
- De Doctrina Christiana. (n.d.). In *Wikipedia*. Retrieved May 5, 2018, from https://en.wikipedia.org/wiki/De_doctrina_christiana
- Dialectic. (n.d.). In *Wikipedia*. Retrieved May 1, 2018, from https://en.wikipedia.org/wiki/Dialectic#Classical_philosophy.
- Donohue, James. (1963). *Jesuit education: an essay on the foundations of its idea*. New York: Fordham University Press. Retrieved from [https://babel.hathitrust.org/cgi/pt?id=uc1.\\$b114041;view=1up;seq=7](https://babel.hathitrust.org/cgi/pt?id=uc1.$b114041;view=1up;seq=7)
- Dubray, Charles. (1909). Emanationism. In *Catholic Encyclopedia*. New York: Robert Appleton Company. Retrieved December 17, 2016 from New Advent: <http://www.newadvent.org/cathen/05397b.htm> ?
- Duignan, Brian. Plato and Aristotle: How Do They Differ? (n.d.). In *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/story/plato-and-aristotle-how-do-they-differ>
- Duminuco, Vincent. (2000). *The Jesuit Ratio Studiorum: 400th anniversary perspectives*. New York: Fordham University Press.
- _____. (October 12, 2011a, 9:33 AM). *Ignatian pedagogical paradigm* [Video file]. Retrieved from <https://vimeo.com/30435642>
- _____. (October 12, 2011b, 10:27 AM). *Ignatian pedagogical paradigm: Components*. [Video file]. Retrieved from <https://vimeo.com/30435642>

Emadi, Matthew. Hermeneutics of Love. (2011, Dec. 28). *The Two Cities*. Retrieved from http://www.thetwocities.com/biblical-studies/hermeneutics/augustine-on-genesis-hermeneutics-of-love/#_ftn2

Erasmus. (n.d.). In *Wikipedia*. Retrieved from <https://en.wikipedia.org/wiki/Erasmus>

Erasmus Biography. (2016). *The Biography.com website. ABC Television Networks*. Retrieved from <https://www.biography.com/people/erasmus-21291705>.

Exemplarism. (2003). In *New Catholic Encyclopedia*. Retrieved from <https://www.encyclopedia.com/religion/encyclopedias-almanacs-transcripts-and-maps/exemplarism>

Exemplarism. (n.d.). In *Oxford living dictionaries*. Retrieved from <https://en.oxforddictionaries.com/definition/exemplarism>

Falcon, Andrea. (Spring 2015). Aristotle on causality. In *Stanford encyclopedia of philosophy*. Retrieved from <https://plato.stanford.edu/archives/spr2015/entries/aristotle-causality/>.

Farrell, Allan Peter. (1938). *The Jesuit code of liberal education. Development and scope of the Ratio Studiorum*. Milwaukee, WI: Bruce Publishing Company.

_____. (1970). *The Jesuit Ratio Studiorum of 1599*. Washington, D.C.: Conference of Major Superiors of Jesuits. Retrieved from <http://www.bc.edu/sites/libraries/ratio/ratio1599.pdf>

Feret, P. (1912). Sorbonne. In *Catholic encyclopedia* (Vol. 14). New York: Robert Appleton Company. Retrieved from <http://www.newadvent.org/cathen/14149a.htm>

Fitzpatrick, Edward A. (1933). *St. Ignatius and the Ratio Studiorum*. New York: McGraw-Hill.

Fonseca, Gonalo L. Robert of Couron, c. 1160-1219. (n.d.) *The History of Economic Thought Website*. Retrieved from <http://www.hetwebsite.net/het/profiles/courcon.htm>

Franca, Leonel. (1952). *O mtodo pedaggico dos Jesutas*. Rio de Janeiro, Agir

Francis Petrarch (1304-1374). Letter to Cicero. (n.d.). *Hanover Historical Texts Project*. Retrieved March 11, 2019, from <https://history.hanover.edu/courses/excerpts/111pet2.html>

