

**TRU Education Inc.**  
205 Erin Lane  
Northbrook, IL 60062

**tru\_educ@hotmail.com**  
**(847)291-0461 (phone)**  
**(847)715-4284 (fax)**  
**(815)382-6578 (cell)**  
**www.trueducation.com**

**Presentation Vita (Rev. 10/20/02)**

Jim Howie  
6702 Burning Tree Circle  
McHenry, IL 60050  
(W) 847-509-2413  
(H) 815-759-0765  
jhowie@glenbrook.k12.il.us

Jeff Jordan  
205 Erin Lane  
Northbrook, IL 60062  
(W) 847-509-2615  
(H) 847-291-0461  
jkjordan@glenbrook.k12.il.us

**Jim Howie:** Jim has been a teacher of applied technology for 23 years, nineteen at Glenbrook North High School. During this time he has also coached baseball and football. He has a B.S. from Northern Illinois University (1980) and an M.A. from National Louis University (1994). Jim is a member of the ITEA (International Technology Education Association), IITEA (Illinois ITEA), and the ACTE (Association for Career and Technical Education). Recently he has spent much of his time giving teacher training on the CAD/CAM Mastercam software throughout the United States and Canada. He was awarded Mastercam Teacher of the Year in 1998. He was awarded the Teacher Excellence award from the ITEA in 2000.

**Jeff Jordan:** Jeff has been a science teacher at Glenbrook North for thirteen years. He has taught general science, chemistry, science and technology, and physics. He also coaches tennis and serves as the head of the building safety committee. He has a B.S. from the University of Illinois (1990), a M.A. in Physics Education from DePaul University (1996), and a C.A.S. (Administrative certification) from National Louis University (2002). His masters paper "Science and Technology: An Integrated Course" focused on researching the trend in integrating science and technology and the science-tech course that is presented in "Toys Are Us." Jeff is a member of the ITEA, IITEA, ACTE, ISPP (Illinois State Physics Project), and AAPT (American Association of Physics Teachers).

## **Publications:**

“A Taste of Honey” by Jim Howie and Jeff Jordan, with David Millson. The Technology Teacher. December/January 1999.

“Toys Are Us” by Jim Howie, Jeff Jordan, Iven May, and David Millson. Ties: The Magazine of Design and Technology Education, October 1998. The College of New Jersey; Trenton, NJ 08650.

“Teen Novice Machines CAM Coaster” by David Millson, contributing authors Jim Howie and Jeff Jordan. Machine Design, June 1998.

“Two Years of Ups and Downs” by David Millson, contributing authors Jim Howie and Jeff Jordan. Ties: The Magazine of Design and Technology Education, Jan/Feb 1998. The College of New Jersey; Trenton, NJ 08650.

## **TRU Education Publications/Products (available at [www.trueducation.com](http://www.trueducation.com))**

“Cheat Sheets for Building Skills in Mastercam” by Jim Howie & Jeff Jordan.

- \* Student Guide Version 9 \* Instructor Guide Version 9 (available in 2003)
- \* Student Guide Version 8 \* Instructor Guide Version 8
- \* Student Guide Version 7 \* Instructor Guide Version 7
- \* Student Guide Version 6 \* Instructor Guide Version 6

“Poor Man’s Laser” educational kit. An inexpensive but high quality wood burning tool with directions and materials for creating your own wood burning projects. Adapters available for various machines. The wood burner cut is as crisp as a laser cut.

“Dynamic Ceramic Engraving” educational kit. Materials and directions for machining and glazing your own ceramic tiles with Mastercam and a CNC milling machine.

“Easy Enamel, Glass With Class” educational kit. Materials and directions for completing CAD/CAM projects with a low-temp enamel finish.

“Direct Hit Dart Kit” educational kit. Includes materials for an entire class to design and manufacture their own plastic tipped dart. Includes complete directions and curriculum.

“Fool Proof” fixture. A fixture designed to hold a variety of materials 4.25 x 4.25 inches quickly and easily to the bed of any mill. Designed to work with all the TRU Education kits.

