

Statistics: A Key to Student Success in College and Life

By John Loase

3

A few years ago, Ben Fusaro asked me what I thought was the most important college course for an undergraduate. I replied in an instant: Statistics. Ben agreed. His innovations in mathematical modeling and environmental mathematics appeal to our advanced students. Statistics, on the other hand, could help all undergraduates in both their future personal and professional lives.

In 2005, the Department of Education released a report that revealed mathematics to be the most serious obstacle to college graduation in the United States. The report described mathematics as an "insurmountable barrier" for economically disadvantaged college students. We should be looking to fix this.

We can make a difference in student retention, effect long-term influence toward our students, and share an enjoyable, almost fun, experience. Students in my statistics courses are successful. Concordia College—NY has wonderful students with mean SAT scores in mathematics at approximately the national average, but this approach could be replicated at any college. I came up with many of these strategies during my eighteen years teaching statistics at SUNY—Westchester Community College. The resulting course was enjoyable for the students and for me.

Here is how. I rely on four moves that are the results of two decades of experience.

Shorten the List of Topics

If I did not use a topic from statistics in my first five published interdisciplinary books or my consulting work (both college and legal), then I did not teach that topic. We are still left with seven or eight key topics: probability, small and large sample confidence intervals, sample size, one and two sample hypothesis testing of the difference of means and proportions, correlation, and linear regression. That is plenty. Postpone anova,

multiple regression, and nonparametric statistics for a second, optional course.

Some might feel that this amounts to lowering standards. But consider the collateral damage of finishing the book. Do you really reach the students by covering a different topic every day with little time to apply the concept to the student's future personal and professional life? Are we denying students an opportunity to become an English teacher or social worker because he/she cannot understand Chebyshev's Theorem?

I confess to ignorance as to where Iraq is on the modern globe. My high school and college French were not adequate for me to obtain routine directions while in Paris. We believe that students need arithmetic and algebra as life skills. As a consequence, we frequently end up denying them a college degree, which is essential for economic survival. Are we abusing our power by maintaining the status quo without scrutinizing the role mathematics plays in winnowing the preferred jobs?

Rely on the TI-83 Calculator

Many (if not most) of our students cannot read their textbook. Some students will never learn elementary algebra, despite our best efforts. The calculator compensates for their mathematical handicaps. I wrote a 92 page book, *Essentials of Elementary Statistics (TI-83 Based)*, that I give each student for free. For every topic I teach in statistics, my book shows the students the step-by-step key strokes to perform the statistical analysis. This becomes my main text for statistics. Write me and I will send you a copy of my book, that you can duplicate and distribute to your students, until that blessed day when (or if) it is published. I assign Triola's masterful *Elementary Statistics* for additional homework and as an invaluable lifelong reference text.

Have Fun

I assign three interdisciplinary books

and require students to write essays and attend book discussions on the readings. If they fail to attend the discussion (with the essay as ticket for admission), they lose a letter grade. My assigned books are *Man's Search for Meaning* (Frankl), *Our Neglect, Denial, and Fear* (Loase), and *The Millionaire Next Door* (Stanley and Danko). The three essays, which go through a revise-rewrite cycle, coupled with a required short research paper, constitute 1/3 of the students' grade. Each student is required to write a two page (400-500) word essay critiquing each book and discussing the statistical issues that I raise from each book.

Man's Search for Meaning is one of the twentieth century's great works. I relate statistics to the book by having each student complete a survey to quantify students' perceptions of their positive influence toward others. We discuss this concept at the book seminars. As a mathematician-psychologist, the books I assign may be different from the ones you assign. Statistics has the potential to prepare students for their future personal and professional life with relevance that few courses can rival, and using it to think about books such as these highlights that potential.

If you find the readings interesting, your students may as well. At worst, they will be amazed by our idiosyncratic tastes. Experiment. Have fun. If you are not having fun, your students are not.

I highly recommend *The Millionaire Next Door*, an outgrowth of extensive data mining and statistical analysis, as one of your required readings. It focuses on money and how to become rich in America — a high interest topic for everyone. I suggest to the students that they advise their "Baby Boomer" parents about retirement, using material from the book. I also caution them that their parents do not expect us to teach their children anything that could help them. Be gentle with parents with weak hearts: the shock of being counseled by their children may be too much to bear.