Frijhoff, Willem. (1996). Patterns. In H. de Ridder-Symoens (Ed.), *A history of the university in Europe. Vol. 2. Universities in early modern Europe (1500-1800)* (pp. 43-110). Cambridge: Cambridge University Press. Retrieved from https://books.google.com.br/books?id=ZHMjzvAxHF0C&pg=PA47&hl=pt-BR&source=gbv_toc_r&cad=3#v=onepage&q&f=false

- Galen, Tihanov (Ed.). (2009). *Gustav Shpet's contribution to philosophy and cultural theory*. West Lafayette, IN.: Purdue University Press.
- Galindo, Israel. (2014). Six Educational Principles from Augustine of Hippo. *Columbia Theological Seminary*. Retrieved from <https://www.ctsnet.edu/six-educational-principles-from-augustine-of-hippo/>
- Giard, Luce. (2001). The Jesuits' entry into the field of education. In Alfonso Alfaro (Ed.), *Los colegios jesuitas en la Nueva España* (pp. 93-97). Mexico, D.F.: Artes de Mexico
- Gilman, D.C., Peck., H.T. & Colby, F.M. (Eds.). (1905). Arts Liberal. In *New international encyclopædia* (1st. ed.). New York: Dodd, Mead.
- Gloss (Annotation). (n.d.). In *Wikipedia*. Retrieved May 10, 2018, from [https://en.wikipedia.org/wiki/Gloss_\(annotation\)](https://en.wikipedia.org/wiki/Gloss_(annotation))
- Gómez, César Chaparro. (2014). Del De Ratione Discendi et Docendi de Jouvancy a las Prácticas e Industrias de Idiáquez: Los avatares de la Ratio Studiorum jesuita. *Cuadernos de Filología Clásica. Estudios Latinos* 2014, 34(2): 315-336. Retrieved from <http://revistas.ucm.es/index.php/CFCL/article/viewFile/47361/44401>
- Graham, Jacob. (n.d.). Ancient Greek Philosophy. In *Internet encyclopedia of philosophy*. Retrieved from <https://www.iep.utm.edu/greekphi/#SSH5ai>.
- Graves, Frank Pierrepont. (1910). *A history of education during the Middle Ages, and the transition to modern times*. New York: Macmillan.
- Grendlar, Paul F. (2014). Jesuit Schools in Europe. A Historiographical Essay. *Journal of Jesuit Studies*. 1(1). Retrieved from https://brill.com/view/journals/jjs/1/1/article-p7_2.xml
- _____. (2016). The culture of the Jesuit teacher 1548–1773. *Journal of Jesuit Studies*, 3(1): 17-41.
- Harvard University Press. Retrieved from <http://www.hup.harvard.edu/catalog.php?isbn=9780674993181>
- Haney, Kathleen. (1998). The liberal arts and the end of education. Paper presented at the Twentieth World Congress of Philosophy, Boston, August 1998. Retrieved from <https://www.bu.edu/wcp/Papers/Educ/EducHane.htm>
- Hellyer, Marcus. (2005). *Catholic physics: Jesuit natural philosophy in early modern Germany*. Notre Dame, IN: Notre Dame University Press.
- Hermeneutics. (2017). *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/topic/hermeneutics-principles-of-biblical-interpretation>
- Highet, Gilbert. (1955). *The art of teaching*. New York: Vintage Books.

