NATIONAL SCIENCE FOUNDATION
ADVANCED TECHNICAL EDUCATION PROJECT
ADVISORY COMMITTEE MEETING
March 23, 2012

COMMITTEE MEMBERS

NAME:	COMPANY:	TITLE:
Don MacMaster	Alpena Community College	NSF Grant, Principal Investigator
Dr. Olin Joynton	Alpena Community College	President
Tom Ludwig	Alpena Community College	Director of Facilities
Dr. Mark Curtis	Alpena Community College	Vice President of Instruction
Bob Eller	Alpena Community College	Concrete Technology Faculty (Retired)
Kathleen Bruski	Alpena Community College	Co-Program Coordinator/Outreach
Mike Tholen	American Concrete Institute	Director of Professional Development
Jim Park	Besser Company	Chairman of the Board
Kevin Curtis	Besser Company	Chief Executive Officer
Eric Krebs	Besser Company	Director, WCCT
Dr. Carl Hanssen	Hanssen Consulting. LLC	External Evaluator
Oscar Tavares	Innovative Alternatives	NSF Grant, Co-Investigator
Craig Ryan	Lafarge Cement-North America	Public Affairs Manager
Dave Dziubinski	Lafarge Cement-North America	Plant Manager
Dave Hollingsworth	Michigan Concrete Association	Director, Training and Technical Services
John Staton	Michigan Department of Transportation	Engineer-Materials, Construction and Technology Division

ATTENDANCE:
Kathleen Bruski, Dr. Mark Curtin, Kevin Curtis, Dave Dziubinski, Bob Eller, Dr. Carl Hanssen, Dr. Olin Joynton, Eric Krebs, Tom Ludwig, Don MacMaster, Craig Ryan, Oscar Tavares

Guests: Kari Schellie, Besser Company; Barb Szczesniak, ACC Recording Secretary

I. Introductions
Those present introduced themselves and gave a brief explanation of their background and reason for participation in meeting. The Advisory Committee consists of industry leaders, community college educators, public/private sector employers and will meet quarterly with the Principal Investigator, Co-Investigator, and student researchers.

II. Startup Conference Report
Don MacMaster reported that he had attended the NSF startup conference in Washington, D.C. and had met the contact person for the NSF grant. He reported that the NSF wants to see this project carried forward and become a national center for the study of concrete.

III. Update on Project Outreach
Kate Bruski reported that from December 7, 2011 through February 8, 2012 site visits and meetings with staff had been completed at schools in Alcona, Alpena, Atlanta, Cheboygan, Montmorency, Onaway, Oscoda, Posen, and Rogers City. Follow-up e-mail correspondence was sent to meeting participants with a timeline providing initial deliverables and a request

for comments and feedback, and a list of possible research topics was provided to the committee.

Other activities in January and February included:

- Mailed DVD, *Introduction of Concrete Manufacturing* to all participating schools,
- Mailed copies of Smithsonian Magazine article "Green Concrete" to schools,
- Met with Michigan STEM (Science, Technology, Engineering, and Math) partnership members and shared a list of deliverables related to NSF grant and research for possible state-wide research,
- Met with representatives of MERIT, through a webinar to discuss possible inclusion of deliverables locally, regionally, and nationwide through MERIT's Internet2.
- Videotaped ECOncrete presentation at ACC and mailed DVD to schools.

Kate will continue to work to develop modules for science instructors that are ready to use. Craig Ryan suggested trying to schools during teacher's in-service days.

IV. Update on Research

Don reported that since the last meeting, Tom Ludwig has designed and built a kiln large enough to test nine blocks and has begun work on developing a method to test the introduction of CO_2 into blocks. The chamber was built for $5,000 as compared to the $25,000 initially considered to purchase a kiln. Committee members viewed the unit and Tom shared some of the initial testing results.

V. Update on Deliverables

Production and testing will continue over the summer with nearly 20 2-year concrete tech students interested in becoming involved in the project. Over the next three years, it is estimated that as many as 60 students could be involved.

Kevin Curtis suggested applying for a NCMA (National Concrete Masonry Association) grant to run a possible parallel program to test Lafarge-Alpena product and Bath limestone. Research to change/develop standards and financial benefits are important considerations for the business world.

VI. Evaluation

Dr. Hanssen shared with the committee his role in the evaluation process and explained how the evaluation will be gauged. He will provide the committee with a complete report after each meeting and annually (May 2012). The evaluation piece is a requirement of the grant and evaluating "research" is a new area with criteria being developed.

Don explained that online courses are being developed to offer one-year certificates in Ready Mix and Masonry. The core courses have been completed and the remainder of the courses need to be completed soon. There is a strong effort to provide training to returning veterans and these courses need to be ready by October 2012 to access GI benefits dollars. There was discussion regarding "hands on" vs. "online" courses and "student-led" vs. "instructor –led" courses. One solution might be to offer lab kits or offer some on-site work.

These courses will be "credit" classes and Dr. Curtis felt approval from the Curriculum Committee would not be a problem

VII. Next Steps

An Engineering Camp for Kids was suggested as part of the outreach program.

Consistent quarterly meetings will be scheduled to monitor the progress of the grant.

Respectfully,

Barb Szczesniak
Recording Secretary