Allow Students In

If a student places in college arithmetic, which is in fact a euphemism for fourth grade arithmetic, the conditional probability of that student graduating from college within five years is in the same ballpark as one of us becoming a major league athlete. We are no better than the elementary, junior high, and senior high mathematics teachers, who failed to impart the fundamentals of arithmetic, and they had 180 days a year. We have 45–60 class sessions. Yes, some students may earn a C in statistics without having mastered addition of fractions. But that student now has an improved chance of graduating from college, earning a decent living, and hiring an accountant to do his/her taxes.

I consulted at one college that had a failure rate far in excess of 50% among

its educationally disadvantaged students. At another college, the Director of Counseling regularly informed me that the high rate of remedial mathematics failure was cutting the graduation rate in half. Effective remedial courses are costly, resource intensive, and only available to a small fraction of the under-prepared mathematics students. Those same students could succeed in a statistics course.

Few professions scrutinize the fairness of their credentialing system, which creates winners and losers. In fact, several professions increase their mathematics requirements whenever supply exceeds demand. Several years ago, I attended an MAA session on “Why is Math so Unpopular?” After an hour of missing the painful truth, I raised my hand and asked whether math was so unpopular because we mathematicians serve as the

students’ executioners, by whom they are screened out of Engineering, Medicine, and MBAs. Mathematicians have the tools and the intellect to scrutinize our largely unchallenged assumptions about what constitutes essential mathematical knowledge for college graduates. We could lead other professions in a spirit of societal transformation.

We can prepare all our students for their future professional challenges by tapping the vitality of statistics. We need to prune the curriculum, add enrichment activities, empower students with the TI-83 Calculator, and (if remediation does not work) give students a chance to succeed in statistics.

John Loase is Chair of the Mathematics Department at Concordia College-NY.

4

It is Time to Support Extremes

by Reza Noubary

Traditionally, statistics has focused on the study of values with high frequencies and on averages. This becomes clear when we examine textbooks and course descriptions for introductory statistics courses. In today’s world, however, it is not sufficient to focus on averages alone. It has become important and even necessary to study extremes and rare events, since they are usually critical, newsworthy, and are often accompanied by severe consequences.

The celebrated central limit theorem has given statistics its focus on averages and we do what we know how to do. The statistical theories of extremes are less simple, less unified, and more recent. However they are not less important and there is a need for their inclusion in introductory statistics courses.

Why Averages?

Most of the elementary mathematics we teach deals with the “smooth” part of the world. In the same way most statistical methods are based on the idea of smoothing the data as a

part of their analysis. Specifically, some methods treat the data as a message and seek to decompose it into a systematic (deterministic, trend, signal) part and a random (stochastic, noise) part.

When the form of the systematic part is known, it is easy to separate it from the random part. In the absence of information pertaining to either systematic or random parts, smoothing is used for separation. This is usually carried out assuming that the systematic part is smooth and the random part is rough. Smoothing is an exploratory operation, a means of gaining insight into the nature of data without precisely-formulated models or hypotheses. Smoothing is often achieved by some sort of averaging (low-pass filtering). Once the smooth part is determined, the difference between the original message and the smooth part is used to present the rough part. The rough part is usually utilized to make reliability statements regarding the systematic part. For data with a time index (time series), one popular smoothing technique is the so-called moving average. The idea is to

average the neighboring values and to move it along the time axes.

Why Extreme Values?

In many applications, it is not appropriate to focus on averages alone. In fact, there are many instances where extreme values and values with low frequencies are of more concern. Examples include: large natural disasters compared to moderate ones; weak components or links compared to their average counterparts; large insurance claims compared to average claims.

Extreme values are usually analyzed using one of the three major theories: The “Extreme Value Theory” that deals with maxima or minima of the subsamples, the “Threshold Theory” that deals with values above or below a specified threshold, and the “Theory of Records” that deals with values larger (smaller) than all the previous values.

These theories deal with the actual values of the extremes. The frequencies of extremes are analyzed using the

How to Excel at Math Transformation

5

John Loase

I started teaching math 41 years ago in an economically disadvantaged junior high school. On day one I was given the syllabus — adding and reducing fractions by prime factorization, least common multiples, an axiomatic approach to prove why the product of two negatives was positive. As most of my eighth grade class did not know the times table, the curriculum was sheer madness.