- Humanism in the Early Renaissance. (2005) *Arts and Humanities through the Eras*. Retrieved March 24, 2019 from Encyclopedia.com: <https://www.encyclopedia.com/humanities/culture-magazines/humanism-early-renaissance>
- Ideal. (2012.). In *Collins English Dictionary - Complete & Unabridged* Retrieved February 23, 2019, from Dictionary.com website <http://www.dictionary.com/browse/ideal>
- Ideal. (2018) *Dictionary.com*. Retrieved February 23, 2019, from <http://www.dictionary.com/browse/ideal>.
- Grendlar, Paul F. (2014). Jesuit Schools in Europe. A Historiographical Essay. *Journal of Jesuit Studies*. 1(1). Retrieved from https://brill.com/view/journals/jjs/1/1/article-p7_2.xml#d737369e441
- _____. (2016). The culture of the Jesuit teacher 1548–1773. *Journal of Jesuit Studies*, 3(1): 17–41. Retrieved from <file:///C:/Users/lorenzk/Desktop/Jesuit%20Teacher%20Culture%20Article.pdf>
- Jaeger, Werner . (1945). *Paideia: The ideals of Greek culture. Vol I: Archaic Greece: The mind of Athens* (Gilbert Highet, Trans). New York: Oxford University Press.
- Jesuit Institutions in Portugal. University of Coimbra. (n.d.) Retrieved from http://www.manresa-sj.org/stamps/2_Portugal.htm#coimbra.
- Johannes Sturm (n.d.). In *Wikipedia*. Retrieved July 4, 2018 https://en.wikipedia.org/w/index.php?title=Johannes_Sturm&oldid=844281060
- Joseph, Miriam. (2002). *The trivium: The liberal arts of logic, grammar, and rhetoric*. Glastonbury, UK: Wooden Books.
- Jouveney. (1910). In *Catholic encyclopedia*, Vol VIII. New York: Appleton.
- Kidder, D.S. & Oppenheim, N.D. (2006). *The intellectual devotional*. Ann Arbor: Borders Group.
- Kircher, Timothy. (September 2003). Review of *The two Latin cultures and the foundation of Renaissance humanism in medieval Italy* (review no. 1485). Retrieved March 1, 2019, from <http://www.history.ac.uk/reviews/review/1485>
- Kirwin, Christopher. (1999). *Augustine*. London: Routledge.
- Knight, Kevin. (2017). The Confessions. Retrieved from, <http://www.newadvent.org/fathers/1101.htm>
- Koch, Joseph Robert. (1939). *Quintilian and the Jesuit Ratio Studiorum*. Unpublished Master's Thesis, Loyola University, Chicago, IL. Retrieved from http://ecommons.luc.edu/cgi/viewcontent.cgi?article=1470&context=luc_theses
- Kristeller, Paul Oskar. (1965). *Renaissance thought II: Papers on humanism and the arts*. New York: Harper Torchbooks.

- Lebrun, Harvey. (1973). Humanism with a capital H. *American Humanist Association*. Retrieved from <https://americanhumanist.org/what-is-humanism/humanism-capital-h/>
- Leff, Gordon. (1992). The trivium and the three philosophies. In H. de Ridder-Symoens (Ed.), *A history of the university in Europe. Vol.1. Universities in the Middle Ages* (pp. 307-336). Cambridge: Cambridge University Press.
- Leinenweber, John. (1992). *Letters of Saint Augustine*. Tarrytown, NY: Triumph Books.
- Leite, Serafim. (1965). *Suma histórica da Companhia de Jesus no Brasil (Assistência de Portugal 1549-1760)*. Lisboa: Junta de Investigações do Ultramar.
- Leonard, Timothy. (n.d.). Augustine (354-430) – Augustine and Teaching. Retrieved from <http://education.stateuniversity.com/pages/1778/Augustine-St-354-430.html>.
- Letson, Douglas & Higgins, Michael. (1995). *The Jesuit Mystique*. Toronto: MacMillan.
- Liberal Arts. (2010). In *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/topic/liberal-arts>
- Liberal arts. (2017, April 24). In *Wikiquote*. Retrieved February 23, 2019, https://en.wikiquote.org/w/index.php?title=Liberal_arts&oldid=2246541
- Liddell, H.G. & Scott, R. (1940). *A Greek–English lexicon* (9th ed.). Oxford: Clarendon Press.
- Lindsay, Thomas. (1902) Thomas Aquinas. Italian theologian and philosopher (1225-74). In *Encyclopedia Britannica*. Retrieved from <http://www.1902encyclopedia.com/A/AQU/thomas-aquinas.html>
- Lombard, Peter. (2007). *The sentences, Book 1: The mystery of the trinity* (G. Silano, Trans.). Mediaeval Sources in Translation 42. Toronto: Pontifical Institute of Mediaeval Studies.
- Lorenz, Karl. (2010) *Ciência, educação e livros didáticos do século XIX. Os compêndios das ciências naturais do Colégio Pedro II* [Science, education and textbooks of the XIX Century. The natural science compendiums of the College Pedro II]. Uberlândia, Brasil: Editora da Universidade Federal de Uberlândia.
- Marenbon, John. (1987). *Later medieval philosophy (1150-1350). An introduction*. London/New York: Routledge & Kegan Paul.
- _____. (2008) Logic at the turn of the twelfth century. In D. M. Gabbay & J. Woods (Eds.), *Handbook of the history of logic, Vol. 2, Mediaeval and Renaissance logic* (pp. 65-82). Amsterdam: Elsevier.

