

WILLIAM RAINEY HARPER COLLEGE
Algonquin & Roselle Roads
Palatine, Illinois

COMMITTEE MEETING NOTICE

TO: Members of the Board of Trustees of Community College District
No. 512, Counties of Cook, Kane, Lake, and McHenry and State
of Illinois

NOTICE IS HEREBY GIVEN that there will be a committee of the whole
meeting of the Board of Trustees of Harper College on Thursday, June 10,
1982, at the hour of 7:30 p.m., in the Board Room of the administration
building. The purpose of this meeting is to hear a presentation on
CAD/CAM and to discuss 1982-83 college budget.

DATED this 2nd day of June, 1982, at Palatine, Illinois.



BRIAN BARCH, Chairman
Board of Trustees

WILLIAM RAINEY HARPER COLLEGE
BOARD OF TRUSTEES OF COMMUNITY COLLEGE DISTRICT NO. 512
COUNTIES OF COOK, KANE, LAKE, AND McHENRY, STATE OF ILLINOIS

Minutes of the Special Board Meeting of Thursday, June 10, 1982

CALL TO ORDER: The special meeting of the Board of Trustees of Community College District No. 512 was called to order by Chairman Barch on Thursday, June 10, 1982, at 7:40 p.m. in the Board Room of the Administration Building at Harper College, Palatine, Illinois.

ROLL CALL: Present: Members Brian Barch, Janet W. Bone, Kris Howard, Ray Mills, Don Torisky.

Member Beagle arrived at 8:50 p.m.

Absent: Members David Tomchek, Al Vajda

Also Present: James J. McGrath, President; Peter Bakas, V.P. Administrative Services; David Williams, V.P. Academic Affairs, Felice Avila, Executive Assistant to the President; Janice Cook, recording secretary; Charles Harrington, Dean of Instruction; George Voegel, Dean of Educational Services; John Gelch, Associate Dean of Physical Education, Athletics and Recreation; Roger Mussell, Acting Associate Dean of Technology, Math and Physical Sciences; Larry Bielawa, Director of Personnel; Steve Catlin, Director of Admissions and Registrar; William Howard, Director of Continuing Education; Don Misic, Director of Physical Plant; John Lucas, Director of Planning and Research; Jeanne Pankanin, Director of Student Activities; Elaine Stoermer, Director of College Relations; Fred Vaisvil, Director of Student Outreach. Faculty: Larry Knight, Faculty Senate President. Classified Staff: Mike Nejman, Student Activities; and Joan Young, Institutional Communications. Other guests: Rembrandt C. Hiller, Harper College Educational Foundation; C. Fritz, and A. Turnauer, Applicon, Inc.; Marmon Pine, CADgineering; Mala Laurin and James Tolar, Gould, Inc.; Leonard Marks, Northrup, Inc.

PRESENTATION: Chairman Barch stated that the special meeting was called to discuss two items. The first item on the agenda was CAD/CAM
CAD/CAM a presentation on CAD/CAM on which Board members had previously received materials, and which was brought up at the last Board meeting. The second item was to review the Round 1B 1982-1983 Preliminary Budgets. He turned the meeting over to Mr. William Howard to introduce the presentation on CAD/CAM (Computer Aided Design/Computer Aided Manufacturing).

Mr. Howard thanked the Board for attending and for allowing this presentation on the proposed CAD/CAM Training Center, stating that he felt they would find this to be an exciting activity of the College. CAD/CAM has been called "the front edge of a new wave of productivity for industry."

The invited guests represented industry and the user community of the CAD/CAM system. The guests were introduced and their support to the faculty and the administration was acknowledged. The meeting was then turned over to Dr. Roger Mussell to give a perspective from the faculty.

Dr. Mussell stated that this CAD/CAM project is very important and that since 1967 Harper has been aware of and involved in a number of high technology fields. It is on this basis that the instructional side of Harper College was very much interested in this project. He then introduced Mr. Charles Fritz, Applicon, Inc., who showed a comprehensive slide presentation on the CAD system. After the slide presentation the program was turned over to Mr. A. Turnauer to answer any questions. Since there were no questions at this time, the program returned to Dr. Mussell.

