Innovations in Latin Teaching: Implementing the "Flipped Latin Classroom" at the University of Kansas

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Abstract

The University of Kansas is one of many post-secondary institutions across the country that has experienced a significant decline in the number of students enrolled in Latin and Greek courses. In order to address this decline in enrollment, beginning in Spring 2016, the University of Kansas Classics Department sought to develop a course that promotes flexibility, utilizing online lectures and assignments to decrease the number of required class periods from five to three per week. This course seeks to aid students who are encountering scheduling issues at the University, conflicts with their work and school lives, and those seeking to graduate in less time by fulfilling the needs of their language requirement more easily. The University of Kansas implemented the "Flipped Latin Classroom," a course developed by Mark Damen, a Professor of History at Utah State, to achieve these goals. This thesis explores the first full academic year of the "Flipped Latin Classroom" at Kansas, the Fall 2016 and Spring 2017 semesters, through data analysis and collection as well as a comparison with the traditional course taught during the same time period. Surveys of instructors and students, an analysis of test scores and trends, a diagnostic test, and more detailed data were assessed and examined in this thesis. The positive and successful results of the "Flipped Latin Classroom" gathered over the past year have led to the continuation and further assessment of the course into the Fall 2017 semester. The adaptation of the "Flipped Latin Classroom" course structure and its assignments at the University of Kansas shows that Latin courses at other universities could benefit from rethinking their course structures and blending online methods with those of traditional courses.

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Innovations in Latin Teaching: Implementing the "Flipped Latin Classroom" at the University of Kansas

Since the middle of the 20th century, scholars and educators alike have been perplexed and challenged by the decline of interest in and availability of subjects such as Latin and Greek at the highest level of education. Often, it is the traditional elements of education, such as Latin, History, and English, which struggle to attract students on college campuses where the presence and influence of STEM subjects is greater and still growing. There is also a trend towards professional schools; students are more often seeking degrees in fields such as law, business, and medicine. Conversely, enrollment at the secondary level seems to have remained constant, if not showing a slight increase in both course availability and student participation. The National Latin Exam states that 142,271 students, the majority at the secondary level, took their diagnostic exam across all fifty states and twenty-one countries in 2016, an increase of 20,000 students over the last ten years. 1 By contrast, Latin and Greek courses and enrollment at the college level have seen a significant downward trend over the same period. In a report by the Modern Language Association (MLA) published in February 2015, the overall number of students taking Latin courses at the college level had dropped from 32,444 in 2009 to 27,192 in 2013, after increasing in each year since 1995.² The University of Kansas is one of many universities across the country that has experienced a significant decline in the number of students enrolled in Latin and Greek courses. The decline may be the result of a new type of college student, who out of necessity has another job outside of the university and who may deal with more course conflicts caused by courses outside of their major field. In order to address this decline in enrollment,

¹ http://www.nle.org (2016 Survey). Accessed Feb. 14, 2017.

² Goldberg et al. (2015). This report was collected from nearly 3,000 postsecondary institutions, and shows that Latin is not the only language struggling to attract college-age students; Spanish, French, and other modern languages also saw a decrease in overall enrollment. While some languages are suffering more than others the overall drop in enrollment for language courses is intriguing.

beginning in Spring 2016, the University of Kansas Classics Department sought to develop a course that promotes flexibility, utilizing online lectures and assignments to decrease the number of required class periods from five to three per week.³ This course seeks to aid students who are encountering the types of issues mentioned above by providing support and instruction outside the classroom supplemented with in-class assignments. I will analyze whether the implementation of this course has been a success in three ways: first, whether there was an increase of total enrollments in Beginning Latin courses; second, whether there was a level of student learning and comprehension comparable to the five-day a week Latin course; third, whether there was an increase or at least an upholding of retention rates.

The Classics Department at The University of Kansas implemented a version of the "Flipped Classroom" created by Dr. Mark Damen, a Professor of History at Utah State University. Dr. Damen flipped his Latin course in the Fall 2014 with two main goals: (1) to make Latin accessible and enjoyable for his students; (2) to allow Latin to reach as many people as possible. The Flipped Learning Network, an organization devoted to helping professors "flip" their classroom, believes that a successful "flipped classroom" can be judged according to four criteria: flexible environment, learning culture, intentional content, a professional educator: ⁵

(1) Flexible Environment: Professors rearrange the classroom to accommodate different types of learning and to teach new subjects. For example, students may take notes individually when lecture is provided at the beginning of class and may transition into group work for practice on sentences. For the "Flipped Latin classroom" the students have continual access to the introductory and instructive materials, and also the course assignments. The students have the opportunity to choose the manner and time of their

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³ This strategy was implemented in a first-semester Latin course for the first time under the guidance of instructor Chelsea Bowden in Spring 2016. This course was unassociated with the "Flipped Latin Classroom," but the significant increase in enrollment at the beginning of the semester encouraged the Classics department to seek alternative methods for instruction.

⁴ Information gathered from a telephone interview with Mark Damen conducted on Feb. 17, 2017. See further Alicia Leitch's thesis at Utah State University entitled "Flipping the Latin Classroom"(2015) that covers both the invention and institution of the "flipped" Latin class at USU.

⁵ Flipped Learning Network "What is Flipped Learning? Defining FLIP." http://www.flippedlearning.org (accessed Feb 16, 2017)

introduction to new material. This course seeks to meet this requirement through the use of video/audio lectures that are provided online through a website created by Dr. Damen. A Presentation Exercise, written transcript, and teacher's guide, which help the student gather the most important information from each lecture, accompanies each of these lectures. The creation of these videos, in theory, allows students who are absent from class not to fall behind, and to have as many opportunities as they desire to review the topics of each lecture. The reorganization of the classroom into group sections, as will be discussed below, allows for a variety of learning experiences that are distinct from the individual opportunities provided by the online assignments.

- (2) Learning Culture: Student-centered learning and engagement rather than teacher instruction and direction drive both the discussion and exercises that are created for the daily class period. The institution of a student-centered course allows the teacher, or teachers, to more easily discover the specific learning needs of each individual student and address them. The best way that this requirement is met in the "Flipped Latin Classroom" is through the inclusion of a variety of types of assignments. The students spend nearly seventy-five percent of the class period working in groups, which allows the students the opportunity to learn from each other and to even teach others under the supervision of instructors. This shift in the focus of in-class learning allows the student to form individual connections with the topics. The "blended" aspect of the course provides students with multiple learning strategies. The student does not depend on the instructor to introduce the topics in a fashion that is interesting and effective for their individual learning style, instead they may choose from the various interesting and effective methods available to them.
- (3) Intentional Content: Intentional content is material that is specifically selected to be completed under the guidance of the instructor, rather than at home, due to its difficulty or significance. Thus, instructors must divide the course into what topics and subjects should be taught in class and what students should attempt to learn on their own. This course divides these two types of subjects using an online component to present the lectures, instruction, and some course assignments. The "Flipped Latin Classroom" implements the online section of the course to invite the creation of both a flexible environment as well as a student-centered culture in the classroom. The course uses intentional content to provide introductory lectures to students outside the classroom. Thus, the in-class time is spent on the more difficult material and this allows students to complete assignments that will aid in their understanding of the assignments completed outside of the classroom.
- (4) Professional Educator: A professional educator in this course must be engaged with the students when they are in the classroom by answering questions, providing direction. and assessing the progress of each student. This type of course places more pressure on the teacher as they are forced to answer a greater variety of questions. The instructor must have a more developed understanding of the topic, and of the language in general. The teacher may also be forced to grade assignments quickly and in the moment rather than

⁶ http://www.usu.edu/markdamen/Latin1000/.

⁷ Deagon (2006): 34 addresses the need for variety in student-centered Latin classrooms.

after the class period altogether. A professional educator is also necessary because the success of the course often depends upon the instructor's ability to discover the individual learning needs of each student. The instructor thus takes a less prominent but more involved role in the classroom; a shift that could be difficult for instructors who are experienced in the five-day-a-week method of Latin teaching at the University of Kansas.

The goals of the "flipped classroom" are to create a dynamic learning environment by providing a variety of both individual and group learning opportunities. Each student will have the opportunity to engage with other students by working in small groups, as well as to interact on a more individualized level with the professor and other experts in the classroom. In this method, the instructor can more easily perceive the optimal learning techniques for each student and work with them to create the most effective learning environment.

The "Flipped Latin Classroom" utilizes many innovative pedagogical techniques: one example is "blended or hybrid learning." "Blended learning" uses online digital media to present information to the students both inside and outside the classroom that is supplemented by face-to-face instruction and discussion. The "Flipped Latin Classroom" uses "blended learning" to present students outside the classroom with introductory material and other instructional content normally presented in class, and uses the greater amount of in-class time to complete exercises and practice problems. The Classics Department at the University of Kansas experimented with "blended learning" with the first-semester Greek course in the Fall 2015 semester when Dr. Pamela Gordon introduced this aspect to the course. The Fall 2014 first-semester Greek course involved only four students; as recently as 2000 the first-semester course had twenty-five to thirty students registered. This low enrollment number sparked the need for a course redesign. The introduction of the "blended" aspect of this course resulted in a significant increase in student interest, enrollment, and performance. The "blended" aspect of the course was added in Fall 2015, shrinking the number of required in-class days from five to three days a week. Fifteen

semester. Another important set of data to consider is that the number of students receiving above a C in the course significantly increased in the "blended" classroom. In Fall 2012 and 2013 nearly fifty percent of students received a C or above in each semester of the original five-day-a-week course. This means that an average of seven students occupied a category known as DFW's, a summation of students who either received a D or an F, or withdrew from the course. By contrast, in the 2015 and 2016 Fall semesters an average of thirteen students received better than a C in the course, and only three students received a DFW, from classes of similar size. The percentage of students receiving a grade above a C in 2012 and 2013 was only fifty percent, while over eighty percent of students received above a C in the 2015 and 2016 semesters. The immediate reestablishment of enrollment numbers seen in 2012 and the significant improvement in overall student performance led the department to seek a program that could be implemented in a Latin course that was experiencing similar (although not as stark) decreases in enrollment.

The blended Introductory Greek courses at the University of Kansas use "blended learning" without implementing many of the other strategies of the "Flipped Latin Classroom."

The "blended" Greek course does not use group work in class, nor are there multiple experts in the classroom who serve as instructors for each class period. The online assignments for the Greek course do not include audio/visual lectures or exams; both are still completed in-class, but similar to the "Flipped Latin Classroom," the assignments include a variety of question types.

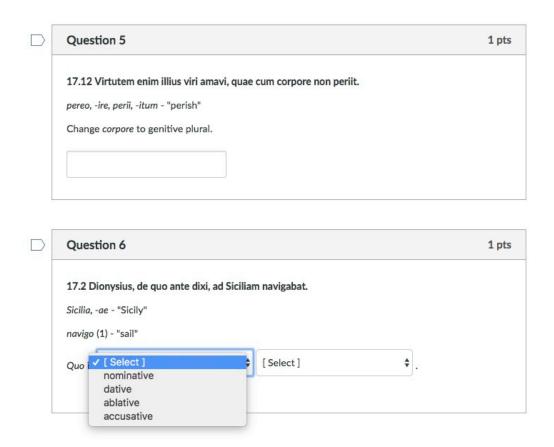
The schedule for the Greek course remains similar to the five-day a week in-class Greek course; although the course meets in-class only three-days-a-week, there are assignments due on days

⁸ Enrollment information gathered from a report provided by the University of Kansas on March 28, 2017

⁹ This category will be explained later through my interview with Dr. Andrea Greenhoot completed on Feb. 24, 2017.

The course does include an in-class GTA who aids with the grading, providing aid to struggling students; however, their role in the course differs significantly from the experts in the "Flipped Latin Classroom."

when class is not in session in order to compensate for the removal of two class days. The "Flipped Latin Classroom" presents the students with daily assignments where some questions feature a drop-down menu, in which solutions are provided, while others require that students formulate their own responses and fill in the blank with the proper form.¹¹



This method of fill-in-the-blank questions is unreasonable to implement in the "blended" Greek course because of the Greek alphabet. Learning the proper keystrokes for an Ancient Greek keyboard while attempting to learn the language would prove difficult for introductory students, in addition, each of the assignments would have to be hand graded due to the use of different keyboards and to check the responses for proper accentuation. Although the success of the beginning Greek course encouraged the adoption of the "Flipped Latin Classroom," due to the

¹¹ One difficulty that the Greek course encountered by adopting the type of question that the "Flipped Latin Classroom" offers was the need to use a separate alphabet and program the online system to recognize answers in a different script.

significant differences in course design and the format of assignments, the results of the students' learning and achievement in the "blended" Greek course and the "Flipped Latin Classroom" cannot be compared.

In the beginning, the goals of instituting the "Flipped Latin Classroom" at the University of Kansas were (1) to increase enrollment and (2) to produce students who understand Latin with the same or better results as in the previous method.

- (1) In order to encourage more students to enroll in the class the Classics Department at the University of Kansas offered a complete course with a more flexible schedule. The time and flexibility of the "Flipped Latin Classroom" allowed the required in-class days of the course to be reduced to three days a week. Strict due dates for online assignments were not enforced, although students were reminded that keeping up with the assignments in the course was essential to success, and that the course was five credit hours and required an appropriate amount of study. One of the greatest benefits of a course modeled in this manner is that the students are given time outside of classes to study in what they believe is the most efficient means for them as individuals and to form their own thoughts and ideas about the subject. Dr. Damen believes that the proper implementation of time and freedom is essential to the creation and maintenance of a successful course. ¹³
- (2) The main goal of each beginning Latin class, traditional or "flipped", is to produce students who are proficient in reading and understanding Latin. What is specifically relevant in the creation of the "Flipped Latin Classroom" is whether the students produced are as proficient in Latin as students who learn by the traditional five-day a week method. While the method of introduction, study, and learning may be different in a course like this, the end result must at least be comparable. One example of this could be that the "time" and "freedom" provided by this course allows the students to receive the "reward" of Latin reading earlier in their experience. The guided learning offered by the "Flipped Latin Classroom" with multiple experts in the classroom allows students to attempt more difficult Latin passages under the guidance of more experienced Latinists and creates a comfortable environment where students are free to drive and extend themselves as far as they are capable, and hopefully succeed to a greater extent.

While those are the goals of the Classics Department in the utilization of the "Flipped Latin Classroom," the university must also have guidelines for the successful creation of a non-

¹² According to guidelines presented by the University of Kansas it is expected that for each hour of credit a student will spend two hours a week studying. Thus, a five-hour-a-week course demands ten hours of study regardless of how many hours are spent in class. https://achievement.ku.edu/time-management-now.

¹³ According to a telephone interview with Mark Damen conducted on February 17, 2017.

Excellence at the University of Kansas, believes that it is essential that the students of the "flipped classroom" meet the same goals as the students of the traditional five-day-a-week method. ¹⁴ Thus she agrees with the second goal put forward by the Classics Department, in the sense that a course which increases enrollment but produces a student who is unprepared for an advanced level of Latin would defeat the purpose of creating a new course at the University. Dr. Greenhoot also believes that the "Flipped Latin Classroom" is following a path similar to other successful "blended" and online courses at the University of Kansas. ¹⁵ According to Dr. Greenhoot, the goals and design of the course seem to be headed in the proper direction by attempting to enhance student learning using a variety of strategies, making the more difficult assignments the focus of the in-class time and improving the classroom environment for each individual student. The University has many criteria for the success of these online courses, but one measure that is particularly pertinent regardless of the subject is a decrease in DFWs. ¹⁶

The Latin program has been experiencing a steady decline in the number of students who continue from first-semester to second-semester for nearly a decade, if not longer. Fifty students enrolled in the first-semester of Latin in Fall 2011, and seventeen students in Spring 2012. Enrollments in the period from Fall 2012 to Spring 2014 experienced a steady decline until the numbers fell to lows of twenty-six in Fall 2014, and twelve in Spring of 2015. In Fall 2016, the first full semester of the "Flipped Latin Classroom" produced intriguing results. Forty-three students enrolled in the first semester of Latin in the Fall of 2016, after a record low just two years earlier. If more students enrolled in these Latin courses overall, the next step is retaining

¹⁴ All information from Dr. Greenhoot is taken from an interview on February 24, 2017.

¹⁵ While these courses are not Classics courses it is helpful to consider how these courses have been deemed a success in comparison with the traditional methods. This means analyzing the "Flipped Latin Classroom" through DFWs, enrollment numbers, and retention rates, areas that the Center for Teaching Excellence uses to judge success. ¹⁶ For the DFW designation see above pp. 4-5.

them and having them continue to more advanced Latin courses. The retention rates for students taking the first-semester Latin course, advancing into second-semester, in the 2011-2012 school year was around seventy-five percent, with thirty-seven out of fifty students taking the second semester of Latin. With thirty-five students enrolled in first-semester Latin courses in Fall 2016, and only seventeen students in second-semester courses in Spring 2017 the retention rate fell to only slightly over fifty percent. A further worrying sign was the particular retention rate in the "Flipped Latin Classroom", where only thirty-three percent or, nine of twenty-seven students, continued on to the second semester of Latin; while the traditional course maintained a seventyfive percent retention rate. The three students enrolled in the honors sections in Fall 2016 increased to four students in the Spring 2017 semester, leaving only six students who advanced to the second semester of Latin from non-honors sections of the "Flipped Latin Classroom". This may be the result of scheduling the two hybrid second-semester courses at 9am and 10am and the removal of an afternoon time slot that contained the largest number of potential students.¹⁷ The promising increase in student enrollment in the first semester was one factor that led to the continuation of the course into the Spring 2017 semester and beyond. While the course seems to attract college students for a variety of reasons, what must be measured next is how these students are performing in comparison with students who learn via the traditional method. The Traditional Method:

Stanley Bonner in his *Education in Ancient Rome* documents the ancient methods of learning Latin. Bonner demonstrates that learning to read and write in ancient times followed the logical progression from "letters to syllables, syllables to words, and words to sentences." The

¹⁷ After interviewing students who were unable to continue Latin, the most recorded reason was that no afternoon class was offered. Instead a traditional Latin class was offered in the 1:00-1:50 time slot that a hybrid class had occupied the previous semester.