- Martins, António Manuel. (2006). *The Conimbricenses. Introductory note to the commentaries of the college conimbricense of the Society of Jesus (Commentarii Collegii Conimbricensis Societatis Iesu)*. Madrid: Universidad Complutense de Madrid. Retrieved from http://www.saavedrafajardo.org/Archivos/Conimbricenses_Presentacion.pdf
- Masi, Michael. (Summer 1979). The liberal arts and Gerardus Ruffus' commentary on the Boethian De Arithmetica. *The sixteenth century journal*, 10(2): 23-41.
- Mason, Steven F. (1962). *A history of the sciences*. New York: MacMillan.
- Mastin, Luke. (2009). Scholasticism. *Philosophybasics.com*. Retrieved from https://www.philosophybasics.com/movements_scholasticism.html
- Maurer, Armand. (1962). *Medieval philosophy*. New York: Random House. Retrieved from https://books.google.com/books?id=fOSatTABLBQC&pg=PA86&lpg=PA86&dq=book+on+logic+by+Toledo&source=bl&ots=QecBV_hsFd&sig=L7dD2kSZRWJZP_D8DOWWpubCnE&hl=en&sa=X&ved=0ahUKEwj9yoKe4dbOAhXG6x4KHVPzChE4ChDoAQgoMAM#v=onepage&q=book%20on%20logic%20by%20Toledo&f=false
- McDougall, Richard. & Pavlos, Suzanne. (2000). *Cliffs notes on Virgil's Aeneid*. New York: Houghton Mifflin Harcourt Publishing Company
- McInerny, Ralph. (1963). *A history of western philosophy* (Vols. 1-2). South Bend, IN: University of Notre Dame Press. Retrieved from <https://maritain.nd.edu/jmc/etext/hwp.htm#II>
- McInerny, Ralph & O'Callaghan, John. (Summer 2018). Saint Thomas Aquinas. In *Stanford encyclopedia of philosophy*. Retrieved from <http://plato.stanford.edu/archives/spr2015/entries/aquinas/>
- McKay, Brett & McKay, Kate. (2015). Classical Rhetoric 101: A Brief history. Retrieved from <http://www.artofmanliness.com/2010/11/30/history-of-rhetoric/>
- McMahon, Michael. (2008). The Jesuit model of education. *Edocere: A resource for Catholic education*. Retrieved from https://www.seattleu.edu/media/university-core/files/jesuit_model_education.pdf
- Medieval University. (n.d.). In *Wikipedia*. Retrieved July 4, 2018 from https://en.wikipedia.org/wiki/Medieval_university
- Metaphysics. (n.d.). In *Wikipedia*. Retrieved July 4, 2018, from <https://en.wikipedia.org/wiki/Metaphysics>.
- Metaphysics and Being Qua Being. (n.d.). *Acrewoods Home*. Retrieved February 18, 2019, from <http://www.acrewoods.net/library/aristotle/metaphysics-and-being-qua-being>
- Metaphysics. (2019). *English Oxford Living Dictionaries*. Oxford University Press. Retrieved February 19, 2019, from <https://en.oxforddictionaries.com/definition/metaphysics>