Dr. Mussell introduced Mr. Len Marks, Manager of Mechanical Engineering of Northrup, Inc., with over 20 years of experience in engineering technology. Mr. Marks stated that computer aided design is looked upon as a revolution akin to the first industrial revolution because what this does is to allow engineers to address problems at a level of complexity never before possible. This is a technology past its infancy but not yet mature which is now being used by many companies in engineering-related fields. It is estimated that in 1980 the value of the CAD/CAM market in the U.S. was about \$900 million. In 1986, it is expected to be \$5.8 billion, and by 1991, \$22.5 billion. It is a tool that is being placed in industry, but there are no people available to use it. What is needed is some way to train people to use this, giving them an idea of what is involved, what the system can do, what options are available in the market place, and what costs are.

The next presenter was Mr. Marmon Pine, President of CADgineering Services of Schaumburg. The firm currently has an Applicon system equivalent to the system Harper is considering. As an operating company, CADgineering has found a need for people who are trained at the operator level. Training could include experience on the board with some level of technical training in either an accredited or non-accredited course program. He stated that CADgineering could act as an umbilical cord to the Harper program, which is in an extremely fortunate position to provide a benefit to the community and this industrial center.

Dr. Mussell then introduced Mala Laurin, Director of Information Resources at Gould Corporation in Rolling Meadows. Gould is involved in making products of the future such as computers and programmers. She had just returned from a seminar in Boston where 200 people from all over the world discussed such developments as CAD/CAM and Robotics. She introduced her colleague, Jim Tolar, a CAD engineer. He emphasized that Gould is very eager to cooperate with the development of a program at Harper to meet the great need for trained people.

Dr. Mussell thanked all the presenters. Mr. Howard asked if the Board had any questions to present to the visiting experts.

Member Torisky asked if CAD/CAM was an American technology or if we were playing "catch-up" with the Japanese. Mr. Marks answered that the Japanese recognized the value of CAD early in the game, and in some areas they are ahead. Member Torisky also asked if all the software is developed inhouse. Mr. Turnauer stated that it was not, nor is software necessarily interchangeable. He stressed that it is the teaching of the technology that is applicable to other systems.

Member Howard asked if the Harper program would be two-pronged, training some people as technicians to serve local industry and others who wished to study toward a degree. The answer from the guests was that the program could be offered to people with different educational goals.

Member Barch asked if the proposed Harper system was primarily aimed at the CAD as opposed to CAM, or could both of them be incorporated. It was stated that this system would generate the information to feed into the CAM equipment. Applicon has a sister company which is a leader in that area, which would be a side benefit.

Mr. Howard asked for more questions from the Board, and since there were none, he proceeded to thank all the presenters.

Chairman Barch expressed the thanks of the Board for the time spent in the presentation and suggested a five-minute recess.

Chairman Barch reconvened the meeting at 8:45 p.m. calling on Mr. Howard for a presentation of the facts on CAD/CAM.

Mr. Howard referred to the 6-year financial projection for the center given to each member of the Board which was a list of expenditures and revenue possibilities. The College is looking at an off-campus site at 1014 Algonquin Road where Applicon and CADgineering are also located, which will allow for that umbilical cord connection to resources and experts. Expenses include some remodeling and wiring, movable walls, and the installation of the system itself. The facility handles custodial and security, but the College would pay utilities. Applicon would supply the College with an \$886,000 system meeting about 64% of the cost, and Harper would pay \$300,000. Mr. Howard noted that the College will have a need in the near future to replace the HP-2000 for the Computer Science area. An interlink with the Applicon system might eliminate the need to purchase a larger computer like HP-3000 in another year.

Dr. Mussell referred to the fact that Mr. George Dorner had been hesitant in the beginning, but is now very impressed and enthusiastic about the possibility of developing a Computer Science Associate Degree program.

