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**2018 Toy Study Results**

**What is the TIMPANI Toy Study?**

TIMPANI is an on-going scientific study of toys for preschool-aged children conducted by the Center for Early Childhood Education at Eastern Connecticut State University. The purpose of the study is to identify toys that best engage children in intellectual, creative, and social interactions in classrooms, and to pass this information on to preschool teachers and parents. TIMPANI is an acronym for Toys that Inspire Mindful Play And Nurture Imagination.

**Why study toys?**

Research indicates that children learn much through their play. A considerable amount of children’s play involves toys, but there has been little research conducted to date that focuses on the qualities of toys that impact how children learn.

**How does the study work?**

Preschool teachers, researchers, and education faculty nominate toys to be studied. An Advisory Committee reviews the nominations and selects toys that meet basic criteria of developmental appropriateness, cultural and gender sensitivity, and other areas. This year 8 construction toys were selected for the study. Each toy was videotaped being used by children in four different preschool classrooms during the period designated as “free play” or “center time.” Recordings were made on two mornings in each classroom. Recordings were then scored by two researchers using a scientific instrument developed in a previous study (Trawick-Smith, Russell, & Swaminathan, 2010). Sub scores were computed for thinking/learning, social interaction, creativity/imagination, and verbalization.

**How are Eastern Connecticut State University students involved in the project?**

A major goal of TIMPANI is to train students to conduct behavioral research. Students have been responsible for conducting preliminary research on toys, piloting the instrument used to score toys, videotaping toy use, and coding videos. This year, four undergraduate students were involved in the study. To date, 24 students from sociology, psychology, and early childhood education have participated as student researchers, and 9 communication students have assisted in making videos about the findings. April Doolan was the student editor for this year’s video.

**How is the TIMPANI Toy selected and announced?**

In determining the TIMPANI Toy for the year, researchers look at each toy’s score on the four subscales—thinking/learning, social interaction, creativity/imagination, and verbalization—and also identify which toy receives the highest overall score. Researchers also look closely at differences in scores across age, gender, ethnicity, and socioeconomic backgrounds before determining the TIMPANI Toy. Results of the study, including a video with footage of children playing with the toy, are posted on the website. Findings will also be published in both practitioner and research journals in the field.

**What is the TIMPANI Toy for 2018?**

This year, one toy scored slightly higher than all others. Magz Clix (previously known as Bottle Clix) by Magz® is this year’s TIMPANI toy.

**A picture containing writing implement, stationary, indoor, table

Description automatically generated**

Magz Clix by Magz®

Highest-scoring toys in previous TIMPANI studies

2017: Animal Kingdom Mega Pack Playset by Animal Planet

2016: Plus-Plus® by Plus-Plus

2015: Wooden Cash Register by Hape

2014: Paint and Easel (easel by Community Playthings); Hot Wheels Cars by Mattel

2013: Magna-Tiles by Valtech!; My First Railway by Brio

2012: DUPLO bricks by LEGO

2011: Tinkertoys by Hasbro

2010: Wooden Vehicles and Traffic Signs by Melissa & Doug.

**Who should be recognized for their involvement in the study this year?**

Researchers  
Dr. Jeffrey Trawick-Smith, co-investigator

Julia DeLapp, co-investigator

Allison Lundy, student researcher

Morgan Winship, student researcher  
Dominique McLean, student researcher

Nicole Green, student researcher

Video Production

Julia DeLapp, producer/scriptwriter

Ken Measimer, director/videographer

April Doolan, student editor/production assistant

The teachers and children of Eastern’s Child and Family Development Resource Center should also be recognized for their participation.

**How do I find more information on TIMPANI?**

For more information on the TIMPANI study, visit the Center for Early Childhood Education website ([www.easternct.edu/cece/timpani](http://www.easternct.edu/cece/timpani)). To speak with one of our researchers, contact: Julia DeLapp, Director, Center for Early Childhood Education, at (860) 465-0687 or [delappj@easternct.edu](mailto:delappj@easternct.edu).