- Monroe, James P. (1906). *The educational ideal. An outline of its growth in modern times*. Boston, MA: D.C. Heath. Retrieved from <https://archive.org/details/educationalidea00munruoft>
- Morris, Robert Conway. (2004, May 29). Petrarch, the first humanist. *The New York Times*, Retrieved from <https://www.nytimes.com/2004/05/29/style/petrarch-the-first-humanist.html>
- Murphy, P. (2008). Defining pedagogy. In K. Hall, P. Murphy & J. Soler (Eds.), *Pedagogy and practice; Culture and identities* (pp. 28-39). London: SAGE publications.
- Murray, Michael & Rea, Michael. (2016). Philosophy and Christian theology. In *Stanford encyclopedia of philosophy*. Retrieved from <https://plato.stanford.edu/archives/win2016/entries/christiantheology-philosophy/>
- Naugle, Davey. (n.d.). The Greek concept of paideia—paideia. *Dallas Baptist University Summer Institute in Christian Scholarship*. Retrieved from https://www3.dbu.edu/naugle/pdf/institute_handouts/paideia/notes.pdf.
- Nederman, Cary J. (2012). The union of wisdom and eloquence before the Renaissance: The Ciceronian orator in medieval thought. [Abstract]. *Journal of medieval history*. 18(3): 75-95. Retrieved from [https://www.tandfonline.com/doi/abs/10.1016/0304-4181\(92\)90017-S](https://www.tandfonline.com/doi/abs/10.1016/0304-4181(92)90017-S)
- Nelson, Lynn Harry. (2001). The Rise of the universities. *WWW.Virtual Library*. Retrieved from <http://www.vlib.us/medieval/lectures/universities.html>
- North, John. (1996). The quadrivium. In H. de Ridder-Symoens (Ed.), *A history of the university in Europe*, Vol. 2. *Universities in early modern Europe (1500-1800)* (pp.337-359). Cambridge: Cambridge University Press.
- O'Connor, John Bonaventure. (1910). St. Isidore of Seville. In *The Catholic Encyclopedia*. New York: Robert Appleton Company. Retrieved from <http://www.newadvent.org/cathen/08186a.htm>
- O'Donnell, James J. (1979). *Cassiodorus*. Berkeley: University of California Press. On-line e-text.
- O'Malley, John. (2000). How the first Jesuits became involved in education. In V. J. Duminuco (Ed.), *The Jesuit Ratio Studiorum: 400th anniversary perspectives* (pp. 56-74). New York: Fordham University Press. Retrieved from <http://www.bc.edu/content/dam/files/top/church21/pdf/HowtheFirstJesuitsBecameInvolvedinEducation.pdf>
- Pachtler, G. M. (1887-94). *Ratio studiorum et Institutiones scholasticae Societatis Jesu per Germaniam olim vigentes, collectae, concinnatae, dilucidatae*. Vol II, Berlin: A. Hofmann.
- Padberg, John W. (2000) Development of the Ratio Studiorum. In V. J. Duminuco (Ed.), *The Jesuit Ratio Studiorum: 400th anniversary perspectives* (pp. 80-100). New York: Fordham University Press.