Mr. Howard commented that benefits have continued to appear as the project was discussed. The need for support systems management could be serviced by CADgineering. In regard to faculty development, four or more of our faculty could be trained in operating the system beginning this summer. With regard to staffing, it would be necessary to create a professional technical position to manage the site, market the program to the local communities, and to serve as a liaison to local industry. A lab assistant/clerical person would be needed to manage the communications. The College would set up two classrooms in the facility. The funding for the project is expected to come from the Auxiliary fund as a cost recovery program. The facility could be leased between 10 p.m. and 8 a.m. to other organizations which could, in two years, pay for the College share of the equipment cost. Interest has also come from the Department of Commerce and Community Affairs, and Mr. Howard hopes for support from the Department of Adult and Vocational Education.

President McGrath noted that Peter Fox had sent a representative to the initial meeting on CAD/CAM, and he has been invited to come to the College before he goes to the local Chamber of Commerce in July. The Governor is also very interested in programs of this nature. He also announced that a meeting has been called for the Council of Presidents, Friday morning, to discuss high-technology programs and the interest that should be generated between community colleges and local industry.

In response to a question from Dr. Williams, Mr. Howard stated that ongoing cost of a program like this could run from \$500 to \$1,000 a day and he anticipates from \$300 to \$400 for a 2-day seminar program which is a very lucrative market in generating revenue. The center would be self-supporting and money generated would be put back into the center to expand the computer hardware. The College could also establish an Industry Associate Program asking companies to join the College in creating a Resource Center for journals, films and materials. This membership would give them access to the facility during its down time.

In response to Member Bone's question regarding a six-year lease, Mr. Howard stated that for the first three years it would be a fixed rate of \$59,000. The only exception would be a clause regarding any unforeseen cost for which everyone in the facility would be assessed.

Member Bone asked if lack of support by DCCA and DAVTE would mean that the Education Fund would need to subsidize the center. Mr. Howard said that if the College didn't have the \$260,000, it could be recovered after the third year. If the agencies don't fund at those levels, there would be a more aggressive program in the Industry Associate side. The other option would be leasing the equipment and having the money up front, but that seems expensive for the College. Member Bone questioned if appropriations are not signed by the Governor until late August, would the committee be coming back for \$200,000 to \$250,000 out of the Education Fund. Mr. Howard stated that that was a possibility, along with a greater leasing program, but these were two areas not considered in the revenue picture at this time. He assured Member Bone that Board members would be given periodic updates.

Dr. Williams stated that by the time a pricing structure is established and the revenue to be generated from the program is clear, there should also be an indication whether or not the money from the two external agencies would be there.

President McGrath noted that there is a current Auxiliary Fund balance of \$300,000 which would more than cover the \$260,000.

Member Torisky noted that this is an outright purchase but the College could consider a lease factor arrangement to be funded as we go and at the same time be a tax advantage. President McGrath indicated there is more information in the packet which Mr. Howard would make available to the Board. Member Torisky also asked if there was a financial statement on Applicon since the College is relying heavily on Applicon for this program. Mr. Howard said it was incorporated in the report of Schlumberger which bought out Applicon.

The question was raised by Member Bone that since Harper would be using this program to train people on this system, does the College anticipate a capped-type of enrollment. Mr. Howard said that enrollment would be limited in basic user training, but waiting lists would be expected. However, seminars would be limited only to what we could do. President McGrath mentioned that in terms of seminars, classroom work is done at the College and then groups go to use the computer. Member Bone indicated that she was anticipating heavy demand. President McGrath agreed that to protect the quality of the education the program should maintain waiting lists and not over-subscribe.

Mr. Howard reported that an official of Brigham Young University had expressed an interest in having transfer students at BYU who had been exposed to CAD/CAM. In response to questions from Member Beagle, he indicated that a career program graduate would be headed for mechanical application, while a transfer student would be pursuing the technical side.

