

# The WFF 'N PROOF

## Newsletter

SPRING/SUMMER 1972

### MICHIGAN HOSTS SEVENTH NATIONAL ACADEMIC GAMES OLYMPICS

In an idyllic setting reminiscent of Thoreau's Walden Pond, nearly three hundred dedicated academic gamers celebrated the Seventh National Academic Games Olympics last May 6-10 at Waldenwoods Conference Center near Ann Arbor, Michigan. Approximately 280 elementary, junior high, and high school students (accompanied by their teachers and coaches) from California, Florida, Louisiana, Michigan, and Pennsylvania made this seventh annual festival of fun and learning the biggest and best yet.

Participants in the Olympics match wits in a group of games designed by university professors and other subject matter specialists to be used as a regular part of classroom activities or in extracurricular instructional gaming programs -- or as 'parlor games' with an extra fillip of intellectual challenge along with fun. The games range over a wide variety of subjects: American history (MR. PRESIDENT); American and European geography and history (AMERICARDS U.S.A. and EUROCARDS); analysis and identification of emotional arguments meant to influence opinion and action (PROPAGANDA); matching quotations with their sometimes unlikely authors (STRANGE BEDFELLOWS); mathematics (EQUATIONS); set theory (ON-SETS); and mathematical logic (WFF 'N PROOF).

#### NEW AWARDS CATEGORIES

Several innovations in the awards categories marked the 1972 competitions. First, the individual games were placed in three subject matter areas -- Language Arts, Social Studies, and Mathematics -- with overall championships in each area. Thus, in the elementary, junior high, and senior high school divisions, an overall individual player and an overall team championship were awarded in Language Arts, based on cumulative scores in PROPAGANDA and STRANGE BEDFELLOWS. Best performers in AMERICARD-EUROCARD and MR. PRESIDENT became Overall Social Studies Champions. And final standings in EQUATIONS and ON-SETS determined the Overall Mathematics Champions. WFF 'N PROOF was treated as a category unto itself, and only individuals, rather than teams, competed in The Game of Modern Logic. Finally, by entering the games comprising two of the three subject matter areas, teams became eligible for the Grand Championship in their respective divisions -- elementary, junior high, and senior high.

Some of the five-member Olympic teams represented their schools; others were all-star teams representing entire cities or counties. In either case, players earned their berths on Olympic teams through outstanding performance in intramural or interscholastic tournaments or round-robin playoffs. (Although the Olympics brings together

'varsity' teams, many academic gaming programs are organized to involve the underachieving student on an equal footing with the academically successful.)

This was Michigan's first turn as host state, and, as was expected, more Michigan students than ever before were able to take part in the national games. Michigan schools represented for the first time in Olympics competition were: Pelham Middle School, Detroit; West Junior High, Ypsilanti; Wylie Intermediate, Dexter; and Mack Elementary, Ann Arbor. Prior to this year, the Olympics have been held in Florida, Louisiana, and Pennsylvania. It is rumored that West Virginia may be the site of next year's contests, as the meeting places are moved about the United States in order to facilitate wider participation by schools from different parts of the country.

#### PENNSYLVANIANS SCORE AGAIN

Repeating their superb performances of last year, Pennsylvania students again garnered a lion's share of team and individual trophies. At the elementary school level, a lone Michigan student's win in ON-SETS prevented players from South Park E.S., Allegheny Co., PA, from making a clean sweep of all games. In the junior high division, Florida players tied with Pennsylvanians four to four in individual wins, and Michigan and Louisiana players each captured one individual award. In the team competitions, however, fivesomes from Allegheny Co., PA, won all contests except EQUATIONS, which was taken by Pine Crest J.H. students from Ft. Lauderdale, FLA.