¹⁸ Bonner (1977): 165.

Roman method of teaching grammar involved the formal instruction in scansion, parts of speech, and finally declensions and conjugations. Proper forms were emphasized through the use of solecisms, in other words the incorrect use of the language, and what should be avoided in everyday speech. The study of these subjects eventually advanced to reading poems and passages in larger textbooks that were implemented widely throughout the "primary schools." While the teaching of Latin has progressed and developed in significant ways from the way it was taught in ancient times, some aspects of learning remain central to today's methods. Both methods depend on understanding vocabulary and grammar before progressing to transition sentences and passages, and the use of textbooks as a guide for individual learning.

The traditional method, for the purposes of this paper, refers to the teaching method that depends upon the implementation of one of two styles of textbooks and is implemented in a majority of classrooms across the country. The first style of textbook used in the traditional method is the reading-based textbooks such as *Ecce Romani!* and the Oxford and Cambridge Latin courses. The stated goals of the Cambridge Latin course are to teach comprehension of the Latin language for reading purposes and to develop from the outset an understanding of the content, style and values of Roman civilization, with special reference to the 1st century A.D.²¹ Students learn through reading passages. The first section begins using simple language and sentences and, as the student advances, the sentences become more difficult and include more advanced vocabulary and grammar. These passages are supplemented by illustrations and discussions that reinforce the student's understanding of the Latin language and Roman culture, foregoing an extensive analysis of grammar and sentence structure. The second style of textbook is the grammar-based textbook, the most common of which is *Wheelock's Latin*. This style of

¹⁹ Ibid: 189.

²⁰ Ibid: 175-180.

www.na5.cambridgescp.com Accessed May 25, 2017.

students using a progressive series of chapters with practice sentences and concepts that build upon previous chapters. The grammar textbooks do not follow a specific story and do not focus on the introduction of culture. This method instead chooses to build the students' knowledge of the Latin language through chapters based on specific grammatical constructions. The reading and culture elements can be introduced into courses taught using the grammar textbooks through the introduction of supplementary material such as Groton and May's 38 Latin Stories. The grammatical style of textbook is used in both the methods taught at the University of Kansas.

The traditional method as it has been employed at the University of Kansas follows a five-days-a-week schedule with a single instructor without the addition of "blended" learning techniques or any of the significant changes introduced in the "Flipped Latin Classroom." This method uses the seventh edition of Wheelock's textbook and places an emphasis on the memorization of vocabulary and a close study of sentence structure, grammar, and forms. The seventh edition contains a significantly greater amount of vocabulary, extra discussions of etymology, and expanded sentences, which were revised and lengthened in some cases. Richard Lafleur in the Editor's Note for the 5th edition includes his reasons for his inclusion of these changes and others such as a reorganization of chapter material and the inclusion of all four principal parts from the beginning of the textbook. Lafleur asserts his belief that Wheelock himself had considered changes both to improve the text and update it for a new type of student. The traditional method centers on the assignments provided in the textbook. Each chapter contains a short introduction, a list of example sentences and vocabulary as well as practice sentences, some fabricated and others adapted from passages by Latin authors, a short passage or

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 $^{^{22}}$ The selection of the 7^{th} edition for the traditional course is not due to improvement of material but instead because of availability and ease of purchase for the student.

²³ Wheelock's Latin (1993): ix-xi.

poem, and a few sentences of composing Latin from English sentences. Each chapter receives three or four in-class sessions in this traditional method.

The traditional course values memorization; it is essential for the student to recall both the meaning of a word as well as its significance in context to make progress in this course. Vocabulary is memorized through repeated at-home practice and weekly quizzes; the most common words appear in class through assignments designed to help the student with memorization of key words and phrases. Learning about grammatical usage comes primarily from memorizing charts and the various forms of each word. Learning in the traditional method begins in the classroom with a lecture by the professor on the subject presented in the book chapter, followed by example sentences and questions. Students for the remaining class period or as homework complete the Latin-English sentences or bring the completed assignment and questions to class on the following day. Thus, students are taught to work through problems on their own. However, when confronted with a question the book does not answer clearly or directly, student learning may stall and become fragmented until the following day. The larger issue that accompanies this problem is that students must still complete the assignment before class without their questions answered and confusion addressed, making it more likely that they will repeat the same mistake, thus reinforcing improper translation. The remaining class periods spent on the chapter typically involve more translation, some English-Latin sentences, and a quiz of some sort on that chapter or a series of chapters. Latin passages are often introduced into the class in order that students may experience Latin in a similar fashion to the more advanced levels ²⁴

²⁴ Some Latin passages for the course are provided by Groton and May's *38 Latin Stories* whose stories are designed to accompany each chapter of Wheelock's textbook except for the first couple chapters.

The traditional method focuses on instruction during the class period; for the majority of the class period the students' attention is focused toward the teacher at the front of the classroom. Answers are provided to the practice sentences and, while the teacher may occasionally focus on the progress and learning of an individual student, what often occurs is an undesired but necessary concentration on the group's understanding and success. Each student is able to participate only a limited number of times each class due to the ask-answer format of instruction, and some students are limited in participation further by other factors such as nerves and stress. To succeed, this method relies on a student's own ability and motivation to memorize, with many of the practical aspects of the course are being completed outside of the classroom away from the guidance of experienced instructors.

The Flipped Latin Method:

The "Flipped Latin Classroom" inverts many of the aspects of the traditional course. While the curriculum at the University of Kansas also implements *Wheelock's Latin* it employs the older 3rd edition. The 4th edition of *Wheelock's Latin* entitled *Wheelock's Latin Grammar* was notorious and generally despised for the carelessness of its execution and for losing the concise and careful teaching that Wheelock's Latin was renowned for. ²⁵ These faults were largely a result of mechanical issues, and the publisher acknowledged them at a later date. As in the traditional method, each chapter takes three or four days on average to complete, with no more than two spent in class. This way the learning begins at home, using technology and a "blended" approach. For each lesson there is an introduction accompanied by instructions provided online through a video presentation, which includes an overview of the new material as well as example

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²⁵ Briggs (1992): "The Wheelock Crisis" Bryn Mawr Classical Review. http://bmcr.brynmawr.edu/1992/03.01.20.html.

sentences and other supplemental instruction such as a detailed discussion of vocabulary. The class period then involves practice and translation at sight, meaning the students have not prepared the exercises and sentences beforehand as in the traditional method. Focus centers on the sentences based on Latin authors. Each day in class, there is an attempt to maintain an advantageous student-teacher ratio of 4:1 or 5:1; this means that multiple instructors are asked to attend each class period. The experts walk around the classroom answering questions and providing help to the whole group if a particular subject proves difficult. This turns the focus of the classroom away from a single lecturer at the front of the class and towards the individual learning of each student. Classwork consists of breaking into small groups of students, who collaborate in completing the assignments, with all encouraged to teach and help each other under the supervision of the instructors who monitor quality and accuracy. The second day of class deals primarily with English-Latin translation, which is notoriously more difficult than its counterpart, and the reading of short passages in preparation for more advanced levels of Latin. These assignments constitute the best assessment of a student's understanding of the concepts introduced in each chapter.²⁶ In the traditional method the English-Latin sentences are often the first assignment removed from the schedule, and the first assignment students stop attempting, likely due to their difficult and time-consuming nature.²⁷

Students complete online assignments to compensate for the two days of class that are removed in the "Flipped Latin Classroom." These assignments focus on vocabulary, Latin and English grammar, as well as the translation and transformation of Latin words. These are often timed and always open-book. The shift in how the online assignments are offered changes the

²⁶ For more consideration of this point refer to Appendix sections A.1 and C.2, where students claim that this assignment is both difficult and a comprehensive assessment.

27 Even teachers who may not desire to leave these sentences out of the schedule often do not see them as essential

for students' success in intermediate Latin, which rarely involves prose composition.

goals of the course from the traditional focus on the memorization of paradigms, to their use in transforming individual words and translating larger passages. The implementation of webbased assignments encourages the use of online items such as dictionaries and also eases the students into some facility with online sources like Perseus that advanced students often employ when translating Latin passages. The online assignments also provide practice for the exams, which take place online and are also open-book; the exams do not focus on memorization, but on identification and translation. The goal is not to have students concentrate on understanding and memorizing the individual form and morphology of each word, but focus instead on comprehending and understanding whole Latin passages. This method also forces the students to teach themselves and to make their own connections with the material, but provides them with in-class opportunities for practice and to ask questions while they are completing assignments.

The difficulties of creating a course that will be successful both in "blended learning" as well as in the creation of a "Flipped Latin Classroom" cannot be overstated. Mark Damen's course provided the opportunity for the University of Kansas to begin restructuring with a strong foundation already in place. This thesis will attempt to assess the effects and successes of this new system for teaching Latin and provides the opportunity for direct comparison of a class taught by the traditional method. Through this data-driven comparison of these two systems, I will analyze whether this system can be adapted for different college classrooms, and help restore students' proficiency and interest in studying classical languages. My goal is to assess this method of teaching Latin and evaluate its wider applicability at a national level to each stage of learning.

²⁸ Perseus Digital Library Project at http://www.perseus.tufts.edu. An online library aimed at providing digital copies of collections of ancient texts.

"Chapter One: The Installation"

The University of Kansas introduced the "Flipped Latin Classroom" in Fall 2016 for three first-semester Latin courses and one-second semester Latin course.²⁹ These were undertaken concurrently with a first-semester course that was taught using the traditional method. One of the first-semester Latin courses was an honors course with three honors students and one auditor. Of the remaining sections, the first at 11:00am-11:50am contained eleven students, and the second at 1:00pm-1:50pm contained thirteen students. At the beginning, each one of these sections implemented the "Flipped Latin Classroom," adhering as closely to Mark Damen's original method as possible. The two non-honors courses were assigned one lead instructor, a graduate teaching assistant (GTA) from the Classics Department at the University of Kansas, who attended the class Monday, Wednesday, and Friday; and two GTA assistants, who attended each class period in rotation. Professor Anthony Corbeill, a Latin professor experienced in teaching the traditional method, taught the honors section using the "Flipped Latin Classroom" without aid.

The online component of the course includes five unique assignments for each chapter of the third edition of Wheelock's Latin.³⁰ These assignments are designed to teach each of the required elements for learning Latin: grammar, vocabulary, and translation. The sum total of each of the chapter assignments is 120 points, thus by completing all of the assignments for a given chapter students have the opportunity to earn twenty points of extra credit, although the maximum score for any individual chapter is one hundred points.

The first component of the online section of each chapter is the presentation (a short video with a transcription) and presentation exercises. The online presentations created and

²⁹ All the data focuses on the first-semester sections of both the traditional method as well as the "Flipped Latin Classroom."

³⁰ For further information a sample syllabus is attached as Appendix D on pg. 106.

formatted by Mark Damen are available on the website

http://www.usu.edu/markdamen/Latin1000, which is publically available. Initially, Dr. Damen designed this course and website to make learning Latin available to anyone, but for students in the "Flipped Latin Classroom" these presentations are an essential method of introduction.

Lasting between fifteen and forty-five minutes, the online presentations follow the chapters in the 3rd edition of *Wheelock's Latin*. Students are assigned to watch the audio/video presentations before they come to class and may also choose to complete optional presentation exercises that accompany each presentation to ensure a basic level of understanding of the topics introduced in each chapter. Overall, the presentations attempt to replicate what most teachers do in a traditional class setting, that is, introduce the students to grammatical concepts by providing examples not found in the text and discuss the vocabulary that is introduced in a chapter.

Another component of the online section of the course is the DIRT quiz, or the "Do I Remember This" quiz, which focus on reviewing previously covered material. The specific subject matter of these quizzes varies widely from English grammar to practice with endings to hard-to-learn vocabulary and tend to coordinate in some way with the grammar in the chapter to which they are attached. DIRT quizzes carry a maximum of ten points, the lowest of any graded component. These assignments are designed as "extra credit;" a student can receive a perfect score for a chapter without completing the DIRT quiz. The questions included on these quizzes are some of the most difficult the student encounters on a weekly basis because they often involve grammatical concepts that are not included or emphasized in the English classroom along with new Latin grammatical concepts.

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³¹ This information was gathered from an interview conducted on February 17, 2017. See Leitch's thesis for more information concerning the installation of the course.

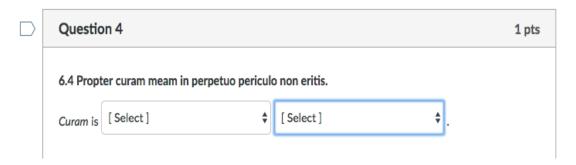
³² Leitch (2015): 34.

A third component of the online section for each chapter is the Vocabulary Quiz, which contains twenty-five questions based upon the vocabulary introduced in a chapter along with a review of words introduced previously. Each Vocabulary Quiz is worth twenty-five points toward the overall chapter grade. There is a five-minute time limit for each quiz, which forces the students to have a significant number of the vocabulary words memorized or readily available. The students are able to take the Vocabulary Quiz an unlimited number of times – only the highest score counts- either to improve their score or to review before exams. The limited time frame, along with the ability to attempt the quiz multiple times, ensures that some aspects of the memorization in the traditional method carry over into the "Flipped Latin Classroom." The in-class sentence practice that follows on the days after students have recently watched the presentations and other introductory exercises is yet one more attempt of helping students recognize the most important and most commonly occurring vocabulary.

A fourth component to the online section of the course is the Practicum, a chapter quiz in which students answer thirty-five questions based upon the Latin sentences that are provided in the corresponding *Wheelock's Latin* chapter. The Practicum is worth thirty-five points toward the overall chapter grade, the highest point total of any of the online assignments. As the most complete examination of a student's current ability, the Practicum offers students the opportunity to know where they stand with respect to the course material at the end of each chapter. As such, question types vary in order to help students identify weaknesses in their comprehension of vocabulary and grammar. The exercises found in Practica require students to transform words into other forms, translate phrases, create Latin, and explain syntax. In particular, practice with changing the grammatical function and placement of words in a sentence instructs the student about both the natural flexibility of Latin sentences and the importance of recognizing individual

words and constructions. The following examples illustrate two of the various types of questions posed in Practica.





The above image demonstrates the two most common types of questions appearing in Practica. The first question is an example of an exercise in which students are asked to take a word in a sentence they have translated in class and change it in some way, here by altering the person of the third-person verb *erat* to first-person, while at the same time retaining the original number, tense, mood, and voice. The second question exemplifies another question type in which students must identify the form and function of a noun, in this case *curam*, which is accusative because it is the object of the preposition *propter*. This style of questions forces students to review a concept that was introduced in an earlier chapter of *Wheelock's Latin* and reinforced by inclusion in a sentence found in the current chapter.

A fifth and final component of the online section of the "Flipped Latin Classroom" is a set of Grammar and Vocabulary Drills. These assignments are designed to reinforce the new material introduced in a chapter and help students struggling to grasp or memorize it. The drills are ungraded, untimed, and can be taken as often as the student desires. These drills present those struggling with a resource where they can help themselves outside of the classroom, by forging

their own connections with the material. Since these assignments are ungraded, it can be tempting for students to see these assignments as extra, unnecessary work.³³ These assignments are designed to support students outside of the classroom, but for those who need and use them they can deliver critical, timely support. It is to be expected that not all students will need to use these assignments on a regular basis - some will have no need of and never use them - but these drills are necessary components when a course attempts to provide instruction outside of the classroom and embrace a wide range of learning styles, preparation and ability level.

Some online assignments focus on a single aspect of the Latin language be it grammar, vocabulary, or translation, others address different skills and subject matter. The variety of question styles, formats, and overall options are designed to address a broad array of learning goals and styles. Whether a student learns best through memorization or repeated hands-on practice or active listening, there is an assignment or type of question that is designed to meet that need. The introduction of structure and instruction outside of the classroom through the incorporation of "blended learning," is critical for allowing the "Flipped Latin Classroom" to address the needs of a curriculum in which classes meet only three days a week. The decline from five to three days constitutes a significant shift in the way Latin is taught at the University of Kansas and signifies the greatest difference between the method practiced at Utah State and the one practiced at Kansas. Thus, the value of the online component of the "Flipped Latin Classroom" cannot be understated; the effectiveness of these assignments is essential to the success of the course both in lessening the burden of time spent in the classroom and also providing the students with the ability to learn and engage with the language at their own pace.

The only assignments graded in class are the English-Latin sentences that appear in each chapter of *Wheelock's Latin*. The completion of English-Latin sentences in class provides the

³³ For more information refer to sections A.2 and C.1 in the appendix as well as the notable comments.

instructors with a comprehensive assessment of a student's grasp of the Latin concepts as they are introduced in each chapter of *Wheelock's Latin*. Thus, the significant point value associated with this assignment is well deserved. With English-Latin translation playing so central a role in coursework, the "Flipped Latin Classroom" gives students the opportunity to complete this challenging assignment under the guidance of experienced Latinists. Students who attend class and complete the assignment before the end of the period can have it proofed and then correct their errors. This immediate guidance allows the teacher to address the specific needs of an individual student and offer on-the-spot correction and learning for the individual and the entire group as well.