I adjusted, taught a lot of basics. Despite herculean efforts, the majority of the students never reached the eighth grade level. I believed things might have been better, had the students been properly taught in sixth or seventh grade. The next year I taught one sixth grade class, and tried to do it “properly.” Despite my assertive efforts, most who *started* way behind *stayed* way behind. I learned that if a student falls three or more years below grade level, catching up is rare.

Remedial efforts usually have limited success, especially at the college level. The conditional probability of a remedial college professor of imparting facility with arithmetic and algebra to a student who has failed to achieve mastery of these in the previous 13 years is very low. How low? A recent report from the Strong American Schools initiative in Washington, D.C. found that only 19% of students who require three or more remedial courses in college graduate with a four year college degree within eight years.

It is time to change. Here are five suggestions for how we can improve our colleges’ dismal record with such students.

1) *Give talks at the high school level* about the importance of taking hard high school classes and striving for excellence. This fall I delivered two seminars at local high schools entitled *How to Excel in College*. I organized these in partnership with honors students from Concordia College, where I head the mathematics program. I divided my part of the seminar into two parts: strategies for students for whom mathematics poses an obstacle, and strategies for those for whom it is an opportunity.

I gave the audience both verbal and written advice on how to optimize their college opportunities, based on my 40 years of teaching mathematics, from grade six through graduate level. Our Concordia honors students discussed how they have achieved success at college. Naturally, the college students stole the show, as they should. They are nearly the same age as

the audience and spoke with an authority that was a pleasure to witness:

I waited 24 years to visit economically disadvantaged high schools. This was too long. We have to leave the Ivory tower and serve as guides and mentors. We plan to visit Harlem’s Promise Academy in the spring to deliver our seminar. Geoffrey Canada’s revolutionary effort in Harlem and beyond, designed to transform educational achievement in economically disadvantaged schools, is a national imperative. We should join. Please email me at Concordia, and I will send you a copy of my PowerPoint, that you may use to develop your own outreach efforts.

2) *Scrutinize the math requirements at your college.* A one of my former colleges, the Director of Counseling regularly told me that mathematics was cutting the graduation rate in half. In an article in the December 2007 issue of MAA FOCUS, I suggested that statistics if properly integrated into the college requirements, could increase college success for remedial students. We need to develop alternative routes to certify that our students can succeed in their future profession. At present we frequently serve as their executioners. We should be allies instead.

3) *Staff remedial courses with professors who are student-centered and patient.* Most of us mastered algebra by age 14 and we may feel this level of understanding is a “standard” that every student should reach. But most of us were not educated in economically disadvantaged schools, where some math teachers may not have achieved mastery of algebra themselves. Nearly one-half of eighth grade math teachers in the U.S. are not currently certified. Affluent communities, where many professors were raised, only employ the best trained teachers.

4) *Search for talent among women and the economically disadvantaged.* According to Alan Greenspan in his recent autobiography, our math and science education poses a greater national risk than international terrorism. If an economically disadvantaged student earns 550 on the math SAT, this student should be encouraged to discard the anti-mathematics attitudes com-

mon in many communities and guided through calculus and beyond. In an economically advantaged environment, this same student might have earned Ivy League mathematical proficiency. We have to be creative to train more mathematicians, statisticians, and mathematics teachers.

5) *Adjust the college mathematics curriculum* to emphasize the least you need to know for the next level. You do not need the quadratic equation and algebraic fractions to learn statistics. According to Ben Fusaro, statistics is the most important undergraduate course for all students. I wholeheartedly agree. We are currently depriving our society of future English teachers and social workers due to their lack of ability to solve for imaginary numbers in a quadratic equation.

Many colleges seem willing to countenance a failure rate above 50% in their remedial programs. At Concordia, we have a 10% failure rate. We use the "least you need to know for the next level" approach. And many students jump to calculus most successfully with this program. Our fraternity of mathematics professionals may have been part of the problem in the past, but we can now lead as partners in the solution. ☐

John Loase is Head of Mathematics at Concordia College-NY. He can be reached at splurge47@aol.com.

Alder Awards: Call for Nominations

6

MAA's Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member honors teaching excellence in beginning university and college faculty members. Established in 2003 and named after Henry Alder, former President and lifetime active member of the MAA, this prestigious award is intended to stimulate beginning faculty to accomplishment in teaching as well as in their scholarly endeavors. We are looking for members and sections to nominate their most promising young teachers.