Member Mills asked about related programs. Dr. Mussell referred to an item in the packet showing existing career courses that could be taught in the center and others that could include CAD units.

President McGrath identified the four components of the program as seminars, training programs for industry personnel, CAD/CAM instruction integrated into existing Harper courses, and a possible future computer science degree program.

Member Mills asked if specific aptitudes such as math are required in potential operators. Mr. Howard indicated that an engineering background is not necessary, and that this field requires intelligence and ability to understand and enter instructions in the system. It is much like computer operating but somewhat more complex.

Member Torisky asked about other community colleges entering the field. Mr. Howard replied that Elgin has acquired a system from Computervision, with the aim of expanding career programs rather than to provide

an industry program. Sharing of equipment and information is being explored.

Member Mills asked if the program requires State Board of Education approval. Mr. Howard stated that such approval was required only for reimbursable programs. Dr. Williams added that future development of a degree program would require approval.

Member Howard commented on the information that persons trained on Applicon can easily adapt their training to other systems. Dr. Mussell agreed that the concept of generic training is important, and has been a point in discussions. He pointed out that students who trained on the College's Motorola microprocessor have successfully applied the training to other manufacturers' equipment.

Member Bone asked about legal review of the lease. Mr. Howard stated that the attorney would review the lease, user leases, and systems management components.

Mr. Howard stated that in advance of the June 24 meeting the Board would receive the proposal, the lease for the space, the purchase order for equipment, and the Applicon financial statement. When the budget is presented, the project will be included in the Auxiliary Fund.

Chairman Barch thanked Mr. Howard and guests. He then turned the meeting over to Mr. Bakas for presentation of the preliminary budget for 1982/83.

PRESENTATION:
Round 1B
1982/83
Budget

Mr. Bakas indicated that the main purpose of the presentation was to answer questions and discuss possible modifications.

He reported that the Educational Fund shows a deficit of \$500,000. That includes a contingency of \$150,000 plus a one-time expenditure of \$150,000 to equip Stevenson School. State apportionment shows a decrease of 4%, but pending legislation may change that. If so, revenue may increase by about \$245,000 in this fund. President McGrath noted that state apportionment would be discussed with the Governor June 11 by the Council of Presidents.

In response to a question from Member Howard, Mr. Bakas indicated the preliminary budget reflected the full 4% decrease. He added that funding on current rates would have provided significantly more support. President McGrath noted that Harper's enrollment growth means that the only funding received for 1200 students is tuition.

Mr. Bakas reported that \$1.5 million would be carried over into the 1982/83 Building Fund budget to complete major repair projects. These projects were being financed from the fund balance, so in effect, there is a balanced budget in the Building Fund.

Member Bone questioned the figures for utilities. Mr. Bakas replied that they were based on this year's experience and College involvement in energy conservation programs.

In response to questions, Mr. Bakas described progress on energy conservation, reported on reduced insurance premiums, and explained contingency fund figures.

Mr. Bakas reviewed Auxiliary Fund figures, concluding that the Fund should show an excess revenue over estimated expenditures. President McGrath noted that Food Services should finish this year in the black.

The Site and Construction Fund shows continued investment growth, and the College still has \$3 million in bonds authorized but not sold. President McGrath indicated that the administration would probably come to the Board during the next year to propose a storage building to be financed from this fund.

There were no questions regarding the Student Activities Budget. President McGrath noted that the Board would receive separate schedules of expenditures for men's and women's sports along with the completed budget. Member Bone asked that Miss Sue Hoday be informed of the date for discussion of these expenditures.

After discussion of the final budget format, Member Howard suggested that a memorandum to Board members give explanations for significant changes, for instance the amounts added due to capital equipment purchases for the Northeast Center at Stevenson School.

ADJOURNMENT:

Member Bone moved, Member Howard seconded, that the meeting be adjourned. Motion carried and the meeting was adjourned at 9:40 p.m.

Brian M. Barch
Chairman

Janet W. Bone
Secretary