One other type of in-class assignment implemented in the course is the worksheet, ungraded assignments attached as a supplement for particularly difficult chapters. In a three-day-a-week curriculum where class time is limited, these worksheets cannot receive much attention. Since a good deal of the material the worksheets cover recurs in other aspects of the course such as the practice sentences and the online Practicum their inclusion in daily class activities may not be as significant. Some of the subjects introduced in the chapters of *Wheelock's Latin* may require worksheets in order to be reinforced - in particular, relative and reflexive pronouns and the introduction to new yerb forms.

One other in-class exercise used at Kansas, although more often in Spring 2017 than Fall 2016, involved the collection of readings in Groton and May's 38 Latin Stories. This text provides selections of escalating difficulty tied to the textbook chapter by chapter and adapted from Latin authors. It utilizes almost exclusively the forms, vocabulary, grammar, and constructions that are introduced in the forty chapters of *Wheelock's Latin*. Any vocabulary or grammar that is not introduced there is provided on a facing page. In the "Flipped Latin

Classroom" students who finished their in-class work early were given these Latin Stories to translate. This allowed instructors to preview for some of the class what the advanced semesters of Latin involve. They also open the door to discussion of Latin culture as the stories often involve important characters from Roman legend and history such as Romulus and Remus, Cicero, Caesar, and Pompey. These Latin Stories provide a good opportunity for the introduction of Latin culture in the traditional method, but in this type of course it can be limited to the students, or groups, who complete the assignments early. I discovered that, when time permitted and all of the students have completed the English-Latin assignments, the introduction of a PowerPoint with additional images helped to present the unique cultural aspects associated with each passage.

In the Fall 2016 semester, students were presented with the opportunity to ask questions at the beginning of each class period about the online assignments and the presentations for the chapter provided by Mark Damen. It quickly became clear that the students were often interested in having a short (re)introduction of the new material at the beginning of class. Early on in the semester to address this need, all of the sections began offering five-ten minute short introductions in the first class period devoted to each chapter. These typically involved writing the various paradigms on the board as well as asking the students to present the information they learned from the online presentation. For example, when the third declension was introduced, reviewing the endings on the board at the beginning of class provided another opportunity for students to engage with that day's lesson. The incorporation charts and the reinforcement terminology such as parsing and synopses are a glimpse into how the material would have been introduced in the traditional method. These short introductory presentations also rewarded

³⁴ This issue does not occur in the honors first semester Latin course as the four students complete the assignment at the same time.

students for coming to class by giving them another introduction to new material. While they removed a few minutes from the time allotted for the students to complete practice sentences, the visual learning produced on the board transferred well-proven methods involved from the traditional method. In addition to having a second or third introduction, depending on if the student read the chapter of the book, which is not required, presented students with an opportunity to experience another approach to understanding the subject.³⁵ A further advantage to having the new material on the board is that it provides an easy reference point as the class goes over the new material in class. With the third-declension endings presented in front of them, for instance, students who are unsure about a form while translating the Practice and Review sentences can easily refer to the information on the board. In a presentation at Utah State University Barbi Honeycutt, an experienced presenter on the "flipped classroom," refers to this type of activity as a "focusing activity." The question-and-answer interaction that occurs between the instructors and the students at the beginning of class, which Ms. Honeycutt refers to as a "challenge" reinforces the material learned through the online exercises and prepares students for the important group work that occurs for the remainder of the class period.³⁶

The majority of time in class is spent in groups of three to four students. Small groups allow the instructors to moderate the pacing of individual students' progress and offer corrections and instruction to more than one student at a time. The teaching moments that occur in class are heard not only by the student who raised the question, but also by the entire group and any others who are nearby. Such interactions fostered by the use of group work and

³⁵ One reason for the implementation of this change in method stemmed from a hesitation to remove the teaching element from the classroom entirely along with some reluctance to adopt all the elements of the "Flipped Latin Classroom."

³⁶ A video of the presentation can be found at https://www.youtube.com/watch?v=5etUXJ9qvrM, and further information about Barbi Honeycutt and the work she is doing can be found at http://barbihoneycutt.com.

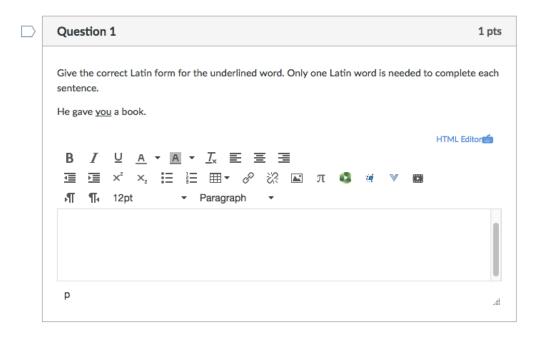
"eavesdropping" provides the opportunity for students to teach each other before posing a question to one of the experts available in the class. In accordance with the tenet that teaching is the best way to learn, this strategy allows the students to create more connections with the subject matter and to experience different methods of learning and understanding. The use of group work in the classroom also promotes collective learning and fosters bonds between the students in each group, especially as the more advanced students help those in need.

The first exam comes after the completion of chapters one through six of *Wheelock's Latin*. Questions focus on simple translation of unseen sentences, first- and second-declension nouns and adjectives, the first- and second-conjugation verbs, and about fifty vocabulary items. The exam was open-book, open-note and offered online over a twenty-four-hour period during which the students had a maximum of one hour to complete it. Following the formatting of the online assignments, it is designed to evaluate a student's recognition of vocabulary, understanding of grammatical concepts, and ability to translate. The students were better prepared for the exam by completing, or at least attempting, all the online assignments.

The average grade achieved by the students in the "Flipped Latin Classroom" was ninety percent, each taking an average of forty-five minutes to complete the exam.³⁷ The class taught in the traditional method demonstrated a comparable score, had an average score of eighty-nine percent with most students finishing within 45 minutes. In both the traditional method and the "Flipped Latin Classroom" students had not seen the material on the exam before and the material covered by the exam was identical, which afford an opportunity to compare and contrast these courses to track the success and development of the students learning through these different methods.

³⁷ These statistics were gathered using the student tracking systems provided by Canvas.

The resounding success of the first exam in the "Flipped Latin Classroom" encouraged both the professor and graduate students to continue what they had done in the early part of the Fall 2016 semester. However, the high average test score invited questions about grade inflation, that by providing students the opportunity to use online resources, including dictionaries, while taking the exam, could harm the overall learning, retention of memorized material and in general the achievement that was taking place in the classroom. As a result, it was decided by the lead instructors of each section that the second exam should be given in class in order to analyze the effect of the various resources available to the students while taking an online exam. The second exam covers chapters 7-11 of *Wheelock's Latin* and features questions similar to the first exam. In contrast to the first exam, students were asked to produce the proper Latin word based upon a sentence in English as in the following example.



This sample question taken from the second exam, which was given online in the Spring 2017, asks a student to give the proper Latin form of the English word "you" as it appears in the sentence. In this instance "you" is functioning as the indirect object and thus should be transformed to *tibi*, the dative form of the second person personal pronoun in Latin. Since it is unclear whether "you" is singular or plural *vobis* is also an acceptable answer.

Other questions asked students to make an adjective and demonstrative adjective agree in case, number and gender with the corresponding Latin noun. The sections based upon vocabulary, identifying and translating verbs, the Practicum, and the three sentences, in which the students were asked to translate and to provide more detailed information about the form and function of individual words, remained largely unchanged from the first exam.³⁸

On the day of the test students were allowed to bring to class a three-by-five index card with any information they thought would be relevant. No student failed to make of this opportunity. Since the exam was offered in class, this meant that the students were given only a period of fifty minutes, as opposed to sixty minutes online, to complete the exam. Most students finished well before the fifty-minute limit, and all students finished the exam within a sixtyminute window. The average score on the exam was an eighty-three percent, seven percent lower than the first exam.³⁹ This demonstrated that while the students were given an opportunity to use a variety of resources when they took the exam online, the majority of them were using what they learned in the classroom rather than depending upon outside sources for answers. Possibly of greater significance is that the average score on the same exam in the first semester course the following semester (Spring 2017) was eighty-five percent with the exam offered online. The class taught implementing the traditional method averaged eighty-five percent on their second exam in the Fall 2016, showing a similar trend from the first to the second exam. The trend exhibited by both the "Flipped Latin Classroom" and the traditional method may show that at this juncture the courses are functioning in a similar manner. While the exams for these courses are not the same it is helpful to analyze and compare the progress of each group of students as they are attempting to learn the same material, albeit through unique methods.

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³⁸ A copy of the entire exam is included in the appendix section of this thesis.

³⁹ The seven percentage point decrease in average score from the first to the second exam may be because of the significant increase in difficult material included on the second exam.

Some students seemed to prefer taking the exams in the traditional manner, on paper, rather than on the computer, although when given the option, no students were willing to schedule a time outside of class to take the exam. 40 The in-class exam also forced the students to condense the most essential information from the first half of the semester onto a small notecard. Students were thus forced to review the materials from the entire first half of the course in order to create the best notecard. The students may also have gained an improved sense of time management, since unlike during the first exam, the restricted classroom period limited the time for completing the exam. Thus, it may be beneficial to offer at least one exam during an in-class session, but further research must be conducted before such a decision is made. It is notable that first-semester Latin students in the Spring 2017 semester also seemed to have more difficulty completing the second exam online within the sixty-minute time limit, which suggests that the in-class exam provided a valuable learning opportunity for the students with respect to organization and time management. From the data gathered about the in-class exam in the Fall 2016 semester, it was decided that the remaining two exams would be administered online since it promotes flexibility in the execution of the course. The student can choose where and when to take an exam in a larger restricted time slot as in the first exam. In addition, the principal reason that the instructors decided to offer the remaining exams online was that it would give them one additional class period review and prepare students for the exam.

After the second exam midway through the Fall 2016 semester, I presented a survey to all the students taking the first and second semester of Latin in order to assess the students' perception of their own progress and how the course was proceeding. Since those in the traditional course had just finished their own second exam, it was an ideal opportunity to

 40 Student responses like this one can be seen in the Appendix specifically in the further evidence sections A.10 and C.8.

compare the state of the two classes. I presented all the classes with the same survey except that it had been adapted in order to remove questions about the online components for the students in the traditional method. 41 Ouestions centered on teaching methods and how helpful they perceived each of the assignments they had completed. I divided the assignments into two categories for the students of the "Flipped Latin Classroom" (1) those completed online and (2) those completed in class. The "Flipped Latin Classroom" students found the English-Latin sentences the most helpful assignment completed in class, while the traditional students found the Latin Stories most helpful assignment out of all the assignments offered. One reason that the students of the traditional method favored the Latin Stories is that they were able to complete these assignments more readily due to the two extra in-class sessions each week. In general, whichever assignments consumed the most time in class students perceived as the most helpful. For that reason, the Latin Stories were seen as less favorable in the "Flipped Latin Classroom," since the student were divided about their value. Some viewed the assignments as extra unnecessary work, and others saw the translation of complete passages as a reward and as a springboard for discussing interesting aspects of Roman culture. One student states that they "were simply longer versions of the sentences that are completed in class;" and another that the Latin Stories are the most applicable to the further study of Latin. The "Flipped Latin Classroom" students seem to view the worksheets in a similar fashion, some seeing them as significant and helpful while others did not.

The survey of the students in the "Flipped Latin Classroom" revealed an intriguing trend about the assignments they completed online. The Vocabulary Quizzes and the Practicum were their two favored online assignments. The students in the "Flipped Latin Classroom" seemed to

⁴¹ See appendix A for the sample survey given to both classes in the Fall 2016 semester and some selected responses provided by students.

prefer the assignments that attempted to teach aspects of Latin learning valued in the traditional method, in this case memorization of vocabulary and practice with grammatical concepts and forms. Their least favorite online assignment across the "Flipped Latin Classroom" was the DIRT quiz. This may either be due to the low point value in association with the overall chapter grade, or it could be due to the difficulty level of these exercises where perfect scores are difficult to achieve on this assignment and there are no retakes. 42 Overall, students do not agree about which assignments were least helpful to their learning. This could be a direct result of designing the online assignments with the goals of meeting the needs of individual students. Thus, some assignments are going to work better for some students and others will work better for others.

The most interesting data which emerged from this survey stemmed from these three questions (1) How much time do you spend studying Latin daily? (2) How much of the vocabulary do you have memorized? and (3) How many of the charts do you have memorized?

- (1) The first question yielded a surprising result. The graphs of the responses from the "Flipped Latin Classroom" show strikingly similar results with the responses from the students of the traditional method. The identical graphs show that a majority of students spend more than thirty minutes studying Latin each day, ant that an equal number of students spend between one-to-two hours studying or more than two hours studying Latin daily. This could be the best evidence for the success of the three-day-a-week "Flipped Latin Classroom." Clearly this course accurately simulates the demands and requirements of the five-day-a-week traditional method. While the results of this survey do not indicate for certain that students in both courses spend the same amount of time studying Latin, it is clearly a perception that both the traditional method and the "Flipped Latin Classroom" require a similar amount of study outside of the classroom. Even with forty percent less in-class management and oversight, students claim to put in the same level of effort.
- (2) The other surprising result comes from the second question asking the students how much of the vocabulary the students believed they have memorized (none, some, most, all.) The charts for both methods again seemed to be nearly identical. This result is the most surprising of all since students in the "Flipped Latin Classroom" format have access to dictionaries and other online translation aids while they are completing daily

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⁴² Many students were unaware of the presentation exercises, an assignment designed to gauge understanding of the online audio/video presentations. The same is true of DIRT Presentations, which discuss the material that may appear on the DIRT Quiz. Therefore, it is difficult to assess the overall effect it would have on the data.

assignments as well as exams. At first glance, the methods do not seem to require the same amount of vocabulary memorization. It could be that the memorization and practice required for maintaining solid scores on the Vocabulary Quizzes corresponds to and replicates how students in the traditional format are forced to recall vocabulary on quizzes and exams.⁴³

(3) The third question asked students "how many of the charts of nouns and verbs do you have memorized?" The students following the traditional method learn the forms and endings of their nouns and verbs through the repeated implementation of these charts, reading the textbook and in-class introductions, and are quizzed explicitly on these charts, whereas students in the "Flipped Latin Classroom" are not. The most important charts are displayed several times throughout the semester. The students in the "Flipped Latin Classroom" have a choice as to how these new topics are introduced, while the online presentation displays the information one way, the textbook and the in-class introduction often provide different ways of understanding the lesson and thus the students do not rely completely on the charts, or the methods, offered by one way of instruction. Some students in the "Flipped Latin Classroom" state that they have some of the charts committed to memory; but a much more common trend in the class is to have all of the charts written out in a notebook, which they turn to for reference when they are having difficulty.

Beginning after the second exam and happening more often as time progressed, students began to delay the completion of the online assignments until the week or so before the exam.⁴⁴ The students stated that completing these exercises just before the exam helped them study, but it often led to some students either skipping class altogether or coming to class unprepared and depending upon the in-class presentation and the other students to give them the essential information. The online access data provided by the Canvas system shows a decline in daily access that emerges dramatically after the second exam, and an increase in assignments that are turned in late. This persuaded the instructor in the 11:00am-11:50am course to institute stricter timeline for the submission of assignments.⁴⁵ The implementation of harsher guidelines for the course is discussed with more detail in later chapters. The immediate results were not significant,

⁴³ Vocabulary Quizzes in the "Flipped Latin Classroom" appear on a regular basis amid the assignments in each chapter. The traditional method does not offer quizzes limited to vocabulary on a regular basis instead they are introduced on a irregular basis depending upon necessity.

⁴⁴ I discuss this point further in the third chapter.

⁴⁵ The 11:00am-11:50am course had the most students that were delaying the completion of their assignments until the exam, and had the most significant drop in attendance. That is why the instructor implemented the restricted submission timeline.

but the students seemed to gradually regain an understanding of how important it is to keep up with the pacing of the course and its demanding requirements. This process proved helpful in guiding the students in this class to a more profitable timetable for completing assignments, so it was instituted as a policy in the Spring 2017 first-semester course and continued in at least one of the second-semester Latin courses as well.

After the second exam a greater effort was made to include a variety of Latin Stories and other Latin passages with accompanying PowerPoints to aid in promoting discussion of Latin culture. The third exam was given online following the format of the first exam where students were asked to translate four sentences instead of three and to analyze more of the grammar within the context of Latin sentences. The students were provided sixty minutes for the exam and could use any of the class materials, textbook, and online aids they desired. They scored an average of an eighty-two on the third exam, with the largest group of students receiving between ninety and ninety-five. 46 What is clear from the third exam is that having the students respond to four sentences rather than three increased the average test completion time to fifty-five minutes, in marked contrast with in comparison with the first exam where students finished in an average of forty-five minutes. This exam also covered the difficult topics of reflexive and intensive pronouns as well as the relative pronoun, often some of the more difficult topics for beginning Latin students in any curriculum.⁴⁷ Students in the traditional course received an average of eighty-nine percent on the third exam with no student receiving lower than a seventy-eight on the exam.

The final exam for the course was in a similar format to the third exam. According to the policy of the University of Kansas, students must be given the full final exam period of two and

⁴⁶ One student scored 6 out of 100 on the exam in the "Flipped Latin Classroom" and this may result in a significantly altered sample for this exam.

⁷ Information gathered from interviews and personal conversations with instructors and students from the classes.

a half hours to take an exam, but no other changes were made to the standard exam. The average score on the final exam was an eighty-six percent and students used an average of one and a half hours to complete the exam. Ninety percent of students finished with a B or better on the final exam. The students of the traditional method received an average of eighty-two on the final exam, with one student receiving a hundred and the lowest receiving a sixty-six. The learning outcomes and the data gathered from this first attempt at instituting of the "Flipped Latin classroom" impressed its instructors favorably and excited them about attempting the curriculum again in Spring 2017, where more promising results and developments were expected to be made.