The deadline for receiving nomination packets for the Alder Awards is October 1. Awardee must have taught full time in a mathematical science in the United States or Canada for at least two, but not more than seven, years since receiving the PhD. For more information and nomination forms, visit <http://www.maa.org/Awards/alder.html>. ☐

Sections Elect New Governors

Seven MAA sections have recently elected new governors. Congratulations to all!

Kansas: Jean Johnson, Baker University

Missouri: Michael C. Reed, Missouri State University

New Jersey: Mark Kunk, Montclair State University

Northeastern: Ed Schaffer, Western Connecticut State University

Ohio: Ann Jackson, Wilberforce University

Pacific Northwest: Susan Boersma, Central Washington University

South Atlantic: David Karpowitz, College of Rochester

Southeastern: Michael Davis, Davidson College

Southwestern: Thomas Garstka, Western New Mexico University

Found Math

Bella: Look, You gotta give me some answers.

Edward: Yes. No. To get to the other side. U
1.77245...

Bella: I don't need to know what the square root of π is.

Edward: You knew that?

Our heroine, Bella, talks to Edward, the vampire with whom she falls in love, in the film Twilight (Nov 2008). — Thanks to David Chavey, Beloit College

NEWS AND TOPICS

EDUCATION

College Students Score High in Math Contest

By IRENA CHOISTERN

AL GORE would be president of the United States if his statistician had presented a better case before the Florida Circuit Court, according to John Loase, a mathematics professor at Concordia College in Bronxville. Statisticians might also be able to provide a solution for the vexing problem of long lines at amusement parks, if the labors of a mathematics team Professor Loase coaches are any indication.

Statistics and its sister discipline, mathematical modeling, or the use of mathematical tools to explore real-world problems, may be widely regarded as unfathomable and abstract, a topic for dusty offices and geeks.

But for Professor Loase and a growing number of students in Westchester, statistics and math modeling are fascinating and the problems they solve are real and concrete.

The efforts of these Westchester residents are taking place at a world-class level, too: at a recent math modeling competition sponsored by the Consortium for Mathematics and Its Applications, a team coached by Professor Loase from Concordia College was designated a "meritorious winner," placing in the top 10 percent of all teams and tying with M.I.T., Duke and Cornell.

Professor Loase explained the value of the somewhat abstract science on a recent day in his windowless office in the basement of Brunn-Maier Hall at Concordia, using the 2000 election as an example.

"In my and one of my colleague's opinions, the 2000 presidential election was largely won because Bush's statistician was able to present an extraordinarily lucid explanation in terms of the projected and predicted number of votes lost in the election, whereas Gore's Yale statistician confused me terribly," said Professor Loase, who moved to Concordia from Westchester Community College in Valhalla two years ago. "I can only assume that Bush's statistician was much better versed in terms of modeling and real world explanation to satisfy the judge, who insisted that he was not going to consider evidence that he did not understand. Since the Yale statistician lost me, I have to confess that he likely lost the judge."

Such real-world topics might be part of the prestigious consortium math competition, in which three Concordia teams and

two from Westchester Community College took part. A total of 599 teams from around the world were in the competition, which is partly financed by a grant from the National Security Agency. Each team selected one of two questions and submitted a mathematical model within five days in the competition, which was conducted online.

The contest was created in 1985 by Ben Fusaro, who is now an adjunct professor of mathematics at Florida State University, in partnership with the Consortium for Mathematics and Its Applications, as a reaction to the prestigious William Lowell Putnam Mathematical Competition, sponsored by the Mathematical Association of America.

This contest's real-world math problems engage the enthusiasm of students, who typically have a background in calculus, dif-



Susan Stava for The New York Times

Prof. Marvin Littman with Maulik Desai, left, and Jason R. Englert, who took part in the math contest.

ferentiated equations, statistics, number theory and computer science. They also belong to their undergraduate math club.

The ascendance of two Westchester colleges in the math modeling competition is primarily due to the efforts of Professor Loase, who set up the Westchester Community College math modeling team before taking early retirement and moving to Concordia.

"Math is my passion," said Maulik Desai, 19, an engineering science major at Westchester Community College. "I was at a math club meeting and they told me you've got to take part in this math modeling contest. If there is something related to math, I can't say no."