In the senior high division, New Orleans players excelled in EQUATIONS for the second consecutive year. Don Bagert (Brother Martin H.S.) again captured the individual title, and his team, with members from Brother Martin and St. Augustine H.S., won the EQUATIONS team championship. Don and his teammates were also awarded the Overall Mathematics Championships, individual and team. Aside from these New Orleans victories, however, all senior high events became the prizes of individuals and teams from Allegheny County and Armstrong County, PA.

Hearty congratulations are due all of the winners -- and all of the participants -- in the National Academic Games Olympics. To represent one's school or community in these intellectual contests is itself worthy of praise. And especial praise must certainly be rendered this year to all of the students, teachers, coaches, and officials. Their dedicated, lively participation made this Olympics an outstanding success.



# THE THINK TANK



Layman E. Allen  
Mary Beth Ogilvie  
Joan Ross

(for those who like brain-to-brain combat)

You might like to try to outline proofs of Rp from each of the rule sets before you look at the suggested proofs we give below.

When using a set of rules to give the effect of the Rp rule in a WFF 'N PROOF game, you should be very sure to remember that for some kinds of WFF's not all of the rules named above will be essential. For example, if the WFF to be repeated is a K-WFF only Ki and Ko are needed. Therefore, if the Solution Kpq / Ki, Ko, Ci is offered for a Goal of Kpq, the C and i are not essential; if the Goal is Aqr and someone presents the Solution Aqr / Ai, Ao, R, then the Ai is not essential. Therefore you must be very careful in using these suggestions in games — but you may also be able to trap other players who are not so careful.

## SOME NOTES ON WFF 'N PROOF

In the WFF 'N PROOF Manual the Repetition Rule is proved by using Ci, Co, and R. There are other sets of rules from which it is possible to prove the Repetition Rule. Some of them are listed below:

- (1) Ci, Ki, Ko
- (2) Ai, Ao, R
- (3) Ai, Ki, Ko
- (4) No, R
- (5) Ni, Ki, Ko

### Kind of WFF

- (6) K-Wff
- (7) A-Wff
- (8) A-Wff
- (9) N-Wff
- (10) E-Wff
- (11) E-Wff

### Set of Rules That Have Effect of Rp

- Ki, Ko
- Ai, Ao
- Ao, R
- Ni, R
- Ki, Ko, Eo
- Ei, Eo

Notice that (5) might suggest that No, Ki, Ko would work. But would they?

## PROOFS

P1	p	** p
1	p	s
2	a   Krs	s
	b   r	a, Ko
3	C-Krs-r	2, Ci
4	K-p-CKrsr	1, 3, Ki
5	p	4, Ko

P2	p	** p
1	p	s
2	App	1, Ai
3	a   p	s
	b   p	1, R
4	a   p	s
	b   p	1, R
5	p	2, 3, 4, Ao

P3	p	** p
1	p	s
2	Apq	1, Ai
3	KpApq	1, 2, Ki
4	p	3, Ko

P4	p	** p
1	p	s
2	a   Np	s
	b   1   NNp	s
	2   Np	a, R
	3   p	1, R, R
	c   Np	b, No
	d   p	1, R
3	p	2, No

P5	p	** p
1	p	s
2	a   KpNp	s
	b   p	a, Ko
	c   Np	a, Ko
3	NKpNp	2, Ni
4	K-p-NKpNp	1, 3, Ki
5	p	4, Ko

P6	Kpq	** Kpq
1	Kpq	s
2	p	1, Ko
3	q	1, Ko
4	Kpq	2, 3, Ki

P7	Apq	** Apq
1	Apq	s
2	a   p	s
	b   Apq	a, Ai
3	a   q	s
	b   Apq	a, Ai
4	Apq	1, 2, 3, Ao

P8	Apq	** Apq
1	Apq	s
2	a   p	s
	b   Apq	1, R
3	a   q	s
	b   Apq	1, R
4	Apq	1, 2, 3, Ao

P9	Np	** Np
1	Np	s
2	a   p	s
	b   1   Np	s
	2   p	a, R
	3   Np	1, R, R
	c   NNp	b, Ni
	d   Np	1, R
3	' Np	2, Ni