"Chapter Two: The Second Semester"

The University of Kansas continued utilizing the "Flipped Latin Classroom" in two second-semester Latin courses and one first-semester Latin course during the Spring 2017 semester: the first a 9:00-9:50am honors section taught by Professor Anthony Corbeill with four students enrolled, and the other second-semester course taught by a lead graduate teaching instructor (GTA) and another position filled by a rotating team of GTA's, contained five students and met at 10:00-10:50am. The second-semester "Flipped Latin Classroom" covered chapters twenty-three through thirty-nine of *Wheelock's Latin*. A third second-semester Latin course, which met at 1:00-1:50pm, was taught using the traditional method by a single GTA, and had eight students enrolled. In the Spring 2017 semester the university offered a first-semester Latin course which enrolled eighteen students and met from 1:00-1:50pm. A team of GTAs with one acting as a lead instructor taught this section. I as the lead instructor in that course decided to maintain the same organization and implementation employed throughout the Fall 2016 semester with some minor modifications.

Before addressing the initial attempt to implement the second-semester "Flipped Latin Classroom," I will briefly address the first-semester course I oversaw. The grading structure for the course used a scale identical to that employed in the previous semester. Forty percent of the students' overall grade came from chapter assignments (English-Latin, DIRT Quizzes, Vocabulary Quizzes, and Practica), fifty percent from four tests of equal weight, and the remaining ten percent was assigned to attendance and participation. The goals of completing chapters one through twenty-two of *Wheelock's Latin* also remained unchanged. The only significant difference between the courses was the introduction of more readings taken from

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⁴⁸ The low retention rate between the first-semester students in the Fall 2016 semester and the second-semester students in the Spring 2017 semester (thirty-three percent) was due in part to poor scheduling that removed the afternoon time slot for the "Flipped Latin Classroom."

Groton and May's *38 Latin Stories*. This change was designed to encourage those students who were already high achieving to enhance their proficiency with the language. For instance, students read an additional three stories from Groton and May before the first exam.

In the period before the first exam, eighteen students were enrolled in the first-semester Latin course. From the outset, this group exhibited an advanced understanding of Latin sentence structure, the function of cases, and basic vocabulary, which later provided an opportunity for inclass discussion of the external readings and Roman culture that was not possible in the first-semester course in Fall 2016. Following the same template of questions and formatting as was used in the prior term, the first exam covered chapters one through six of *Wheelock's Latin*. In a similar fashion to the students in the previous semester the students received an average of ninety percent on the exam and finished in an average of forty-eight minutes.⁴⁹ The early introduction of additional Latin passages seems to have had little effect on the overall examination grades of the students, but the students seemed to enjoy class more when the external readings were included in the classroom, and this factor could have played a role in increasing the retention rate into the Fall 2017 semester.

The second exam, which covered chapters seven through eleven of *Wheelock's Latin*, also conformed to the format used in the previous semester, but was administered online. The inclass exam in which the students created a notecard did not produce significantly different results from the online exams in Fall, and thus, we determined to maintain the continuity of the platform for all of the exams. Administering all four exams online provided the students with flexibility in completing the exam and facilitated grading for the instructor. The result was that the students who took the online exam in the second semester scored on average eighty-five percent and taking about fifty-four minutes to complete the exam. These results compare well with both the

⁴⁹ This data was gathered using the statistics found on Canvas. Chapter 1 data concerning the first exam pg. 26-27.

in-class exam offered in the previous semester where students had only fifty minutes and scored an average of eighty-three percent on the exam, and the students who learned by the traditional method in the Fall 2016 semester and averaged an eighty-five percent. The similarities in each of these results may demonstrate that there is a consistent level of ability across the students of both methods. ⁵⁰ I propose that while there is a natural variation in the ability levels and preparation among students, there is no perceptible difference in their achievement based on the system used in class. Given that online testing provides the instructor one entire additional class day for each test, a day which can be used to discuss and review forms which students need to remember both for and after the test, there is a clear advantage to testing online.

The "Flipped Latin Classroom" students of the first-semester Latin course in Spring 2017 were provided with the same mid-semester survey given to the first-semester students in Fall 2016. Their answers to questions about which assignments were the most and least helpful conformed closely with their counterparts in the prior term. 51 They found the Practicum and the Vocabulary Quiz the most helpful online assignments, while the DIRT Quiz and the Vocabulary and Grammar Drills were their least favorite assignments.⁵² The DIRT Quizzes are difficult and do not have a point total that corresponds well to their difficulty. Students say that the DIRT Quizzes "seem random" or "are just very hard." The DIRT Quizzes are difficult but they are an extra credit opportunity as I mentioned earlier in this thesis, and these students may also have been unaware of the DIRT Presentation, which provides details concerning the material that appears on the DIRT Quiz. If the students were indeed unaware of these presentations this problem can be addressed by the instructors better integrating the DIRT Quizzes into daily

⁵⁰ It is certain that these students will have unique strengths and weaknesses, but classes that have different teachers often produce students with different strengths and weaknesses regardless of the method. ⁵¹ For more information see data included in Appendix C.

⁵² See more information in Appendices A and C. for a more detailed presentation of the results.

conversation and clearly explaining the relevance of these assignments. Conversely, the Practica and the Vocabulary Quizzes reinforce material introduced in the online presentations and completed in class, and thus students see these assignments as essential components of their understanding of Latin. One student stated that the Practicum "helps the lesson sink in" and another believes that the Practicum "is thorough and reviews a wide range of questions."

The responses recorded for the least and most helpful in-class assignments were also similar to those recorded in the Fall 2016 semester. Student designated the English-Latin sentences the most helpful assignment, one stating that they "make me think the most about Latin" and another that "they make me think backwards from what was introduced in class." Students deemed the Latin stories and the worksheets the least helpful in-class assignments. The likely reason for this is that neither of these assignments received enough attention in class to alert the students about how they are used and their significance to their overall learning. The instructor's perspective is, of course, quite different. Where a student may see these assignments as unhelpful because they are ungraded and are not tied directly to exams, a teacher knows that reading Latin prose and learning about Roman culture is essential in preparing students for success in upper level courses. In the first-semester "Flipped Latin Classroom" at the University of Kansas worksheets were implemented around five times, and Latin Stories between five and ten times a semester. Many students voiced that both of these assignments are "not used frequently enough to be effective," a situation that is largely due to the three-day-a-week curriculum.⁵³ If the course met in class five-days each week, there would be more time for these types of assignments. Thus, even though the students may not recognize the importance of these assignments they are an essential part of the learning process and should be implemented as often as possible.

⁵³ See the responses recorded in Appendix sections A.1 and C.2.

When students in the Spring 2017 were asked how much time students they spent studying Latin daily, the results were similar to their peers the term before. They self reported spending more than thirty minutes studying Latin each day. There was also little difference with those who learned via the traditional method, so it seems safe to conclude that this amount of time spent doing homework is equal across various methods of pedagogy. The question concerning vocabulary and chart memorization also produced similar results, with students falling somewhere between "some" and "most," but with more students in the Spring 2017 first-semester course stating that they only have "some" of the verb/noun charts and vocabulary memorized in comparison with the first semester course in Fall 2016. The inclusion of the Vocabulary Quiz for each chapter compels students of the "Flipped Latin Classroom" to memorize words similarly to students in the traditional method.

Overall, the students of the "Flipped Latin Classroom" are attracted to courses that provide flexibility in scheduling and have an online component rather than those taught in the traditional method. In other words, some would not have been able to take Latin at all in a five-day a week course because it would not fit in their schedule; others assert that the "Flipped Latin Classroom" provides them a more beneficial learning environment inside and outside the classroom. Some students stated a belief that the traditional method "keeps students more accountable with memorizing information instead of looking it up." On average, flexibility was the most common response to why the "Flipped Latin Classroom" was their preferred method. One student stated that if the course was only offered five-days a week they are "unsure if they would have been able to enroll in a Latin course."

The third exam, which covers chapters twelve through seventeen in *Wheelock's Latin*, is different because it includes four sentences rather than three in the final translation sections of

⁵⁴ See Appendix C for more responses similar to this one.

the exam. Thus, students had seventy-five minutes to take this exam, fifteen minutes longer than the previous two exams. This change was made after consulting Mark Damen about the traditional length of the exams in his method. Students scored an average of eighty-five percent on this exam and took on average seventy minutes to complete this exam. The average score on this exam remained unchanged from the second exam, but the time required for completing the exam increased nearly twenty minutes with the addition of only one extra sentence. Students are provided with more time for an online exam, but there is no guarantee they will use this time to look up correct answers either online or in the textbook. The most pressing issue was that a few students could not complete the exams and the average score on the exams did not increase although more time was provided to the first-semester students in the Spring 2017 semester than in Fall 2016. Thus students in the first-semester "Flipped Latin Classroom" in the Fall 2016 semester demonstrated on average a time management skill that students in the Spring 2017 semester lacked. It may be that offering the second exam in-class had taught the students an aspect of time management that could not be taught by any other method in the course. Thus, an increase in time was not considered for the third exam in Fall 2016. The average score of eightytwo percent on the third exam in the Fall 2016 semester may be a result of the narrow time period provided for those students.

The last test in Spring 2017, the final exam for the course, covers chapters eighteen through twenty-two in *Wheelock's Latin*. The University of Kansas requires that students be given the full final period of two and a half hours to complete final exams. The test was modified by adding additional questions based on short passages from Catullus and Virgil that the students had translated and discussed in class under the guidance of their instructors. Students were not asked to translate, but to show their understanding of the themes and meaning of the passages.

The students in the Spring 2017 semester scored an average of eighty-six percent on the exam and took around eighty-five minutes to complete the exam. Sixteen students received final grades in the course, which ranged from a seventy percent (C-) to a ninety-seven percent (A).

Although this course did have two withdrawals around the time of the first exam, as I stated earlier the success of the students who completed the course is a significant factor in our optimism for the future of the "Flipped Latin Classroom" at the University of Kansas. ⁵⁵ The rebound in the number of enrollments as compared to those in the Spring 2012 semester is another encouraging sign. At the same time the retention rate of only thirty-three percent of students who completed the "Flipped Latin Classroom" curriculum between the Fall 2016 and Spring 2017 is disturbing and raised questions about the success of this method. The Spring 2017 first-semester course seems to have encouraged more students to continue their study of Latin. The enrollment number for the Fall 2017 are early but they already point to a retention rate greater than thirty-three percent seen in the previous semester. The positive numbers and data gathered from one full year installing the "Flipped Latin Classroom" in the first-semester classroom point toward future success in both encouraging students in their study of Latin and fostering their development and success in the classroom.

Second-Semester Latin Courses

The second-semester classes in Spring 2017, as I mentioned earlier, enrolled nine students overall. The traditional method contained eight students, including one student who began Latin in the "Flipped Latin Classroom." As I discussed in the introduction, there was a

⁵⁵ The withdrawals from this semester were due to difficulties outside of the classroom rather than issues with the course itself.

thirty-three percent retention rate from the first-semester Latin course to the second-semester. The retention rate of students from the second-semester to the third-semester Latin course must be at a higher rate if this course intends to continue its existence alongside the traditional method. This chapter and next will discuss further developments and recommendations that will help this course achieve a greater retention rate as well as more success in instruction and performance in the classroom.

A significant difference between the first-semester and second-semester "Flipped Latin Classroom" is the introduction of a greater number of Latin passages in the second semester from Groton and May's 38 Latin Stories. Since there are fewer chapters covered in the second semester but more difficult material is introduced, these passages provide an additional method for reviewing the material. In the first semester students remain focused on learning basic endings and vocabulary, the construction and manipulation of Latin word forms, and simple sentence structure. The second semester builds on the foundation of the first. While vocabulary and the construction and manipulation of forms remain an essential part of the curriculum, the course begins to introduce more difficult grammatical constructions that require an understanding of both first-semester content and new second-semester material.

The second-semester "Flipped Latin Classroom" courses in the Spring 2017 semester were taught using the methods that were devised in the previous semester without significant changes in the method. The one development in the grading and reception of assignments was when the non-honors section of the "Flipped Latin Classroom" set firm deadlines for when assignments must be completed. This was done in response to students in the Fall 2016 semester who would delay in completing online assignments and come to class unprepared and unfamiliar with the new material. This shift in the grading and reception of assignments succeeded in

getting students to complete assignments in a timely manner and ensured a more productive inclass period. 56 The first exam covers chapters twenty-three through twenty-seven in Wheelock's Latin and the students received an average of ninety-one percent on the exam taking around fifty-four minutes to complete all the questions. The first exam in the course taught using the traditional method covered the same material with the students averaging eighty-six percent and completing the exam within the fifty-minute class period. While these exams were different, they both attempted to cover the same material; I believe it is important to note student performance throughout the course as it may reveal significant trends. A comparison of test scores offers the opportunity to track student learning and comprehension throughout the semester. One of the significant changes to the exams in the second-semester "Flipped Latin Classroom" from the exams offered in the Fall 2016 semester is the shift to offering the students sentences which are similar to those used in the textbook with small differences or in some cases sentences with no changes at all. The integration of "seen" sentences into the questions on the exam was done to encourage students to study for the exam by looking at the Sententiae Antiquae and Practice and Review sentences that they had done in the previous chapters.

The second exam in the second-semester Latin course covers chapters twenty-eight through thirty-two in *Wheelock's Latin*. The format was identical to the first exam and was offered online. The students in the "Flipped Latin Classroom" averaged a ninety-six percent on this exam and finished in an average of fifty-one minutes. Students within the traditional method averaged a seventy-five percent on this exam and again finished within one class period of fifty minutes. After this exam, in the "Flipped Latin Classroom" it was decided that the answers to the questions that simply included translating verbs were too easily accessed online. The points that

⁵⁶ For more information on the introduction of firm deadlines in the "Flipped Latin Classroom" see Chapter 3 for my recommendations for future iterations of the course.

were allotted to the translation of these individual verbs were redistributed into additional questions about the concepts that were introduced in the previous chapters.

The third exam, which covers chapters thirty-three to thirty seven of *Wheelock's Latin*, received no significant changes from the earlier exams offered this semester. The second-semester "Flipped Latin Classroom" students averaged a ninety-six percent on the third exam and took an average of sixty minutes to complete the exam. The "Flipped Latin Course" offered an optional final to students who wished to improve their grades. The reason for this change was that a majority of students in the "Flipped Latin Classroom" were averaging over ninety-five percent overall. The elimination of the final exam in the second-semester "Flipped Latin Classroom" created time to read an additional passage of Latin, in the case of the honors section one of Horace's *Odes*. Thus, the final exams for both the "Flipped Latin Classroom" and the traditional method are not relevant to this study and will not be addressed in this chapter.

I provided the students of both the traditional method and the "Flipped Latin Classroom" a survey at the mid-point of the semester similar to the one that was distributed to them during the first semester. According to students in the "Flipped Latin Classroom" the most helpful online assignment was, as before, the Practicum, which, students say, "combines all the skills" of learning Latin and is "a good review of the material." This may be because the Practica are designed to incorporate review of the subjects of previous chapters and also the sentences of the current chapter, which are completed in class. As before, the least helpful online assignments were judged the Vocabulary and Grammar Drills, which most students confess they leave undone because they lack any point value. While some students resist the idea of these assignments being included in the course design stating, "I just don't do them," the Vocabulary and Grammar Drills are an integral part of the support system designed to help students in need

outside of the classroom. The majority of students who complete the "Flipped Latin Classroom" course will never need to view the Vocabulary and Grammar Drills, but I believe that the students who struggle with grasping the material use them often as both tools for review and practice on learning new concepts. Canvas provides further data that the same students completed these assignments consistently throughout the semester with a few students attempting them on an irregular basis. If a student is struggling in the course and has trouble meeting with an instructor during office hours, the first assignments I suggest to them are the Vocabulary and Grammar Drills; at the very least they allow the student to discover the areas where they are having the most difficulty. The Vocabulary Quizzes received mixed responses from the students in the "Flipped Latin Classroom" in the Spring 2017 semester; as the amount of vocabulary increases, they become more difficult and students often complain that "they are really difficult" and that "the time limit makes it harder to concentrate." 57 Since the Vocabulary Quiz is an integral part of the online learning portion of this course, some changes may have to be made to the time limit as the amount of vocabulary increases, but the time limit on these quizzes is meant to challenge the students and encourage memorization. One option for addressing this problem would be for instructors to help students prepare for the Vocabulary Quizzes by offering advice on how best to review before taking them.

The survey also indicated that the English-Latin sentences are the most helpful in-class assignment in the "Flipped Latin Classroom." The students, similar to the ones in the Fall 2016 semester "Flipped Latin Classroom," said that this assignment "is a way to solidify my understanding" and that "it tests on how well we know the rules by reverse." Almost unanimously, the least helpful assignment was deemed the worksheet. Six out of seven students

⁵⁷ For more information see Appendix C, for more specific response see section C.1.

⁵⁸ For this response and more see Appendices A and C.

surveyed disliked the worksheets because "the worksheets are the least involved" and "they are not done often and don't necessarily make a huge difference." The problem, as I mentioned earlier in this paper, is that these assignments are not integrated well into the three-day-a-week course because of the lack of available class time. In the three-day-a-week method of teaching, it often seems to be a choice between including worksheets and introducing the Latin Stories.