Mr. Desai came from Surat, India, to attend the college as a stepping stone to a four-year program. Next year he plans to go to SUNY at Stony Brook. One of his team-

College Students Score High in Math Contest

Continued From Page 5

mates is Jason R. Englert, 26, of Ossining, next year's math club president. On a recent afternoon, Mr. Englert was writing algebraic equations on a chalkboard in the college's tutorial center.

A former network engineer who has returned to academics at W.C.C., he explained the concept of math modeling, and elaborated upon it in an e-mail message.

"The simplest example of a math model would be a rectangular box," Mr. Englert said. "To create a math model, first we would first label certain attributes about the box which concern us, like the length (L), width (W) and height (H). We may also choose to concern ourselves with attributes such as the volume, surface area, girth or even the cost of materials for the box. After making our variable declaration, we would then proceed to write our relationship between the attributes we described (i.e.: $V=L*W*H$, or $S.A. = 2[L*W+W*H+L*H]$). Testing the model by plugging in specific values for the variables is essential for math modeling."

Prof. Mel Bienenfeld of Westchester Community College is working to create a course in mathematics modeling for the fall, and one goal will be to prepare students for the math modeling team. But it was Professor Loase who set up the Westchester Community College math modeling teams before moving to Concordia. To support the math program, Concordia College, a Lutheran college that has fewer than 700 students, has established math scholarships and nearly half of the 11 students in the math club have such scholarships.

Drawn to Westchester Community College by his mentor, Louis Rotando, chairman of the math department, and the desire to be near his elderly mother, Professor Loase found the eclectic student body at the college fertile ground for forming a math team. Within the mix of older students transitioning back into college and others seeking to transfer into four-year colleges, Professor Loase found a talented group of math students looking for an outlet.

The team tackled the question of designing a quick-pass system for amusement parks to improve waiting line efficiency, instead of the problem developing a model to address the issue of the uniqueness of human thumbprints. One Concordia

team member, Kirk Bamford, explained how he and his teammates based their model on the work of Vladimir V. Kalashnikov, a leading authority on queueing theories.

"It's about assessing the data and implementing that information, building assumptions and building the picture using the information and apply a model," Mr. Bamford said. "It's not a question of solving it. It's building a model from the data they've given you."

A native of Manchester, England, who previously sold polyurethanes to companies, Mr. Bamford, 33, returned to school to pursue a degree in math and secondary education with the goal of becoming a teacher. Like many others on the math team, he was recruited by Professor Loase as one of Concordia's "mathematical warriors." So was Chris Kollmann, 18, of Eastchester, who may double-major in history and math and David Lansing, 25, of Tuckahoe.

"Leaders in the field, the brightest young people in the world from M.I.T. and Harvard, are working 200 hours on mathematical modeling projects," Professor Loase said. "Chicago's O'Hare airport had a multimillion-dollar consulting project to address lost luggage."

MATH modeling is not a new concept, said Prof. Marvin Littman, assistant professor of mathematics at Westchester Community College. "Way back in the time of Galileo, it was believed that heavier things fell faster than lighter things," he said. "Galileo took a piece of paper and dropped it as a sheet, then as a crumpled ball. Both were the same weight, but fell at different speeds. Through experimentation, he was able to come up with the gravitational constant of acceleration."

On a recent afternoon, Professor Loase sat in his office and talked about his 16-year fascination with mathematical modeling. "It's so exciting to have a discipline whose whole focus is to help the world with problems such as terrorism, endangered species or trying to allocate oil so we don't run out," he said.

"The competition is an opportunity for colleges that are not typically associated with Harvard, Yale and Oxford to have the chance to see if the students are competitive," he said. "And we've proven now in every contest that Concordia College, as well as W.C.C., can field teams that are competitive with the best in the world."

Continued on Page 14

All Across the Nation ...

Concordia - Ann Arbor

Under the 2004-05 theme "Anchored in Hope" (Hebrews 6:19), Concordia-Ann Arbor welcomed the largest freshman class in nearly two decades. Overall enrollment is the twelfth largest in the school's forty two years.

Generous private donations have launched new programs in journalism and the creative arts. Additional new major courses of study include "organizational communication" and "criminal justice."

The family ministry program is expanding in the wake of Synod's approval of "Family Life Minister" as a rostered position at this past summer's convention. A new "youth ministry" minor, as well as numerous workshops and partnerships within Concordia's tri-district region (Michigan-Indiana-Ohio) and around the country, are some of the ways family ministry is growing under the leadership of Professor Ben Freudenburg.