P10	Epq	** Epq
1	Epq	s
2	Cpq	1, Eo
3	K-Epq-Cpq	1, 2, Ki
4	Epq	3, Ko

P11	Epq	** Epq
1	Epq	s
2	Cpq	1, Eo
3	Cqp	1, Eo
4	Epq	2, 3, Ei



CHAMPIONS  
SEVENTH NATIONAL ACADEMIC GAMES OLYMPICS  
MAY 6-10, 1972  
WALDENWOODS, HARTLAND, MICHIGAN

WINNING INDIVIDUAL

GAME

WINNING TEAM

Elementary	Junior High	Senior High		Elementary	Junior High	Senior High
Shelly Price South Park 'B' Allegheny Co. PA	Paul Fletcher Pine Crest Ft. Lauderdale FLA	Tim Brown Mt. Lebanon 'B' Allegheny Co. PA	PROPAGANDA	South Park Allegheny Co. PA	Mt. Lebanon Allegheny Co. PA	Mt. Lebanon 'A' Allegheny Co. PA
Francis Waggett South Park 'A' Allegheny Co. PA	Vic Chandhok Mt. Lebanon Allegheny Co. PA	Brad Osgood Mt. Lebanon 'A' Allegheny Co. PA	STRANGE BEDFELLOWS	South Park Allegheny Co. PA	Highlands Allegheny Co. PA	Mt. Lebanon 'A' Allegheny Co. PA
Glenn Feters South Park 'B' Allegheny Co. PA	Doug Reynolds Pine Crest Ft. Lauderdale FLA	Jim Ferrell Mt. Lebanon 'A' Allegheny Co. PA	AMERICARD- EUROCARD	Allegheny Valley Allegheny Co. PA	Allegheny Valley Allegheny Co. PA	Highlands Allegheny Co. PA
Gregg Moll South Park 'A' Allegheny Co. PA	Paul Fletcher Pine Crest Allegheny Co. PA	Chuck Carroll Mt. Lebanon 'B' Allegheny Co. PA	MR. PRESIDENT	Allegheny Valley Allegheny Co. PA	Highlands Allegheny Co. PA	Highlands Allegheny Co. PA
Bart Malencia South Park 'A' Allegheny Co. PA	Tom Scott and Fred Kuhn New Orleans LA	Don Bagert Brother Martin New Orleans LA	EQUATIONS	Allegheny Valley Allegheny Co. PA	Pine Crest Ft. Lauderdale FLA	New Orleans 'A' LA
Jon Rehms Wylie 'A' Dexter MI	Barb Takach Springdale Allegheny Co. PA	Jim Ferrell Mt. Lebanon 'A' Allegheny Co. PA	ON-SETS	Allegheny Valley Allegheny Co. PA	Springdale Allegheny Valley PA	Armstrong Co. PA
no competition	Jeff Kuhn Forsythe Ann Arbor MI	Dean Yee Kittanning Armstrong Co. PA	WFF 'N PROOF		no team competition	

DIVISION

Sandy Gaydos South Park 'A' Allegheny Co. PA	Paul Fletcher Pine Crest Ft. Lauderdale FLA	Tim Brown Mt. Lebanon 'B' Allegheny Co. PA	LANGUAGE ARTS	South Park Allegheny Co. PA	Armstrong Co. PA	Mt. Lebanon 'A' Allegheny Co. PA
Gregg Moll South Park 'A' Allegheny Co. PA	Paul Fletcher Pine Crest Ft. Lauderdale FLA	Ed Boone Highlands Allegheny Co. PA	SOCIAL STUDIES	Allegheny Valley Allegheny Co. PA	Highlands Allegheny Co. PA	Highlands Allegheny Co. PA
Bart Malencia South Park 'A' Allegheny Co. PA	Joe Leftwich Springdale Allegheny Co. PA	Don Bagert Brother Martin New Orleans 'A' LA	MATHEMATICS	Allegheny Valley Allegheny Co. PA	Springdale Allegheny Co. PA	New Orleans 'A' LA