The survey also revealed that the majority of students are studying between thirty to sixty minutes a night, which is similar to the amount of study time the first-semester students of both the Fall 2016 and Spring 2017 semesters indicated. The majority of students also recorded that they had "some" or "most" of the vocabulary and noun/verb charts memorized. Each of these three data points is similar to the responses recorded by the students in the previous semester. The demands of studying seem to have been distributed equally across the first two semesters of Latin; the students enrolled in the second semester course exhibited no significant difference in their study habits. The "Flipped Latin Classroom" seems to ask students to meet requirements similar to those in the traditional method even though less in-class time is required for the "Flipped Latin Classroom." By five to two students of the "Flipped Latin Classroom" prefer the hybrid to the traditional method; the students point to the flexibility introduced by the "Flipped Latin Classroom" and the decrease in required in-class days.

Many of the students who take the "Flipped Latin Classroom" option are forced to do so either by the demands of their private lives, their extra-curricular work schedules, or the needs of their academic schedules (for example, a biology major or engineering student might have a mandatory lab section that conflicts with one day of the five-day-a-week course). One student protests of being, "unable to take a course (taught using the traditional method) but that it might be preferred because it is designated time everyday for Latin." The "Flipped Latin Classroom"

achieves much of its flexibility from the removal of in-class sessions, but as the course exists now, students are required to set their own pace, and thus, if this responsibility is not handled with care, they can be overwhelmed by the workload and amount of study time required.

In order to gauge the progress made by each student through the first two semesters of Latin in the "Flipped Latin Classroom" and the traditional method, I created a diagnostic exam. I used questions from the third level of the National Latin Exam given in the 2016 school year and created my own test. I provided four questions that were based upon sentences and recognition and six questions that analyzed the student's ability to understand a passage. These were multiple-choice questions that are based on unseen sentences and passages. A copy of the diagnostic is located in appendix B as well as an analysis of the students' performance on individual questions. Each question tested the students' knowledge of either grammar constructions or their translation abilities and was designed so that neither class would have an advantage. Students were given fifteen minutes to complete the ten-question exam.

Eight students from each method took the diagnostic exam. The students of the "Flipped Latin Classroom" averaged slightly more than four and a half correct answers while the students of the traditional method averaged six correct answers on the exam. There were two perfect scores on the exam and both students had at least one semester of the "Flipped Latin Classroom." The diversity of scores ranging from a one hundred to a twenty percent may reflect some variation in the students' comfort level with how this test was organized, rather than their knowledge of Latin. The questions were not formatted in a fashion that the students were familiar with and a quiz of this style had never been presented to either group. That being said, it is troubling that students of the "Flipped Latin Classroom" method struggled with understanding the sight passage, a practice with which these students should be familiar. The students may have

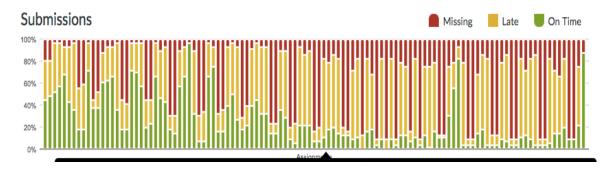
been overwhelmed by a diagnostic exam, a type of assessment which was not only provided to the students in a format they were unfamiliar with but also given at the end of the semester, a period during which students are busy with studying for finals and writing final papers. The scores on this diagnostic exam demonstrate that, while many aspects of the "Flipped Latin Classroom" mimic and improve on the traditional method, there are still areas for improvement that I will address in the following chapter.

Chapter Three: Innovations and Recommendations

The generally promising results of the "Flipped Latin Classroom" which improved enrollment and student achievement encouraged the instructors about the continuation of the course into the Fall 2017 semester and beyond. The course produced a significant number of positive results, but there remains room for improvement in its implementation at the University of Kansas for future semesters. Many of these recommendations are responses to changes made to the original design as it was implemented at Utah State University by Mark Damen, such as the decrease of classroom time from five to three days a week and a shift in the amount and type of assignments given to the students. The recommendations I propose in this chapter are the result of careful observations and are intended to improve the course and classroom interaction at the University of Kansas.

Freedom is one of the greatest advantages of the "Flipped Latin Classroom," giving students a range of choices about when and how they learn, which makes managing and providing guidelines for structuring out-of-class time is an essential part of the administration of the course. Thus, the first proposal I have is the development of a stricter set of guidelines for administering the "Flipped Latin Classroom." The five-day-a-week course implemented at Utah State offers students more opportunities in the classroom to complete the various assignments under the guidance of their instructor. At the University of Kansas the three-day-a-week course, where there is forty percent less time for interaction between the students and the instructors, a clearly defined schedule of assignments and assessments is critical to success..

In the Fall 2016 semester, students in the first-semester "Flipped Latin Classroom" began the course with the goal of completing all of the designated assignments within one week after the chapter was introduced to them. As the semester progressed, the students began to delay completing the assignments until the week before the exam because students claimed it would "help them prepare/study for the exams." The students' choice to delay in completing their assignments led to classes in which the students were not as prepared to discuss the material or to complete the daily assignments. An unanticipated consequence of these actions was that students believed that the in-class sessions where English-Latin sentences were not completed were unnecessary because the subjects were addressed in online assignments such as the online presentation and the Practicum. Thus, the practice sentences for each chapter could be completed on their own at a later date. Canvas, the online system used for the implementation of the course, provides evidence for this trend by recording when the students are completing the assignments with respect to when they are introduced.



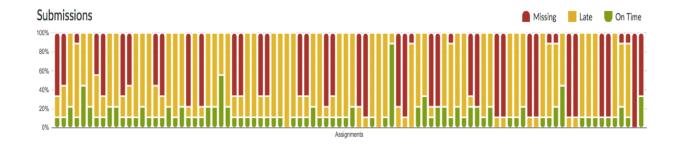
This chart was gathered from the online educational system Canvas. The y-axis depicts the percentage of the assignments that were completed either "late" or "on-time," or were not completed at all ("missing"). The x-axis represents time and dates throughout the semester where assignments were introduced. The yellow bars in the graphic should be considered as green because there was an acceptable timeline in which the assignments could be submitted after the introduction. The chart tracks when the assignments for all three first-semester "Flipped Latin Classroom" courses in Fall 2016 were completed in comparison with when the assignments were scheduled to be completed as presented to the class on a sample schedule, included on Canvas. The three greatest periods of on-time assignment submission- the longest green bars- coincided with exams two through four. The most concerning detail of this graph is the increase in uncompleted assignments that occurs between the second and third exams (near the middle of the chart) a pattern that continues to the end of the semester. The assignments with a consistently high number of "missing" assignments – the longest red bars- are optional assignments.

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⁵⁹ This comment is drawn from interviews with students of the "Flipped Latin classroom" conducted in October and November 2016.

This chart shows that at the beginning of the semester students were submitting assignments at regular intervals in connection with the dates on which they were introduced nor were they leaving any assignments uncompleted. However, beginning before the mid-point of the semester, students began to submit assignments less regularly, with only a few completing the chapter assignments on time. The largest increase in on-time-assignment submissions was before the exams. The drop in all submissions during the second half of the term is notable. While flexibility provides students in the "Flipped Latin Classroom" with greater freedom to choose when they complete the assignments, it also provides the opportunity for the type of procrastination that can be deleterious to the learning process. A stricter and more limited timeline for submissions should be introduced. This would not significantly alter the current level of flexibility offered in this course, but it will help students maintain proper pacing and encourage better study habits. I propose that students should be provided a week to complete select assignments that are specific to each chapter, or a reward system may be introduced that offers extra credit for on-time submissions.

The next step would be deciding what assignments need to be completed on a stricter timeline, but also those tasks that provide more benefit if they are left available to the students as study tools. The Vocabulary Quizzes should be completed along with the assignments specific to each chapter, but it also should be left available to students for practice before the exams. One-second semester course in the Spring 2017 semester introduced a restriction on the Practicum, giving the students one week after it was introduced to complete the assignment. The following chart analyzes the courses from the Spring 2017 semester.



This chart is also from the Canvas educational system. The chart can be read in the same fashion as the earlier chart with the y-axis representing the percentage of assignments that were either missing, "late", or "on-time," and the x-axis representing time and the introduction of various assignments throughout the semester. This chart tracks the second-semester "Flipped Latin Classroom" courses in the Spring 2017 semester. Once again the yellow section of the chart should be understood as green because there was a wider allowable time period for the submission of assignments.

The second-semester course, which introduced a more limited timeline for the submission of Practica, and both flipped courses overall, produced a more consistent pattern of submission of all assignments than the first-semester "Flipped Latin Classroom" courses in the previous semester. The other second-semester "Flipped Latin Classroom" course did not institute such a restriction, but it was an honors course and had not exhibited the same habits as the other first-semester courses in the Fall 2016 semester. A restriction in timeline would also probably be salutary for honors courses, but it seems not to be as necessary as in the other courses. I believe the main shift in the consistency of turning in assignments was the result of the institution of the limited timeline. This structure encourages students to maintain a proper pace with the course and to complete assignments in a reasonable fashion.

One other change that was made to the course structure from the original method in the University of Kansas' adoption is the addition of an attendance grade. The original method implemented by Mark Damen did not designate a part of the overall grade for a student's

attendance. I believe the addition of an attendance and participation grade was necessary because daily attendance in a three-day-a-week course is more critical than in a five-day-a-week course; that being said, this course was designed so that students could learn where and when they desired. Attendance in the first-semester course in Fall 2016 was irregular; students tended to attend class on the days when English-Latin sentences were assigned, but on days when a chapter was being introduced and no graded assignments were completed, attendance became more inconsistent, especially as the semester progressed. The first-semester course in the Spring 2017 semester designated ten percent of the overall grade just for attendance and from the fifty percent allotted to the assignments that were completed in each chapter. Thus, attendance, while still somewhat irregular on days when no graded assignments were completed, was much more consistent than in the previous semester.

This structural problem in the "Flipped Latin Classroom," where attendance on certain class days seems to be more significant than others in the eyes of the students, must be addressed. As I mentioned before, one way is to include an attendance policy that has an effect on the student's grades, but there are other opportunities to resolve this issue. Since the English-Latin sentences are worth a significant portion of a student's grade, there is a perception that attendance on these days of class is more essential for success than attendance on others. One way to combat this misperception and also encourage students to attempt a greater variety of assignments would be to make the *Sententiae Antiquae* and the "Practice and Review" sentences worth credit toward the overall chapter grade. They do not have to be equal with the English-Latin sentences, but presenting the students with the opportunity to earn points to the overall chapter grade each day, instead of every other day, should help alleviate some part of the

attendance problem that was encountered most significantly in the first-semester Latin course in Fall 2016.

The online assignments remained unchanged throughout both the Fall 2016 semester and the Spring 2017 semester, with only small edits made to a few questions either for clarity or correctness. The only change that I propose should be made is the renaming of the DIRT Quiz, or "Do I Remember This" Quiz. The students in the "Flipped Latin Classroom" did not seem to recognize the significance of the material that is reviewed in the DIRT Quizzes and often viewed them as their least favorite assignments. ⁶⁰ This issue could be addressed in part by the inclusion of the DIRT Presentation into daily discussion because many students seem to have forgotten they existed. The naming of this assignment may be one of the reasons that it presented students with difficulties; the early stages of the course at Utah State as described in Leitch's thesis, and the responses concerning the DIRT Quizzes in further surveys conducted by Mark Damen point to continuing issues with this assignment. 61 The majority of students in the courses at Utah State rank the DIRT Quizzes as the second least helpful assignment, or as only "somewhat" helpful. I believe that if the name was changed to perhaps "Grammar Quiz" or "Grammar Review," students might more easily recognize the significant role in their instruction that the DIRT Quizzes represent. If both the DIRT presentations and the DIRT Quizzes were renamed to be more closely associated with their function, I believe students would complete and value these assignments.

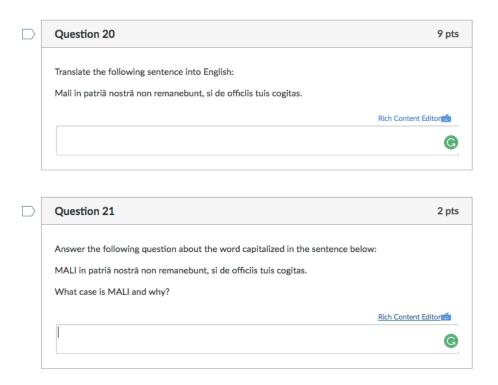
The exams for the course also warrant some attention, as some of the questions may not be tailored specifically for an online course. The first change that was implemented in some of the exams in the second-semester Latin course in Spring 2017 was the shift in the format of the

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⁶⁰ See Chapters 2 & 3 pg. See also Leitch's thesis pg. 85.

⁶¹ For more information see Leitch's thesis pg. 80-85. Other information gathered from surveys provided by Mark Damen on May 12, 2017 elucidates the issues with the assignment.

sentence translation section. In the original "Flipped Classroom" implemented at Utah State and the "Flipped Latin Classroom" that was introduced in the Fall 2016 semester at the University of Kansas, the sentences were to be translated at sight, meaning that the students had not seen any part of these sentences before. Students would be given a short sentence ranging from six to fifteen words in Latin that they would be asked to translate fully and then answer three grammatical questions pertaining to the function of words or phrases in the preceding sentence. An example can be seen here.



These questions are essential for instructors and students as they provide the most telling data about a student's overall understanding of Latin. The problem with providing sentences that are fabricated, new and unseen by the students, and are unlike any sentence that students may have encountered in their assignments, is that students are less likely to study the material that was covered in the previous weeks because there is not a direct association with the sentences they had completed earlier. A remedy for this issue is to offer sentences that are adapted from

those they encountered in Wheelock. Students in the second-semester courses in Spring 2017 semester were presented with familiar sentences, but adjusted with respect to vocabulary and grammar, for example changing the tense of verbs or introducing additional adjectives. By offering sentences in this manner, students are encouraged both to review the material and also to take more care when the sentences are translated initially.

Another issue that was encountered with the examination process was the translation of verbs, which often provided the students with questions that they could easily look up the solution online either in a dictionary or through translation software. For example, when a question like the one below is presented to a student and he/she enters "*erit*" into the search bar of any browser, all the information to answer the question is immediately available.

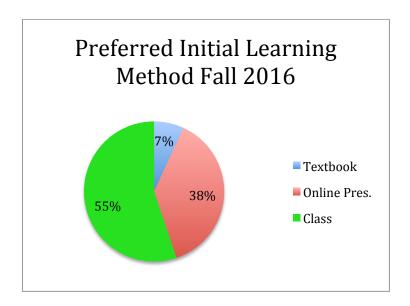


Although offering exams online is beneficial to both the instructor and the student as they are easier to grade, because they provide immediate feedback, and lend greater flexibility about when and where an exam can be completed, this benefit can become a hindrance to student learning and teaching when the right types of question are not asked. The question should promote aspects such as active thinking and problem solving rather than a student's ability to research or discover the correct answer through online tools or dictionaries. The examinations for hybrid and online courses may require more consistent adjustment and adaptation due to the different types of information that become available on a regular basis. I believe that the best

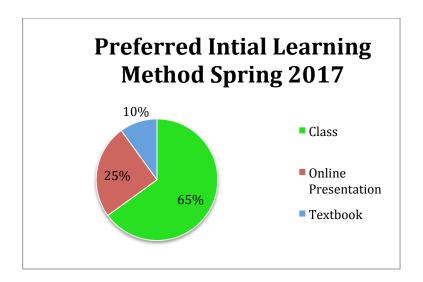
option would be to eliminate these questions altogether and introduce a different type of question. Students could be presented with conceptual questions that involve the application of a certain concept in a new context; these questions would test a student's ability to recognize and to apply the concepts not to translate them. One example of a question would be a multiple choice question where the student would be asked to select the sentence with the properly formed grammatical concept such as a fear clause or a jussive noun clause. Another option could be asking students to identify the grammatical constructions that require the verb to be in the subjunctive mood. These questions may be researched on the Internet but would require more active thinking than the translation of a single verb.

One adjustment that was made in each of the "Flipped Latin Classroom" sections at the University of Kansas in both the Fall 2016 and Spring 2017 semester was the addition of a short introduction of material on the first in-class day of each chapter. This five-to-ten minute introduction was essential so that students who had not watched the online presentation could have a basic idea of what was introduced in the chapter before completing the assignments inclass. Students were asked to describe and explain to the instructors what the online presentation had been about, which prompted a more interactive classroom and discouraged not doing online assignments. As the semesters progressed, it was clear that students who had not watched the presentation were relying on the others in their group to explain what was introduced, and while the sharing of information and the peer-to-peer teaching is a benefit of working in groups each class period, it distracts from the already limited period of time designated for instruction inclass if students are burdened with teaching their peers new information.

The mid-semester survey in the Fall 2016 semester showed that a majority of students preferred to be introduced to the material in class rather than watching the presentation online.



These data points are reinforced by the data that was gathered in the Spring 2017 semester where students overwhelmingly perferred to have the instructors provide the intial introduction to the material.



Thus by leading a discussion concerning the material in class on the first day of each chapter we allow students to have another option for introduction, and one that was preferred to the other methods. These discussions became essential for the students who could not, either due to time constrants or technological difficulties, watch the online presentation, or those who preferred this method, to participate fully each class period without have to rely on the

instruction of their classmates. The greatest drawback to having presentations in-class is that they use up time which was already limited. The proper utilization of the limited in-class time is an essential aspect of the "Flipped Latin Classroom." I believe that the use of ten minutes of classtime for a "reintroduction session" would be a beneficial use of class time. This session would involve students recalling the most important information from memory so that the material could be reproduced on the board before the class, therefore with the information from the online presentation recreated on the board the students can refer to the charts, paradigms, and example sentences for help when they are completing their in-class assignments.