Graduate programs in education – "administration" and "Christian education" (containing Lutheran Teacher Degree certification) – and a comprehensive "public safety administration" undergraduate degree are slated to begin in the spring.

Concordia – Austin

Concordia University at Austin ended another year of blessing by closing its 2004 fiscal year in the black. This included paying down debt, meeting required bond payments, continuing a three-year salary improvement plan, and to quote a CUA vice president, "accomplishing more in the last three months than the previous 14 years" with regard to buildings and grounds.

Strong enrollment figures, hard work by employees to efficiently manage available resources and increased support from Concordia's Endowment were cited as the reason for the favorable financial outcome. The endowment fund has grown from \$7.5 million in 2000 to approximately \$11.2 today.

Sparkling water cascades over Texas limestone in the recently completed fountain in the center of the campus. The two-tiered fountain is 30 feet in diameter and is centered in the quadrangle between the oldest building on campus (Kilian Hall) built in 1926 and the newest (Beto Academic Center) finished in 2002. The fountain holds nearly 13,000 gallons of water.

In addition to the fountain, the quadrangle is being enhanced with new flower beds, winding sidewalks, lush grass and additional lighting. The quad has been named *Nelson Plaza* in honor of the donor, Herb Nelson, past chairman of Concordia's Board of Regents. Mr. Nelson wanted something special to honor his wife Eleanor.

Concordia - Bronxville

Campus worship life is flourishing under the new leadership of Dr. Patrick Bayens, Dean of Worship and Professor of Religion. Gerald Patrick Coleman continues to expand the services of the *Cade Center for Church Music and Worship* by providing learning opportunities for those interested in worship and choral music.

The math team, under the guidance of Professor John Loase, achieved the *Meritorious Winner* rank in an international mathematics competition. Team members shared this honor with MIT, Cornell and Duke and placed above institutions such as Georgetown and Colgate.

years that a Concordia-New York student has won this honor, reflecting the strength of the program under the guidance of Department Chair Peggy Rapp.

Concordia – Irvine

Since 1995 the Ethnic and Multicultural Pastor Training Program at Concordia Irvine has proven itself to be a valuable partner to the Pacific Southwest District for The Lutheran Church—Missouri Synod. It has produced ordained pastors specifically trained to reach people in urban areas and of various cultures with the Gospel of Jesus Christ. Now, solidifying this successful urban, multicultural strategy, Concordia has established the Cross-cultural Ministry Center (CMC) which continues to offer the ethnic and multi-cultural pastoral training, but also provides a masters degree in Theology and Culture.

The center's director, Rev. Gregory Seltz, explains, "Our students have had a tenacity that drives them to be highly motivated missionaries, church planters and pastors; and our program has featured solid academics and sound theology, leading to a committed servant leader."

The expansion of the CMC means that pastors, people, anyone with that tenacious, entrepreneurial spirit can work through this master's program while equipping themselves to work in the multicultural urban mission field that is common in 21st Century America. Helping to expand this effort is a recent \$60,000 grant from the Schwan Foundation.

Concordia - Mequon

Graduates at our May 2004 commencement were inspired to search for ways to be active in their community and to promote service leadership by our speaker, U.S. President George W. Bush. He spoke before 5,000 gathered graduates and their families, guests, and dignitaries from around the State of Wisconsin and the nation.

The Athletic Training Program (undergraduate) has received its initial accreditation with the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Joint Review Committee on Educational Programs in Athletic Training (JRC-AT). This initial accreditation is good for five years and is a real step forward for that program, enabling us to grant to our graduates a level of approval beyond what many institutions in the State of Wisconsin have chosen to offer, and above what we had done formerly.

Our nursing programs (both undergraduate and graduate) have received a 10-year accreditation by the Commission on Collegiate Nursing Education.

After a four year renovation program, our Rincker Memorial Library was rededicated on October 20. The Rev. Dr. Paul Maier, a professor of ancient history at Western Michigan University, author, and LCMS 2nd Vice President, was on hand for the ceremonies and to celebrate the efforts. Highlighting this rededication was the dedication of the new rare books room, donated by the Moeller Family, which houses books dating back to the 1400s.

Concordia – Portland

29 Concordia University Portland students and Professor Jeanette Eggert traveled to the Beautiful Feet Mission Conference held at Concordia University, Wisconsin. After a