“TRU Grip All Shape” fixture. A fixture designed to work with the Fool Proof to hold odd shapes to the bed of any mill.

“23 Step” fixture. A fixture designed to work with the Fool Proof or to stand alone. This fixture holds 2 x 2 or 3 x 3 stock quickly and easily to the bed of any mill. Designed to be used with the “Cheat Sheet” exercises.

“Frame Card” fixture. A fixture designed for the cutting of standard and panoramic picture frames. This fixture comes with curriculum for designing and cutting out a variety of frames.

“Quick Fix” fixture. Included when ordering Mastercam Quick Part 3D or available as a “Stand Alone.” Combines many of the features of the above fixture to work with the Quick Part 3D curriculum or any other machining course curriculum.

### **Presentations of “Toys Are Us”:**

63rd Annual International Technology Education Association Conference; Atlanta, GA. 23 March 2001 (Given in conjunction with Mastercam and Autodesk).

North Dakota In service of technology teachers. 7, 8 & 9 August 2000.

62nd Annual International Technology Education Association Conference; Salt Lake City, UT. 6 April 2000 and 7 April 2000 (Given in conjunction with Mastercam and Autodesk).

\*\*Glenbrook North awarded “Program Excellence” award.

\*\*Jim Howie awarded “Teacher Excellence” award.

Wisconsin ITEA (WTEA) annual conference; Wisconsin Dells, WI. 31 March 2000.

6th Annual Illinois Technology Education Conference; Peoria, IL. 5 November 1999.

\*\* Glenbrook North awarded Illinois “Technology Program of the Year.”

\*\* Jim Howie awarded Illinois “Technology Teacher of the Year.”

Annual Missouri Vocational Association Conference; Springfield, MO. 28 July 1999.

61st Annual International Technology Education Association Conference; Indianapolis, IN. 28 March 1999.

Illinois Drafting Education Association Conference; Bloomington, IL. 13 November 1998.

5th Annual Illinois Technology Education Conference; Peoria, IL. 6 November 1998.

60th Annual International Technology Education Association Conference; Ft. Worth, TX. 8 March 1998.

4th Annual Illinois Technology Education Conference; Peoria, IL. 7 November 1997.

59th Annual International Technology Education Association Conference; Tampa, FL. 23 March 1997.

## **Displays of Student Projects:**

### **CAD/CAM Products:**

Displays of student projects from Glenbrook North can be found in Mastercam display booths at various local and national educational conferences including the ITEA and ACTE.

### **Roller Coaster:**

Toronto Museum of Science; Toronto, Canada. June 98 - 99.

Omni Max presentation of "Thrill Ride." Museum of Science and Industry, Chicago, IL. November 1997 through January 1998.

Annual Physics Day: Great America Theme Park. Gurnee IL. May 1997

### **Virtual Reality Roller Coaster:**

ITEA Annual Conference: Amatrol Inc. display booth. March 1999.

Annual Physics Day: Great America Theme Park. Gurnee IL. May 1998.

## **Available training and presentations:**

Science and Technology - Learn the basic curriculum of the integrated science and technology course that is team taught by Jim and Jeff. Problems of the week, challenges of the month, engineering team projects, and independent design challenges are explained and demonstrated. Sample curriculum is distributed. Length ranges from a 75 minute presentation to an all day training workshop.

Mastercam (beginner and intermediate training) - Training includes the self-designed Mastercam curriculum found in the "Cheat Sheet" books as well as explanations and demonstrations of the educational kits found above (detail and amount of coverage depending on time availability). Training ranges from a 90 minute session to a five day workshop. Determine your own length of training. Strictly projects workshops available.

\* Previous training dates and locations (references available upon request):

Aidex Corporation (Illinois) - June of '98, '99, '00, '01, '02

CNC Software (Washington) - July of '00, 01,

Depco Inc. (Indiana) - June of '02 (scheduled)

Teaching Systems Inc. (Texas) - July of '02

\* Mastercam is a registered trademark of CNC Software Inc.