If the "Flipped Latin Classroom" continues to be offered alongside classes taught through the traditional method, there are some additional problems that may occur with respect to the transition to upper-level Latin courses. The goals of the "Flipped Latin Classroom" must be clearly outlined and presented to its instructors to ensure that just like students who learned in the traditional method those who continue from a flipped curriculum to upper-level Latin courses have the required skills to succeed in the advanced classroom. This begins with a discussion about the expectations of the beginning Latin courses and what students who complete the second semester of Latin should have memorized and been able to put into practice. Some of the skills that a beginning third-semester Latin student should possess are an understanding of essential recurring vocabulary, along with the prevalent grammatical constructions (for example the ablative absolute, jussive noun clause, relative clauses), and the ability to identify the correct morphology of both nouns and verbs.

One of the major issues that was encountered in the implementation of this course at the University of Kansas was how much of the material should the students have memorized. The students of the "Flipped Latin Classroom" are not required to memorize as much of the material

for exams as students in the traditional method. This could be a result of "flipping," or it could be a result of offering online exams that are open-note and open-book. The Vocabulary Quizzes that are completed as a part of each chapter help aid in this aspect of the course as the time limit of the quizzes and the growing amount of vocabulary force students to memorize a large number of the vocabulary introduced in the 3rd edition of Wheelock's Latin. Thus, the memorization of vocabulary may be addressed through these assignments, but the memorization of noun and verb morphology and different grammatical structures do not have a designated assignment for the purpose of memorization.

I believe that the memorization of vocabulary, noun and verb forms, and grammatical structures, which is an expectation that must be met by students of the traditional method, must be addressed specifically by assignments in the "Flipped Latin Classroom." While this is my personal belief, there are questions as to whether these skills are necessary and a requirement to succeed in upper level Latin courses. At the very least, instructors of the intermediate Latin class need to be aware that the students who come into third-semester Latin are likely to have different skill sets. As a result, the instructors of the advanced courses at the University of Kansas should not assess students by their ability to produce paradigms; instead they should assess students by more standard skills such as translation and their understanding of important concepts. This is just one complication that may arise from the enrollment of different students in both the "Flipped Latin Classroom" and classes that are taught using the traditional method in the same semester.

These recommendations have either not been introduced in the "Flipped Latin Classroom" or implemented only in a limited fashion. Many of the solutions I have presented in this chapter aim to address problematic aspects of the course's design and the assignments that

arise from the course's transition from the five-day-a-week course offered at Utah State to the three-day-a-week course now offered at the University of Kansas. The ability of the instructor to adapt this course to meet the evolving needs and desires of its students will be an important element in its success and continuation as part of the Latin curriculum at the University of Kansas.

Conclusion: Hope for Future Progress

The first year of the "Flipped Latin Classroom" at the University of Kansas may be the beginning of a shift in the way that Latin courses are taught. The flexibility introduced through the blending, or hybridization, of technology with the long successful traditional method should prove to be fruitful in the creation of a classroom that is attractive to and effective for both students and instructors. Though there were many unexpected problems encountered through the implementation of the course and its daily management, many of them have been analyzed and measures have been put in place for their correction. Some of these problems included irregular participation and attendance, inappropriate exam questions, and a manipulation of the flexibility; each of these issues and their corrections has been addressed in previous chapters. The transition to the "Flipped Latin Classroom" was a difficult one, but the change has led to a small increase in both enrollment and performance but shows promise that it may have a significant impact on these elements in the future.

This course achieved the goals that were set out before its introduction in the Fall 2016 semester. First, enrollment increased to levels that were seen only five years previous in the Fall 2011 semester. While the actual increase in the number of students enrolled is small, this trend examined over the previous year may demonstrate the beginning of a solution to the much large problem experienced across the country. Second, the "Flipped Latin Classroom" increased enrollment in third-semester Latin where twelve students as of May 2017 are enrolled for the Fall 2017 semester in comparison with nine in the Fall 2015 semester. These encouraging signs can only improve if more students choose or are able to enroll and succeed in second-semester courses. The "Flipped Latin Classroom" has managed to attract new students to the Latin

62 This number may include students who were taught by the traditional method, but the overall increase in numbers

is promising.

language that either were not able to take courses taught by the traditional method or were not interested in either a five-day-a-week course, or indeed Latin in general.

As The University of Kansas prepares to implement the "Flipped Latin Classroom" for the Fall 2017 semester, further changes and developments to the course must be considered, especially with respect to the relationship with the classes taught using the traditional method and the third-semester Latin courses. Downstream teachers will recognize that students in the third-semester Latin course will have a greater disparity of skills than they have encountered in previous years, but this may allow the class as a whole to achieve a different kind of success by encouraging interaction and allowing students learn from as well as teach each other. The longevity of the "Flipped Latin Classroom" will depend on how the course can adapt and develop its relationship with these other courses in the Kansas curriculum. The promising results of the first year of the "Flipped Latin Classroom" give me confidence that this course deserves a place in the Kansas curriculum. That being said I believe there are enough students who prefer the traditional method at the University of Kansas that this course should be offered concurrently with "Flipped Latin Classroom."

The structure of this course may also need to be adapted to provide students with more guidance in the limited three-day a week schedule, with stricter rules for completing assignments, instructors who are able to clearly articulate both the purpose and techniques for success in various assignments, and a careful assessment of how class time is spent. The "Flipped Latin Classroom" provides students, who may not have been able to meet the attendance demands of the five-day-a-week courses taught using the traditional method, the opportunity to take Latin courses. These issues may be addressed when the University of Kansas creates its own online system rather than using the Utah State system. The adaptation of the

Latin course structure and its assignments at the University of Kansas shows that Latin courses at other universities could benefit from rethinking their course structures and blending online methods with those of traditional courses. This course gives me hope that Latin courses at the college level can reestablish themselves among the language options for students and become a standard in all levels of the education system as it was less than a century ago.

Appendix A Mid-Semester Survey: First-Semester Courses Fall 2016 Semester

Mid-Semester Course Evaluations Latin 104

The Latin 104 hybrid is a new course this semester and this is one method by which we are attempting to make this course more accessible and helpful to students. Comments made in this format will be confidential and will be used to improve the course in a variety of ways.

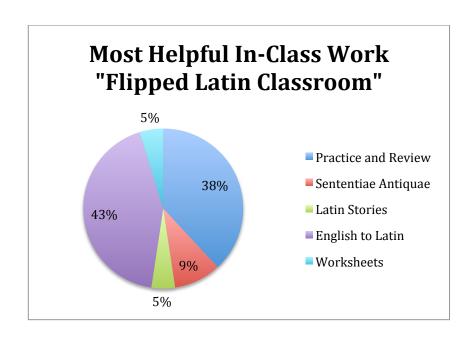
What type of online exercise is the most helpful and what type is least helpful? Circle the one that you find most helpful, draw a line through the one you find least helpful and explain why.

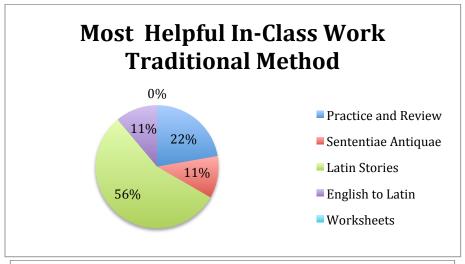
Presentation Exercises DIRT Quizzes Vocabulary Quizzes Practicum								
Vocabulary and Grammar Drills								
How much time do you spend on Latin on average every day?								
Do you typically study alone or in a group? (Circle one) Alone Group								
What is the best way to learn new material? (Circle one) Textbook Presentation Class								
Which in-class exercise is least helpful? Which is the most helpful? Circle the one that you find most helpful, draw a line through the one you find least helpful and explain why.								
Sententiae Antiquae Practice and review Latin Stories Worksheets								
English to Latin								
How much of the vocabulary have you memorized? (Circle one)								
None Some Most Every Single Word								
How many of the declension/conjugation charts have you memorized? (Circle one)								
None Some Most Every Single One								
In your opinion has class time been used effectively? Why or Why not?								

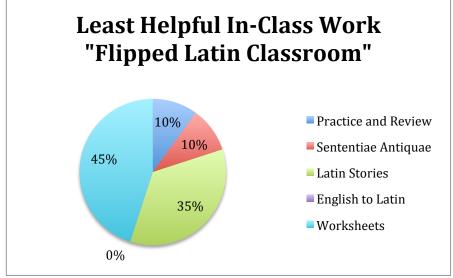
in-class? Why?	
· · · · · · · · · · · · · · · · · · ·	
f you could change one thing what would it be?	
is you could change one timing what would it be:	
Do you plan to continue taking Latin after this class? Why or why not?	
This class is has traditionally been taught 5 days a week with no online componer	
had remained true would you have been able to take class? Would you have prefe it in this manner? Why or why not?	erred to take
the date manager way not	
	ions that
Please feel free to write in the remaining section of this sheet any further suggest you may have.	ions that
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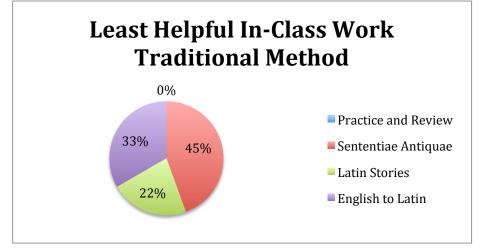
<u>A.1</u>: What type of in-class exercise is the most or least helpful? *Areas in the graphic that are marked in red represent students who denoted each assignment as their least favorite.

Most/Least Helpful i	n-class work	Practice and Review	Sententiae Antiquae		
Lat 104 9:00-10:00 MTWTHF = Class A		2	0	1	4
Lat 104 11-12pm MWF= Class B		3	0	0	0
Lat 104 1-2pm MWF= Class C		3	2	1	1
Lat 105 10:00-11:00am MWF= Class D		2	0	1	1
Lat 108 9:00-10:00am MWF= Class E		0	0	3	0
Latin Stories		English to Latin	Worksheets		
5	2	1	3	n/a	n/a
1	2	2	0	0	2
0	5	6	0	1	4
0	0	1	0	0	3
2	1	0	2	0	2



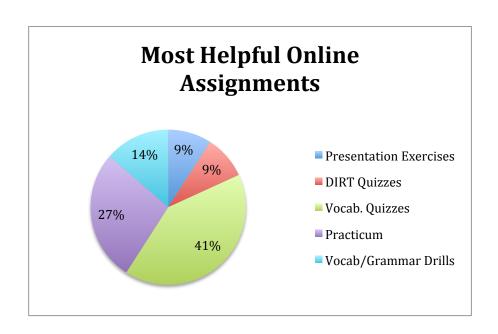


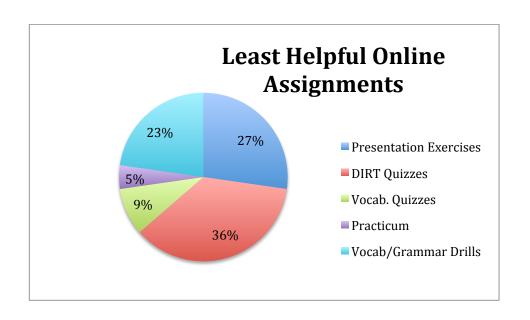




<u>A.2</u>: What type of online exercise is most or least helpful?

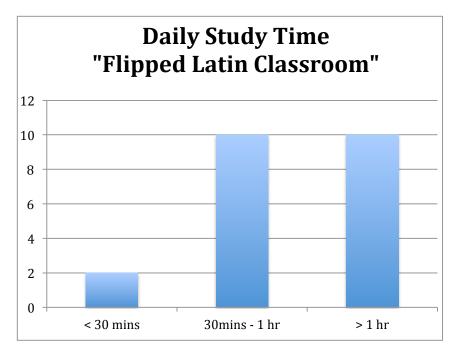
Most/Least Helpful Onli	ne work	Presentation Exercises		DIRT Quizzes		
Class A		n/a	n/a	n/a	n/a	
Class B		0	3	1	0	
Class C		2	2	1	7	
Class D		0	1	0	1	
Class E		1	1	0	1	
Vocab. Quizzes		Practicum		Vocab/Grammar Drills		
n/a	n/a	n/a	n/a	n/a	n/a	
3	1	1	0	1	2	
5	1	2	1	2	1	
1	0	3	0	0	2	
2	0	2	1	0	1	

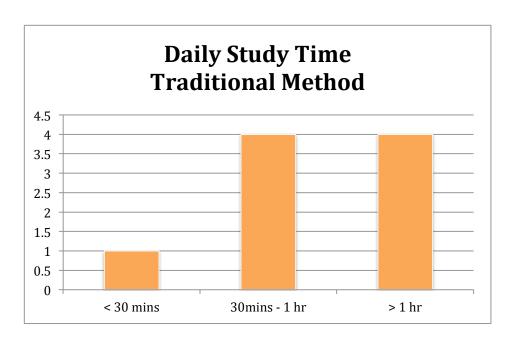




A.3: How much time do you spend on Latin everyday?

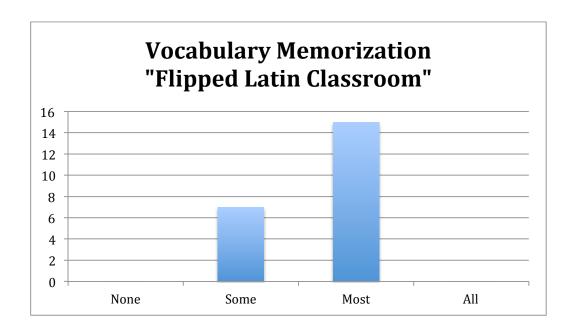
Daily Study Time	< 30 mins	30mins - 1 hr	>1 hr
Class A	1	4	4
Class B	0	3	3
Class C	2	5	5
Class D	0	2	2
Class E	0	3	2

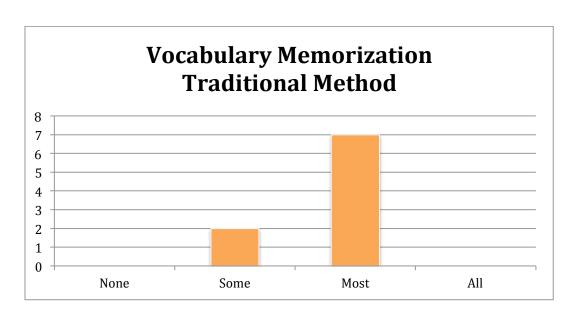




A.4: How much vocabulary do you have memorized?

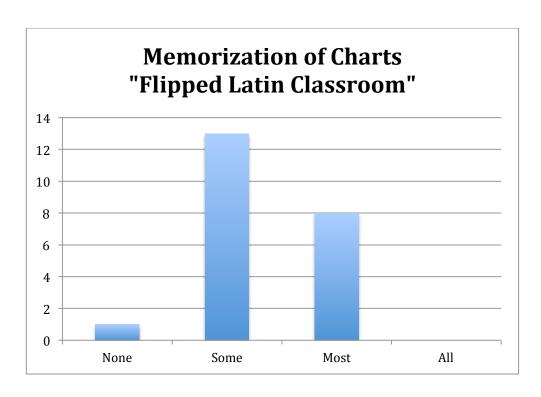
Vocab Memorization	None	Some	Most	All
Class A	0	2	7	0
Class B	0	2	4	0
Class C	0	3	9	0
Class D	0	2	2	0
Class E	0	2	3	0

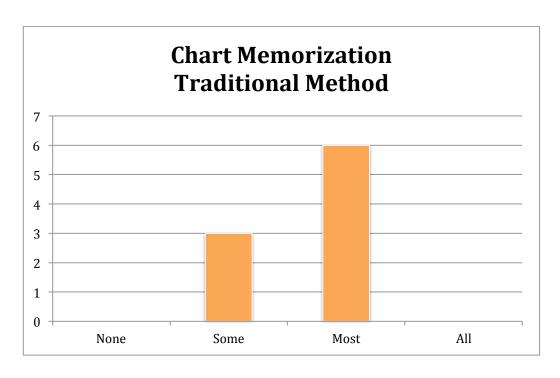




A.5: How many of the charts do you have memorized?

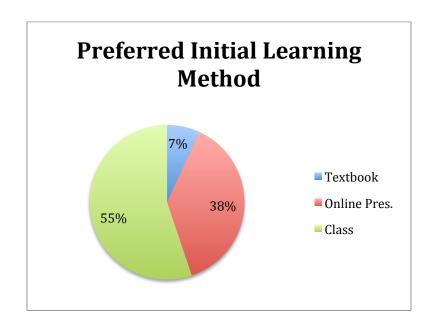
Chart Memorization	None	Some	Most	All
Class A	0	3	6	0
Class B	0	5	1	0
Class C	1	7	4	0
Class D	0	1	3	0
Class E	0	0	4	1





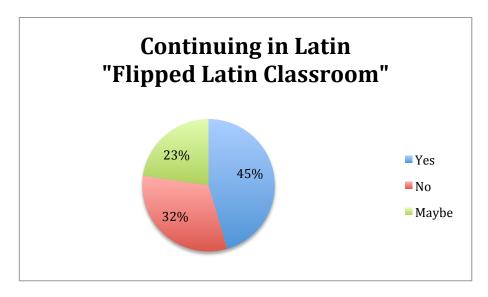
A.6: What was your preferred initial learning method?

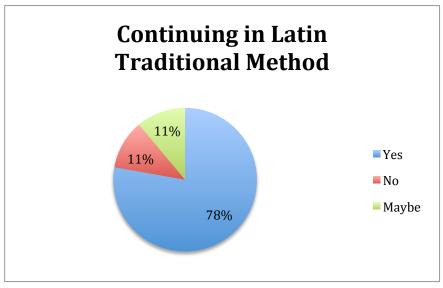
Preferred Initial Learning Method	Textbook	Online Pres.	Class
Class A	n/a	n/a	n/a
Class B	1	4	1
Class C	0	5	9
Class D	1	1	2
Class E	0	1	4



A.7: Do you plan to continue taking Latin after class? Why or Why not?

