



Editorial from Małgorzata Marciniak

Addressing multifold issues of modern college education, we composed the current volume, Vol 11 no 1-2, so that it contains articles of various goals and themes. The readers can find here articles about quantitative reasoning, history of mathematics, book review of a biography of Emmy Noether, and a discussion essay with reflections about creativity being taken out from curriculum due to challenging assessment. Bonus contains another book review with a detailed report on the life of August Ferdinand Möbius.

The volume opens with an excellent exposition by **Paula Stickles** from Millikin University, a small liberal arts college located in Midwest. The article "Using Projects in a Quantitative Reasoning Course" describes project-oriented approach in a course directed to a general population of students. Her approach is motivated by the fact that students need to work on topics relevant to their majors, which should be reflected in class assignments and assessments. Individualized topics relevant to students' major seem to make a perfect fit for those needs. The appendices contain sample projects. What is worth attention are the ways the projects are made relevant to students. To give an example, a project in financial mathematics that evaluates the down payments of a house contains an actual search through listings so students can find a house of their choice, its price, mortgage rates and then perform calculations for the data they found. Other projects follow a similar pattern and it is quite delightful to see so many creative ideas implemented in class work. The article contains sample projects in the attachments.

The article by **David M. Nabirahni, Brian R. Evans, and Ashley Persaud** with the title "Al-Khwarizmi (Algorithm) and the Development of Algebra" addresses classroom needs for a background material in the history of mathematics. The authors present the person of Al-Khwarizmi who gave a name to the modern word "algorithm" and is considered to be the author of the first known algebra book titled "*The Compendious Book on Calculation by Completion and Balancing*". During his times Al-Khwarizmi was known as well for his works in geography, astronomy, and astrology, however not all of his books survived till our times. Aspects of this article can be used in high school and college classes to encourage students needs for additional context. Bringing biographies, historical and epistemological remarks to the classroom enriches the lectures by providing human aspect of the mathematical content.

Continuing the idea of bringing history of mathematics and biographies to readers attention, Roy Berglund prepared a book review of a biographical volume "Emmy Noether" authored by M. B. W. Tent. Even if Emmy was a daughter of a mathematics professor, she struggled during her life with her interest in an academic area which was quite unusual for a female during her times. We



MATHEMATICS TEACHING RESEARCH JOURNAL SPRING/SUMMER 2019 Vol 11 no 1-2

learn from the book that WW II did not take much toll since Emmy was offered a position in the US; however, her health problems significantly shortened her life.

Bronislaw Czarnocha and William Baker in their "Notes From the Field: creativity kidnapped" discuss insufficient emphasis on creativity in modern education as a national, and possibly international issue. Assessment based on standardized tests scores does not favor creative approaches and simply ignores such unmeasurable skill as creativity. In the second part of the article the authors make a suggestion that they have an idea for a valid assessment of creativity, and they apply it on daily basis in their classes of remedial mathematics.

The second book review in the current issue was written in the honor of **August Ferdinand Möbius** and his influential work in astronomy and mathematics. Living on at the end of eighteenth and beginning of nineteenth century, Möbius experienced changes in Germany motivated by the *Aufklärung*, which had a great influence on his employment and profession.

Małgorzata Marciniak

Managing Editor of MTRJ