- Padilla, Guillermo Zermeño. (2001). Jesuit philosophy in New Spain in perspective. In Alfonso Alfaro (Ed.), *Los colegios jesuitas en la Nueva España* (pp.109-112). Mexico, D.F.: Artes de Mexico
- Paideia. (n.d.). In *Wikipedia*. Retrieved January, 10, 2019, from https://en.wikipedia.org/wiki/Paideia#cite_note-2
- Paideia. (n.d.). In *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/topic/paideia>.
- Pavur, Claude. (2001). The Method of Teaching in Practice from Jesuit Education: Its History and Principles Viewed in the Light of Modern Educational Problems by Robert Schwickerath, S.J. Retrieved February 27, 2019, from <http://www.slu.edu/colleges/AS/languages/classical/latin/tchmat/pedagogy/schw/schw1.html#schw-data>
- Perry, M., Chase, M., Jacob, M., Margaret C, & Jacob, J. (2008). *Western civilization: ideas, politics, and society*. Boston, MA: Cengage Learning.
- Petrarch. (n.d.). *Wikipedia*. Retrieved March 12, 2019, from <http://en.wikipedia.org/w/index.php?title=Petrarch&oldid=886669206>
- Philosophical Hermeneutics. (n.d.). *Wikipedia*. Retrieved from https://en.wikipedia.org/wiki/Hermeneutics#Philosophical_hermeneutics
- Morris, Roderick Conway. (MAY 29, 2004). Petrarch. The First Humanist. *New York Times*. Retrieved March 11, 2019, from <https://www.nytimes.com/2004/05/29/style/petrarch-the-first-humanist.html>
- Proclus. (1992). *A commentary on the first book of Euclid's Elements*, xii, (G. R. Morrow, Trans.). Princeton, NJ.: Princeton University Press.
- Quick, Robert Hebert. (1897). *Essays on educational reformers*. New York: Appleton and Company.
- Rait, Robert S. (1912). *Life in the medieval university*. Cambridge, MA.: Cambridge University Press.
- Ratio Studiorum. (2003). In *New Catholic encyclopedia*. Retrieved from <http://www.encyclopedia.com/religion/encyclopedias-almanacs-transcripts-and-maps/ratio-studiorum>
- Reed, James E. & Prevost, Ronnie. (1993). *A history of Christian education*. Nashville, TN: Broadman & Holman.
- Renaissance Man. (2017). In *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/topic/Renaissance-man>
- Riché, Pierre (1978). *Education and culture in the barbarian West: From the sixth through the eighth century*. Columbia, SC: University of South Carolina Press.

- Ridder-Symoens, Hilde. de (Ed). (1996). *A history of the university in Europe*. Vol. 2. *Universities in early modern Europe (1500-1800)*. Cambridge: Cambridge University Press.
- Ross, David. (1949). *Aristotle* (5th ed.). London: Methuen.
- Rüegg, Walter. (1992a). Themes. In H. de Ridder-Symoens (Ed.), *A history of the university in Europe*, Vol.1. *Universities in the Middle Ages* (pp. 3-34). Cambridge: Cambridge University Press.
- _____. (1992b). Epilogue: The rise of humanism. In H. de Ridder-Symoens (Ed.), *A history of the university in Europe*, Vol.1. *Universities in the Middle Ages* (pp. 442-467). Cambridge: Cambridge University Press.
- Sandys, John. E. (1903). *A history of classical scholarship*. London: Cambridge University Press.
- Scaglione, Aldo. (1986). *The liberal arts and the Jesuit college system*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Scholasticism. (n.d.). In *Theopedia*. Retrieved March 20, 2017, from <https://www.theopedia.com/scholasticism>
- Scholasticism. (n.d.). In *Wikipedia*. Retrieved March 27, 2017, from <https://en.wikipedia.org/wiki/Scholasticism>
- Schwickerath, Robert. (1903). *Jesuit education; its history and principles viewed in the light of modern educational problems*. St. Louis, MO.: Herder.
<https://archive.org/stream/jesuiteducationi00schwrich#page/118/mode/2up>
- See also the contents of Chapter XVI, The Method of Teaching in Practice. Retrieved from <http://www.slu.edu/colleges/AS/languages/classical/latin/tchmat/pedagogy/schw/schw1.html#top>
- _____. (1911). Ratio Studiorum. In *Catholic encyclopedia*. New York: Robert Appleton Company. Retrieved from New Advent: <http://www.newadvent.org/cathen/12654a.htm>
- Seth, Andrews. (1902). Scholasticism: Porphyry's Isagoge. In *Encyclopedia Britannica*. Retrieved from <http://www.1902encyclopedia.com/S/SCH/scholasticism.html>
- Shuttleworth, Marilyn (October 2011). Psychology in the Middle Ages. Part III - St Augustine (354-430CE), the first western psychologist. Retrieved from <https://explorable.com/middle-age-psychology-st-augustine>
- Siefert, Chris. (1999). Augustine's view of signification in *On Christian Doctrine*. Retrieved from http://www.memoryhole.net/~chris/research/rel331_augustine.html
- SparkNotes Editors. SparkNote on Aristotle. (2005a). Retrieved from <http://www.sparknotes.com/biography/aristotle/section5/>