GRAND CHAMPIONS



Elementary Grand Champions, Allegheny Valley, Allegheny Co., PA: Back row, James Melle, Pam Bowser, Coach Gerry Fouse, Susan Playfair, Jane Grender. Front row, Joe Kurtik and Dave Tomer



Grand Champion Junior High, Allegheny Valley, PA: Back row, Barbara Takach, Coach John Pommersheim, Jayne Kralovil, Ann Wilson. Front row, Mike Winkleman and Joe Leftwich



Grand Champion Seniors, Mt. Lebanon S.H., Allegheny Co., PA: Back row, Tim Brown, Andy Zangwill, Coach Joe Prokay, Jeff Sell, Dave Sze. Front row, Chuck Carroll, Brad Osgood, Jim Ferrell



Give A Game For Thinkers—  
They'll Get The Message!

EDITOR  
Doris J. Humphrey

The WFF 'N PROOF Newsletter is published intermittently (generally four times a year) as a vehicle for the exchange of information about the use of autotelic instructional materials. Material for inclusion should be sent to:

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1490 South Boulevard  
Ann Arbor, Mich. 48104  
Subscription rates are \$1.00 per year.

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## BULLETIN BOARD

*players wanted*

WFF 'N PROOF players in the San Francisco Bay area are invited to contact

Patricia M. Frain  
42939 Everglades Park Dr  
Fremont, CA 94538  
(415-657-2629)

Ms. Frain has learned some of the basics of WFF 'N PROOF and is eager to find other players who want to master the game.

# Shhh!

## Games for Thinkers

Send check to: **WFF 'N PROOF**  
1111-ZC Maple Ave., Turtle Creek, Pa. 15145

Enclosed is \$ \_\_\_\_\_ Please send me:

WFF 'N PROOF (mathematical logic)	\$ 8.75
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SPRING/SUMMER 1972

# WFF 'N PROOF

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New Orleans, LA 70122

## ON-WORDS TURNS STUDENTS ON TO WORDS

As a former teacher of remedial and freshman English in a California college and university, I recall the leaden response -- and performance -- of most students confronted with exercises designed to familiarize them with the workings of the dictionary. For the most part, my impression was that students ground out the lessons without particularly registering or remembering what they had done. And they certainly hadn't developed any enthusiasm for words or the dictionary in the process. I suspect that many English teachers have had this experience.

More recently, as a once-a-week teacher of ON-WORDS in a Detroit middle school, I have had a much more encouraging experience with students in relation to dictionaries ... because the students had an experience with dictionaries unlike any other they had had. A dictionary is the final judge of the correctness of Solutions in ON-WORDS. So students playing ON-WORDS consistently, avidly, voluntarily, looked up words in the dictionaries in their classrooms.

Usually, students would carry a dictionary to a three-player table before play commenced: they didn't want to waste time walking back and forth to bookshelves every

time a dictionary was needed. Several classrooms contained only two or three dictionaries when ON-WORDS was introduced. After a few weeks, student demand had prompted the importation of many more dictionaries into these rooms -- and the dictionaries were used.

ON-WORDS has other positive effects. For example, it provokes student discussions of the difference between proper and common nouns (proper nouns may not appear in Solutions in Basic or Advanced ON-WORDS); when phonetics cubes are introduced into play, students practice and attend to pronunciation as Solutions are explained and perhaps defended; and students enjoy thinking about parts of speech when, in a game of Adventurous ON-WORDS, one player has introduced the rule that only prepositions (or verbs, or adverbs, etc.) can be used in Solutions. These are only a few examples of the aspects of words that students become intensely involved with while they are playing ON-WORDS.

What was originally conceived of as an introduction to EQUATIONS and the other games in the WFF 'N PROOF series has turned out to be an exceedingly rich game in its own right.

- D.J.H. -