Continuing in Latin	Yes	No	Maybe
Class A	7	1	1
Class B	3	1	2
Class C	5	5	2
Class D	2	1	1
Class E	4	1	0





Mid-Semester Survey: First-Semester Courses Fall 2016 Executive Summary

Overview:

The Fall 2016 Mid-Semester Survey was the first survey presented to students of the "Flipped Latin Classroom," which gave them the opportunity to critique the course. An altered version of the same survey, which removed questions about the online component of the course, was provided to students learning through the traditional method. This survey produced both expected and unanticipated results. The results of this survey were consulted when the instructors considered changes for the Spring 2017 semester.

A.1: Notable Comments

- Sententiae Antiquae
 - o Traditional method
 - Three students said either these sentences are too abstract or isolated from the topic covered in book chapters.
 - o "Flipped Latin Classroom"
 - Three students state that since they are adapted form Latin sentences they are the most helpful and most relevant assignment.
 - One student says that these sentences are often abstract and can be difficult to understand.

Practice and Review

- o Traditional method
- Two students stated that these sentences are closely connected to the chapters in the book and are the best way to evaluate their understanding.
- o "Flipped Latin Classroom"
- Five+ students viewed the practice and review sentences as the best method for putting concepts into practice.

• Latin Stories

- o Traditional method
- Three students stated that the Latin Stories are the most helpful because they provide context for sentences and are the most entertaining.
- o Two students believe that these assignments are too easy.
- o "Flipped Latin Classroom"
- o Two students believe that the stories are too unconnected from the concepts and vocabulary introduced in the chapter.
- o Two students believe that they are just longer practice sentences.
- o Two students see these sentences as the most applicable to the real study of Latin.

English-Latin

- o Traditional method
- Two students said that this was the most difficult assignment one in a positive way the other in a negative way.
- o "Flipped Latin Classroom"
- One student stated that this assignment is the best way to find out what you do not know.

- Five+ students view this is the best way that they learn the concepts from each chapter.
- Worksheets ("Flipped Latin Classroom" only)
 - o Two students view the worksheets as one-dimensional learning assignments while the other focus on teaching multiple concepts.
 - o Five+ students do not think the worksheets are unhelpful but that they are the least effective method introduced in the classroom.

A.2: Notable Comments

- Presentation Exercises
 - o Two students believed that these exercises did a good job reinforcing the lesson.
 - Three students stated that they never used these exercises and that the material in the presentation was reinforced by in-class assignments.

DIRT Quizzes

- o Five+ students believed that the DIRT Quizzes were too difficult.
- One student stated that the DIRT Quizzes were great review tools but never introduced anything new.

Vocabulary Quizzes

- o One student said that because the Vocabulary Quizzes offered unlimited tries they studied these words for hours more than they would have otherwise.
- o Two students stated that the time limit on the Vocabulary Quizzes was too short.
- Five+ students believed that the Vocabulary Quizzes were essential assignments in helping them memorize the essential vocabulary.

Practicum

- o One student believed that the Practica were too long.
- Two students believed that completing the Practicum assignments were the best way to study for the exam.
- o Three students stated that the Practicum was the best assignment for review and reinforcing the concepts that were introduced in each chapter.

Vocabulary and Grammar Drills

- Two students stated that these drills helped them practice and to work through their assignments
- Five students stated that because these assignments were ungraded they did not feel that they were worth completing.

Further Evidence:

A.8: "In your opinion has class time been used effectively? Why or Why not?"

One hundred percent of "Flipped Latin Classroom" students responded that class time was used effectively, and ninety-five percent stated that they either appreciated the shift in class time introduced by the "Flipped Latin Classroom," or that they would change nothing about how class time is spent.

A.9: Question "Is preparing English-Latin ahead of time more helpful than doing it in class?"

Class A: MWF 1:00pm Hybrid

Sample #1: Prefers on the spot correction

Sample #2: Prefers asking questions during the process rather then having to go back and correct.

Sample #3: Prefers to work in a group setting

Sample #4: Prefers to ask question in the process and comparing with others.

Sample #5: Feels that doing the work alone allows for more understanding and that sometimes it takes away from class discussion.

Sample #6: Prefer the group setting in class.

Sample #7: Tends to forget questions by the time class starts.

Sample #8: More time correcting mistakes and explaining the mistakes of others is beneficial

Sample #9: Neutral as long as answers were discussed in class.

Sample #10: Neutral completing the work before class reinforces individual thoughts, but working with peers and TA's is helpful also.

Sample #11: Neutral same as above.

Class B: MWF 11:00am Hybrid

Sample #1: Yes, it helps with individual learning.

Sample #2: Yes because class time is too short and it feels rushed.

Sample #3: Yes, because I can go through it myself and learn and ask questions.

Sample #4: Preparing ahead of time is better because you have a starting point to work from.

Sample #5: No, More effective to do in groups.

Sample #6: Yes, because then you review in class rather then attempt to solve problems for the first time.

Sample #7: More time to ask questions in class.

Class C: MWF 10:00 am Hybrid

Sample #1: Yes because it allows you to discuss answers about the errors made.

Sample #2: Yes because it provides me the time to think and consider each individual component of grammar.

Sample #3: I enjoy doing them on my own, but by the time I get to class I forget the reasoning.

Sample #4: yes because you cannot depend on the other people to help you with it.

A.10: Question: "If you could change one thing about the course what would it be?"

Class A: MWF 1:00pm Hybrid

Sample #1: Latin as a whole

Sample #2: Explain the declension charts in class more.

Sample #3: Spend more time reviewing previous chapters in class rather than doing strictly group work.

Sample #4: Make the time limit on quizzes longer or shorten it to 20 questions.

Sample #5: Less online more in-class assignments

Sample #6: Not as much online work for every chapter. It takes too long to complete everything.

Sample #7: I would make the drills count rather than the DIRT Quizzes.

Sample #8: Remove the DIRT Quizzes

Sample #9: Make the E2L due before class and allow students to make corrections while going over them in class.

Sample #10: Adding points for the days in class that E2L is not due.

Sample #11: Different online activities that attempt different method of Memorization.

Class B: MWF 11:00am Hybrid

Sample #1: The pace of the course could be slowed

Sample #2: no chanting of the forms

Sample #3: Spend time working on E2L with the class as a whole.

Sample #4: I would make Latin take not much longer than a regular class

Sample #6: Make the time on the vocab. quiz longer

Class C: MWF 10:00am Hybrid

Sample #1: More time on the Vocabulary Quizzes. (6 or 7 minutes)

Sample #3: The course is time insensitive

A.11: Question: "This class has traditionally been taught 5 days a week with no online component. If this had remained true would you have been able to take this class? Would you have preferred to take it in this manner? Why or why not?

Flipped Latin Classroom

54% of students reported that they could have taken the traditional method.

45% of students state that they either could not or would not take the course.

73% of students state they could not take the course because of schedule conflicts.

90% of students state that they prefer the "Flipped Latin Classroom" to the traditional method

Traditional method

88% of students reported that they would prefer the traditional method

55% of students reported that online classes do not work for them.

35% of students reported that they prefer in class meetings every day to facilitate learning and memorization

Appendix B Diagnostic Exam: Second-Semester Courses Spring 2017 Semester

Second Semester Diagnostic Exam (15 minutes)

Please read the entire sentence and choose the answer that best represents the underlined portion. There is only one correct answer.

- 1) Exploratores hostium ${\hbox{\tt R\bar{o}mam}}$ veniebant. A) through Rome B) of Rome C) to Rome D) from Rome
- 2) <u>Verba Vergilī discipulīs discenda sunt</u>. A) The words of Vergil had been learned by the students. B) The words of Vergil must be learned by the students. C) The students would like to learn the words of Vergil. D) Vergil's words will be learned by the students.
- 3) Liberı̃ ex silvã quam celerrimẽ cucurrẽrunt. A) rather fast B) that fast C) as fast as possible D) Very fast
- 4) Fīliae dīxērunt sē mūsicam in theātrō <u>audīvisse</u>. A) were hearing B) will hear C) hear D) had heard
- DO NOT TRASLATE THE PASSAGE! You are not expected to know all the vocabulary Read the questions and refer to the passage for the correct answer for each question.

WOMEN IN POLITICS

After the Second Punic War, Roman women support the repeal of the Oppian Law.

 Ölim Römae rēs parva, quae inter perīcula bellörum magnōrum intercessit,
 1

 causa magnī certāminis fuit. Duo tribūnī Lēgem Oppiam abrogāre voluērunt.
 2

 Haec lēx imperāvit nē qua mulier plūs aurī quam sēmiunciam habēret, nec veste
 3

 versicoloīrī ūterētur, nec vehiculō in urbe, nisi sacrōrum pūblicorum causā,
 4

 veherētur.
 5

Mons Capitolinus turbă hominum faventium legi adversantiumque complebătur. Mătronae nec üllă auctorităte nec <u>verecundia</u> nec imperio virorum contineri in domiciliis suis poterant. Omnes vias urbis aditusque in Forum <u>obsidebant</u>. Augebătur turba mulierum cotidie; nam etiam ex parvis oppidis conveniebant.

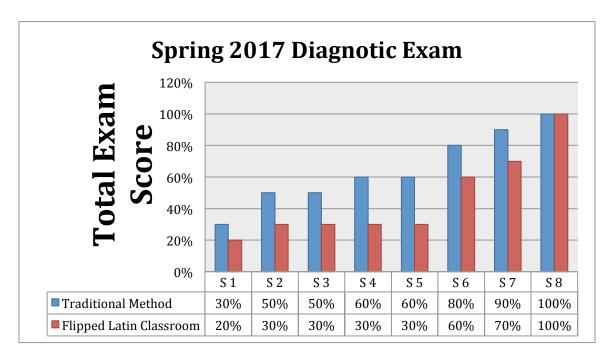
```
1 intercessit = happened
2 abrogăre = repeal
3 qua = any; sēmiunciam = half ounce
4 versicolori = multicolored
5 Certamen, - minis (n) = contest
6
7 verēcundiā = by modesty
8
9 obsidēbant = were blocking
```

- 5) In line 2, magnī certāminis contrasts to which Latin phrase? A) ōlim Rōmae B) rēs parva
- C) inter perīcula D) Duo tribūnī
- 6) In line 2, the best translation of voluerunt is A) wanted B) had wanted C) used to want
- D) will have wanted

(Flip Over)

- 7) In line 3, imperāvit nē qua mulier... habēret means A) lest he had any woman order B) lest he order any woman to have C) no one ordered any woman to have D) ordered that not any woman have
- 8) In lines 3-5 (*Haec... veherētur*) we learn that the law forbids women from A) traveling to other cities B) presenting lavish entertainments at home C) spoiling their children with gifts D) wearing extravagant clothes
- 9) Lines 7-8 (*Mātrōnae...poterant*) describe a dispute between A) Roman men with their wives B) generals and their soldiers C) religious leaders and their followers D) mothers and their children
- 10) In lines 8-10 (*Omnes... conveniēbant*) we learn that A) officials tried to calm the crowds B) the crowd threatened the women C) the women fled to nearby small towns D) women from outside the city joined the protest.

B.1 A Comparison of Scores: students in the "Flipped Latin Classroom" with students of the Traditional Method



Overview: The scores of the eight students enrolled in second-semester "Flipped Latin Classroom" courses were compared with the scores of the eight students enrolled in the second-semester traditional method course. Overall the traditional method students performed better on this diagnostic exam scoring over ten percent better on average than students of the "Flipped Latin Classroom." The questions for the diagnostic exam were selected from Level III 2016 National Latin Exam. There are two further points that should be considered when analyzing this graph and the following data. First, the National Latin Exam is designed to be provided to students who learned through versions of the traditional method. Second, students in the traditional method were able to take this quiz as a part of their grade while the "Flipped Latin Classroom" students were took the quiz voluntarily.

B.2 Question-by-Question Analysis of the Spring 2017 Diagnostic Exam

Question 1: The Accusative	Correct	Incorrect	% of
			Correct
			Responses
Flipped Latin Classroom	3	5	38%
Traditional	4	4	50%
Question 2: Future Passive	C	I	
Periphrastic			
Flipped	2	6	25%
Traditional	4	4	50%

Question 3: Superlative	С	I	
Flipped	6	2	75%
Traditional	8	0	100%
Question 4: Perfect Infintive	С	I	
Flipped	7	1	88%
Traditional	4	4	50%
Question 5: Vocab/Abstract	С	I	
Flipped	2	6	25%
Traditional	5	3	63%
Question 6: Perfect Tense	С	I	
Flipped	2	6	25%
Traditional	3	5	38%
Question 7: Jussive	C	I	
Flipped	4	4	50%
Traditional	8	0	100%
Qustion 8: Comprehension	С	I	
Flipped	6	2	75%
Traditional	4	4	50%
Question 9: Comprehension	C	I	
Flipped	3	5	38%
Traditional	5	3	68%
Question 10: Comprehension	С	I	
Flipped	4	4	50%
Traditional	5	3	68%

Overview: This data reinforces the information that was gathered from the chart in the previous section of this appendix. The students in the traditional method seem to slightly out perform the students in the "Flipped Latin Classroom" across all the categories presented in the diagnostic exam. This data and further examinations will useful in discovering the areas of instruction that still need to be improved for future "Flipped Latin Classroom" courses.

Appendix C Course Survey "Flipped Latin Classroom" Courses Spring 2017 Semester

Mid-Semester Course Evaluations Latin 108

The Latin 108 hybrid is a new course this semester and this is one method by which we are attempting to make this course more accessible and helpful to students.

Comments made in this format will be confidential and will be used to improve the course in a variety of ways.

What type of online exercise is the most helpful and what type is least helpful? Circle the one that you find most helpful, draw a line through the one you find least helpful and explain why.

DIRT Quizzes Vocabulary Quizzes

Vocabulary and Grammar Drills

Practicum

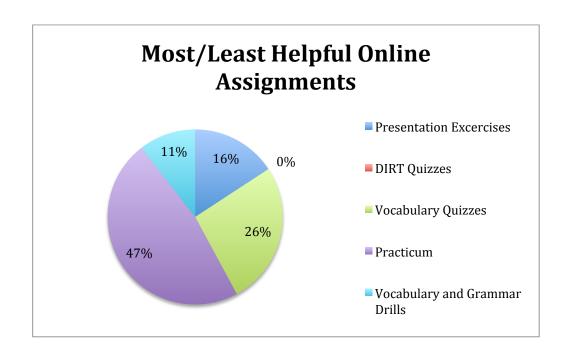
Presentation Exercises

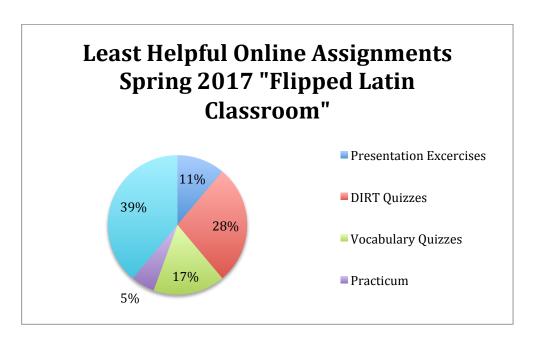
How much	time do you s	pend on Latin on ave	erage every day?	
Do you typ	ically study alo	one or in a group? (Ci	rcle one) Alon	e Group
What is the	best way to le	earn new material? (C	ircle one) Textbook	Presentation Class
Which in-c	lass exercise is nelpful, draw a	least helpful? Which line through the one	is the most helpful? Ci you find least helpful a	rcle the one that you and explain why.
Sententia	e Antiquae	Practice and review	Latin Stories	Worksheets
		English to	Latin	
How much	of the vocab	ılary have you memo	rized? (Circle one)	
None	Some	Most	Every Single Word	
How many	of the declen	sion/conjugation cha	rts have you memorize	d? (Circle one)
None	Some	Most	Every Single One	
In your op	inion has class	time been used effec	ctively? Why or Why no	ot?

If you could change one thing	what would it be?
Oo you plan to continue takin	ng Latin after this class? Why or why not?
This class is has traditionally had remained true would you tin this manner? Why or wh	been taught 5 days a week with no online component. If this have been able to take class? Would you have preferred to take y not?
How did you hear/learn abou	at this course?
Please feel free to write in th you may have.	e remaining section of this sheet any further suggestions that

C.1 What online assignment is the most or least helpful for your study of Latin? *Numbers marked in red represent the number of students in each class who responded that this assignment was the least helpful.

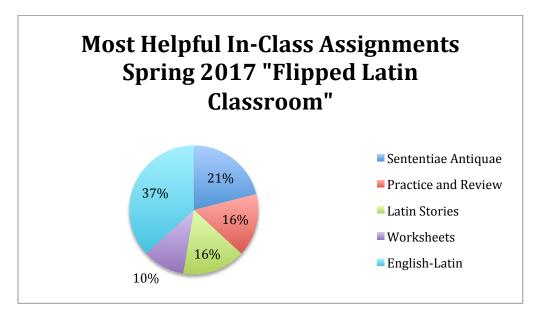
Most/Least Helpful Online Assignments Presentation Excercises DIRT Quizzes							
Latin 109 9:00-	-10:00am MWF=	Class A	0	1		0	1
Latin 108 10:00	- 11:00am MWF	= Class B	2	0		0	0
Latin 104 1:00	-2:00pm MWF=	Class C	1	1		0	4
Vocabulary Quizzes Practicum Vocab			ocabula'	ry and Gr	amma	ar Drills	
1	0	2		0	1		2
0	2	1		0	0		1
4	1	6		1	1		4

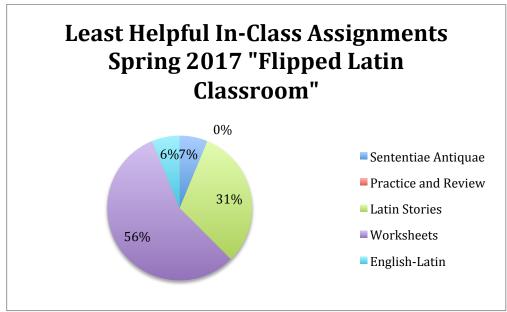




C.2 What in-class assignments are the most/least helpful for your study of Latin?