- SparkNotes Editors. (2005b). SparkNote on Thomas Aquinas (c. 1225–1274). Retrieved May 18, 2017, from <http://www.sparknotes.com/philosophy/aquinas/themes/>
- St. Augustine's Confessions. (n.d.). In *CliffsNotes*. Retrieved from <https://www.cliffsnotes.com/literature/s/st-augustines-confessions/book-summary>
- Studium Generale. (n.d.). In *Wikipedia*. Retrieved July 4, 2018, from https://en.wikipedia.org/wiki/Studium_generale
- Sweeney, Eileen. (2015). Literary forms of medieval philosophy. In *Stanford encyclopedia of philosophy*. Stanford, CA: Stanford University. Retrieved from <https://plato.stanford.edu/archives/sum2015/entries/medieval-literary/>.
- Tarnas, Richard. (1991). *The passion of the western mind: Understanding the ideas that have shaped our world view*. New York; Ballantine Books.
- Theory of Forms.(n.d.). In *Wikipedia*. Retrieved January 10, 2019 from https://en.wikipedia.org/wiki/Theory_of_forms#cite_note-35
- Thomas, Kenneth. (1999). *Commentary on Aristotle's Physics*. Notre Dame, IN: Dumb Ox Books. Retrieved from https://books.google.com/books?id=6CD0IRPg4roC&pg=PR3&source=gbs_selected_pages&cad=2#v=onepage&q&f=false
- Tierney, Richard H. (1914). *Teacher and teaching*. New York: Longmans, Green, and Co..
- Tracy, James D. (January 2019). Desiderius Erasmus. *Encyclopedia Britannica*. Encyclopedia Britannica, inc. Retrieved March 3m 2019, from <https://www.britannica.com/biography/Desiderius-Erasmus>
- Turner, William. (1912). Scholasticism. In *Catholic encyclopedia*. New York: Robert Appleton Company. Retrieved from <http://www.newadvent.org/cathen/13548a.htm>
- UNESCO. Effective and appropriate pedagogy. (29 March 2018). *IIEP Learning Portal*. Retrieved from <https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/teachers-and-pedagogy/effective-and-appropriate-pedagogy>
- Universities. (2015, April 14). *1911 Encyclopædia Britannica/Universities* Vol. 27. In *Wikisource* . Retrieved 17:43, April 18, 2019, from https://en.wikisource.org/w/index.php?title=1911_Encyclop%C3%A6dia_Britannica/Universities&oldid=5356060
- Van Inwagen, Peter and Sullivan, Meghan. (2018). Metaphysics. In the *Stanford Encyclopedia of Philosophy*. Retrieved from <https://plato.stanford.edu/archives/spr2018/entries/metaphysics/>.
- Verger, Jacques. (1992). Patterns. In H. de Ridder-Symoens (Ed.), *A history of the university in Europe, Vol.1, Universities in the Middle Ages* (pp. 35-76). Cambridge: Cambridge University Press.

- Weisheipl, James A. (2012). Scholasticism. *BELIEVE Religious Information Source web-site*. Retrieved from <http://mb-soft.com/believe/txn/scholast.htm>
- Williams, Rowan, (July 1989). Language, reality and desire in Augustine's *De Doctrina. Literature and Theology*, 3(2): 138–150. Retrieved from <https://academic.oup.com/litthe/article-abstract/3/2/138/1101850>
- Willmann, Otto. (1907). The seven liberal arts. In *Catholic encyclopedia*. New York: Robert Appleton Company. Retrieved from New Advent: <http://www.newadvent.org/cathen/01760a.htm>
- Witt, Ronald. (2012). *The two Latin cultures and the foundation of Renaissance humanism in medieval Italy*. Cambridge: Cambridge University Press.
- Woodbridge, Frederick J. E. (1965). *Aristotle's vision of nature*. New York: Columbia University Press.
- Wulf, Maurice de. (1952). *History of mediæval philosophy*, Vol. 1. *From the beginnings to the end of the twelfth century* (6th ed.). (E. C. Messenger, Trans.). London/New York: Thomas Nelson and Sons. Retrieved from https://archive.org/stream/historyofmediv01wulf/historyofmediv01wulf_djvu.txt