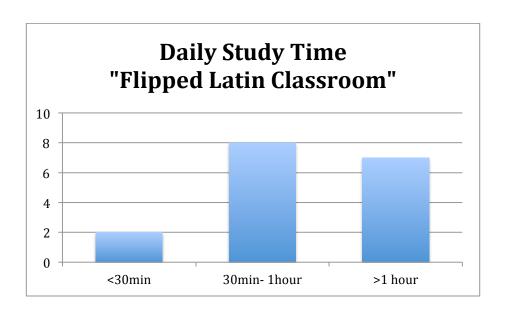
Most/Least Helpful In-Class Assignments Sententiae Antiquae Practice and Review					view		
(Class A	1	0		0	0	
Class B		1	0		0	0	
Class C		2	1		3	0	
Latin Stories		Worksheets		Engl	lish-Latin		
1	0	0	4	1	2		0
1	1	0	2	2	1		0
1	4	2	3	3	4		1





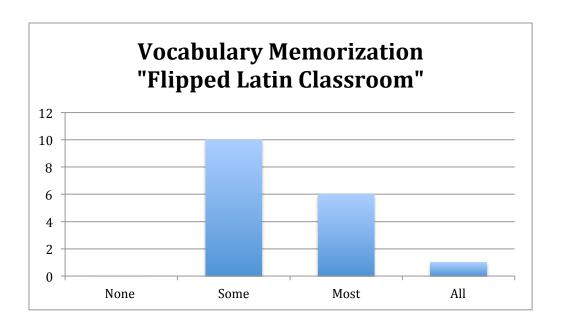
C.3 How much time do you spend on Latin everyday?

Daily Study Time	<30min	30min- 1hour	>1 hour
Class A	1	2	1
Class B	0	2	1
Class C	1	4	5



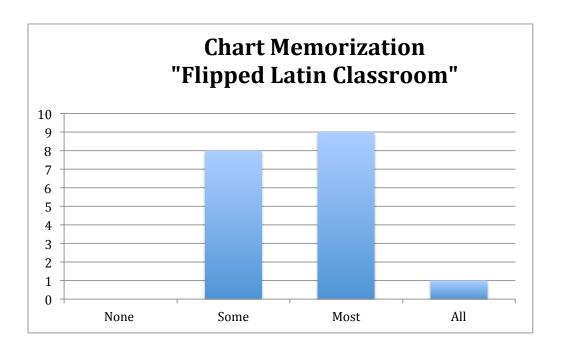
C.4 How much of the vocabulary do you have memorized?

Vocabulary Memorization	None	Some	Most	All
Class A	0	3	1	0
Class B	0	3	0	0
Class C	0	4	5	1



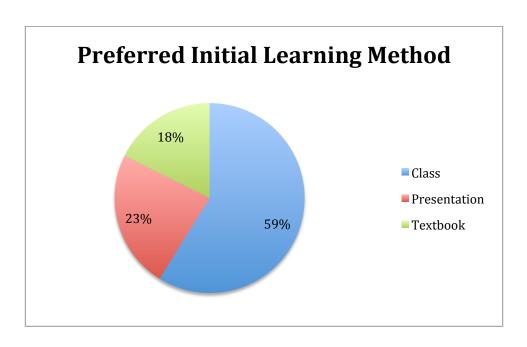
C.5 How many of the charts do you have memorized?

Chart Memorization	None	Some	Most	All
Class A	0	1	3	0
Class B	0	2	1	0
Class C	0	5	5	0



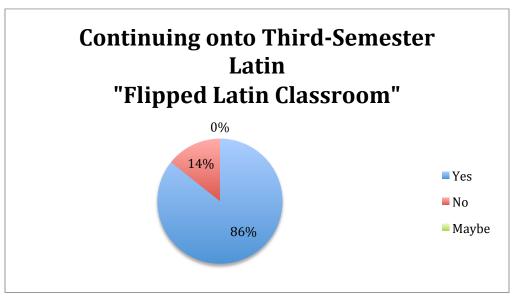
C.6 What is your preferred initial learning method?

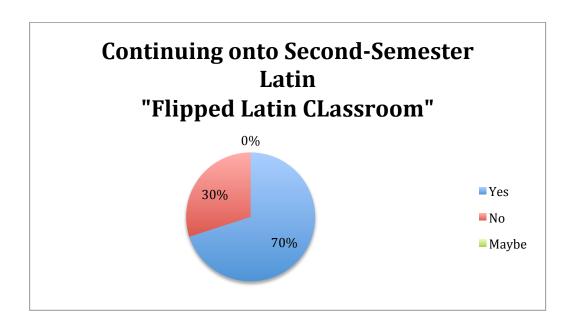
Preferred Learning Method	Class	Presentation	Textbook
Class A	3	0	1
Class B	0	2	1
Class C	7	2	1



C.7 Do you plan to continue taking Latin after this class? Why or Why not?

Continuing in Latin	Yes	No	Maybe
Class A	3	1	0
Class B	3	0	0
Class C	7	3	0





Course Survey: First and Second-Semester Courses Spring 2017- "Flipped Latin Classroom" Only Executive Summary

Overview:

The course survey for the Spring 2017 semester was presented to students of the "Flipped Latin Classroom" in both the first and second-semester course. This survey provided them the opportunity to critique the course and provide feedback in an anonymous manner. The responses gathered from the students in the second-semester course taught using the traditional method were too insignificant to include in this appendix. This survey provided results that were both expected and unanticipated. The comparison of these results and those gathered from the midsemester survey in Fall 2016 provided insight to changes that must be made to the course and in its instruction for the coming school year.

C.1: Notable Comments

- Presentation Exercises
 - One student stated that these exercises ensure his understanding of the most important topics introduced in each chapter.
 - o One student said that they never complete these exercises.
- DIRT Quizzes

- o Two students stated that the DIRT Quizzes seem to be worded unclearly or are written in a fashion in order to trick or confuse the student.
- One student said that these assignments are often random.

• Vocabulary Quizzes

- Three students stated that the time constraints on the Vocabulary Quizzes add stress, and make the quizzes to difficult.
- Two students stated that these are the best way to review matter and gauge whether or not they are ready to move on.

Practicum

- Four students said that these are the best assignments for review and to ensure that they understand the material.
- o One student said that the assignment was too long.
- o One student stated that the assignment offers questions that combine various skills and allows them to practice all the necessary components.

Vocabulary and Grammar Drills

- o Five students stated that they do not complete these drills either because they are not worth any points or they are unnecessary.
- One student believes that these assignments are extremely helpful because they allow for the most direct practice of material.

C.2:

• Sententiae Antiquae

- o One student referenced them frequently because they could help on the Practicum
- One student believed that these sentences were a great review of material and various scenarios.
- o One student stated that there is never enough time to do these sentences.

• Practice and Review

• One student referenced that these sentences helped the lessons to "sink-in."

Latin Stories

- o Two students stated that these assignments were the most relevant and helpful to their study of the language.
- Two students said that they were unhelpful because we did not complete enough of them in-class.

Worksheets

- Three students stated that the worksheets were not completed often enough to make a difference.
- o Two students stated that they were often repetitive and were not challenging.

• English-Latin

- Three students stated that these assignments are the most helpful because they cause you to think "backwards" and test your understanding of the concepts.
- One student stated that the working together and conversation that accompanies these sentences is extremely helpful to their learning.

C.7:

• Two students responded that they were not going to continue Latin because it was not what they expected, or that they want to attempt another language.

- One student says that they do not have time to continue studying the language in the coming semester.
- Twenty-Five percent of students desire to continue due to graduation requirements either for their Classics major or other degree program.

Further Evidence:

C.8: If you could change one thing about the course what would it be?:

Class A: Latin 109 9:00-10:00am MWF

- Sample #1: Having the course for five days a week would increase exposure.
- Sample #2: Coming to class should be more necessary.
- Sample #4: More time on the Vocabulary Quizzes.

Class B: Latin 109 10:00-11:00am MWF

- Sample #1: Not as much homework
- Sample #2: More Latin Stories, retakes on the Praticum, and six minutes for vocabulary.
- Sample #3: Untimed Vocabulary Quizzes

Class C: Latin 104 1:00-2:00pm MWF

- Sample #1: Slow down the pace of the course.
- Sample #2: Less online work
- Sample #3: Different drills and worksheets in-class.
- Sample #4: Teach the material first in-class before the online presentation.
- Sample #5: Too much online work
- Sample #6: Take exams in-class not online.
- Sample #8: Introduced more aspects of Roman culture, history, and mythology.

C.9: Question: "This class has traditionally been taught 5 days a week with no online component. If this had remained true would you have been able to take this class? Would you have preferred to take it in this manner? Why or why not?"

- Seventy-six percent of student reported that they would prefer a course like the "Flipped Latin Classroom" to a course taught by the traditional method.
- Fifty-eight percent of students stated that they would have been unable to take the course by the traditional method.
- Fifteen percent of students preferred the course taught by the traditional method and would have taken the traditional course at a different time.

Appendix D Sample Syllabus for "Flipped Latin Classroom" Spring 2017

Latin 104: Elementary Latin 1 (Hybrid) Fall 2016: MWF 1:00-1:50 pm, 1043 Wescoe TR online

Scott McMickle Office Hours: By appointment 1041 Wescoe E-mail: scott mcmickle@ku.edu

Text:

There is only one required text. You have two options for obtaining it (I recommend option A):

A. Purchase online a used copy of Frederic Wheelock, *Latin: An Introductory Course Based on Ancient Authors* (various publishers, but be sure to get **third edition** *only*). Copies are available for as little as \$0.01.

OR B. Download/print a PDF of the text of Chapters 1-22, plus the <u>essential</u> "Wheelock Extras", from the "Files" link in the left-hand column of the class website.

Class website:

All additional materials, assignments, quizzes, and tests are available at the class website. Login page is https://usu.instructure.com/login/canvas. Your user name will be your KU email address in full (as it occurs on Enroll & Pay); I will give you your unique password on the first day of class.

Course Description and Requirements:

The aim of this course is to acquire a familiarity with the Latin language so that after one year you will be reading with skill and enjoyment original texts written in Latin. On-line lectures and drills each Tuesday and Thursday will concentrate on the basic grammatical elements of Latin. In-class meetings on MWF will focus on assigned homework and unassigned group work, supplemented occasionally by Latin presentations on ancient Roman civilization. MWF attendance is required. In Latin 104/5 we plan to cover the first twenty-two chapters of *Wheelock's Latin*. In the Spring 2017 semester (Latin 108/9) we shall complete *Wheelock's Latin* and spend much of the term reading original Latin texts from ancient Rome. Final course grades will be determined according to the following percentage (grading is on a straight scale: A=93.5% and above; A-=89.5-93.5%; B+=86.5-89.5%, etc.):

3 Exams (based on 300 pts. total; 100 pts. each)	37.5%
Individual Chapter Assignments (based on 2200 pts.)	40%
Final Examination (100 pts.;)	12.5%
Participation (1 point for attendance per class)	10%
1 ,	$\overline{100\%}$ (of final grade)

Fifty percent of your final grade will be based on three one-hour Exams and a Final, each equally weighted (12.5% of your final grade). The other fifty percent will be based on the average of scores earned in individual chapter assignments (Practica, English-to-Latin sentences, Vocabulary Quizzes, DIRT Quizzes) including the attendance grade. Each chapter offers the opportunity to earn 100+ points in individual chapter assignments. Details on the next page of the syllabus.

Make-Up Policy: Make-up examinations will only be given in the case of a medical or family emergency; prior notification must be provided by calling the Classics Department (864-3153) or by emailing scott_mcmickle@ku.edu

Accommodations: If you have a disability for which you wish to request accommodations and have not contacted the AAAC, please do so as soon as possible. They are located in 22 Strong Hall and can be reached at 864-4064.

Academic Misconduct: Students should review the university policy on Academic conduct at: http://policy.ku.edu/governance/USRR#art2sect6

Religious Observances: Should the examination schedule for this course conflict with your mandated religious observance, please contact me at the beginning of the semester so that we can schedule a make-up exam at a mutually acceptable time. Conflicts with Instructor: If you experience difficulties or feel that you have been treated unfairly, please speak directly with me. If you prefer, or if the issue is not resolved, feel free to arrange a meeting with Prof. Tara Welch, Chair of Classics (tswelch@ku.edu).

SALVETE ET BONAM FORTUNAM!!

DAILY ASSIGNMENTS

Class time on MWF will normally consist of going over assigned work and translating at sight exercises in the book (English to Latin, P&R, and SA). You are required to do the online work assigned below for Tuesday and Thursday **BEFORE** coming to class the next day.

Presentations. Presentations are videos ranging from fifteen to forty-five minutes explaining in detail the material covered in each of the chapters in Wheelock. You should view these at the beginning of each lesson. Each Presentation is accompanied by optional supplementary material: a **Transcription** (a text of what is said on the Presentation), a **Presentation Exercise** (a worksheet to guide note-taking) and a **DIRT Review** (a brief on-line drill covering the new grammar material in each chapter). To ensure that you are prepared for learning Latin there are also four **Grammar Preview Presentations** (Nouns/Adjectives, Prepositions, Verbs, Subjects/Direct Objects). Students who feel they need to review parts of speech (nouns, adjective, verbs, prepositions) and basic grammar (subjects, direct objects) should watch these Preview Presentations at some point prior to beginning or very early in their study of Latin grammar.

Individual Chapter Assignments (2200 total pts.; 22 Chapters at 100+ pts. each). This part of your grade is based on the average of the total score earned on four types of graded assignments: (1) Vocabulary Quizzes, (2) English-to-Latin Homework, (3) Practica and (4) DIRT Quizzes ("Do I Remember This?"). To help you prepare for these graded assignments, each chapter also includes four types of ungraded exercises: (1) Presentation Exercises, (2) Presentation Drills, (3) Vocabulary Drills and (4) Grammar Drills; most chapters also include a (5) Worksheet. All of these are available on the course web site.

Ungraded Exercises. Ungraded exercises are designed to help you absorb and practice the new material in each lesson. They also help you review the grammar and vocabulary in previous chapters. You should complete ungraded exercises before attempting the graded assignments in each chapter.

Presentation Exercises and Drills. These are worksheets and drills designed to reinforce comprehension and memorization of new material. Presentation Exercises are worksheets to be filled out as you watch the Presentation. Presentation Drills are short, on-line drills to ensure you have absorbed all the new material correctly.

Vocabulary Drills. These on-line flash cards review the chapter's vocabulary.

Worksheets. Most Presentations are accompanied by worksheets. Please complete these on the days assigned below and bring them to the next class.

Graded Assignments. Graded Assignments are designed to assess your understanding of Latin vocabulary and grammar. A passing total score (80% or higher) on a chapter's graded assignments is an important prerequisite in proceeding to the next chapter. Please note that while it is possible to score above 100% on the graded assignments for a chapter, no more than 100 points will be awarded to your total points.

Vocabulary Quizzes (25 pts.). Vocabulary Quizzes focus exclusively on the vocabulary which is or has been formally introduced in the vocabulary lists found in each chapter of Wheelock's textbook. They use the Practice-and-Review (P&R) and *Sententiae Antiquae (SA)* sentences from the current chapter. The Vocabulary Quiz will feature twenty-five such sentences that will appear in succession on screen with one word in each sentence highlighted. You will receive one point each time you define the highlighted word correctly using one of Wheelock's definitions and put it in its proper category (first declension, second conjugation, etc.). These quizzes are open-book and timed (5 minutes) and may be retaken as many times as you like, always restarting at the beginning. Only the single highest score you earn will be recorded for each chapter.

DIRT Quizzes (10 pts. bonus). DIRT ("Do I Remember This?") Quizzes test your knowledge of material covered prior to the current chapter. The content of any particular DIRT Quiz is based on the DIRT Presentation found in a particular lesson. <u>DIRT Quizzes are open-book and timed (3-5 minutes)</u>. Each DIRT Quiz has a maximum of 10 possible bonus points. While DIRT Quizzes are included in a particular chapter's on-line materials, they do not have to be taken with that chapter. Once a DIRT Quiz is available, you may take it <u>at any time</u> before the course closes. <u>DIRT Quizzes are not repeatable</u>.

English-to-Latin Sentences (50 pts.). In every chapter of Wheelock at the end of the first set of Latin sentences (P&R after Chapter 2) you will find English sentences to be translated into Latin. Your ability to provide a correct Latin translation of these sentences is one critical indicator that you have mastered the material in this chapter and may move on to the next chapter. As you complete these translations, you may seek my help. These are graded by me.

Practica (35 pts.). Practica are open-book, graded exercises based on the P&R and SA sentences in the current chapter, though many questions on Practica will include material drawn from earlier chapters. <u>Practica are open-book and untimed.</u>

Study Habits. This is a hybrid version of a **five-credit** course that would otherwise meet five days per week. In order to learn the language effectively you must treat this class as a 5-day a week course that requires you to work on Latin on Tuesdays and Thursdays as well as on class meeting days. The importance of regular study habits and keeping up in Latin cannot be overemphasized. Please contact me *immediately* if you are having difficulties. Regular course participation is your best key to success in language study. **Find the time to study Latin every day! Languages are learned through repetition.**

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