

# ABET AND GATEWAY: A FIT?

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Presentation to Board of Directors  
February 9, 2017



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# THE QUESTIONS:

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- How to ensure students who complete an Associate of Applied Science (AAS) in Manufacturing Engineering Technology (MET) program can transfer seamlessly to complete a Bachelor in Science (BS) in Mechanical and Manufacturing Engineering Technology (MMET)?
- How to recruit students from high schools who ultimately want to complete a Bachelor in Science (BS) in Mechanical and Manufacturing Engineering Technology (MMET) into the Associate of Applied Science (AAS) in Manufacturing Engineering Technology (MET) programs?

# THE ASSUMPTIONS:

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- ABET accreditation is the only way to ensure a viable transfer pathway from an AAS in MET to BS in MMET.
- ABET accreditation is a driving force for recruiting students into the program.

# DEFINITION OF TERMS:

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- **Institutional accreditation** determines whether institutions have met certain minimum standards in terms of administration, resources, faculty and facilities. Gateway is accredited by the Southern Association of Colleges and Schools (SACS).
- **Programmatic accreditation** determines whether professional programs within an institution have met defined criteria for that discipline. These are measured and developed by the professionals in the discipline and exemplify what it takes to be successful in that profession. Not all professions require this type of accreditation.
- **Articulation Agreements** are formal agreements creating partnerships between two or more colleges and universities documenting the transfer policies for a specific academic program or degree in general.

# QUESTION 1: TRANSFER OF CREDITS

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# HISTORY ON TRANSFERABILITY:

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- In March 2013, NKU and Gateway began the Gateway2NKU Pathway program. [Gateway2NKU Pathway Program](#)
  - Faculty to faculty collaborative effort to design academic pathways from Gateway to NKU with minimal to no credit loss.
  - At that time, Dr. Morteza Sadat, Department Chair of NKU's MMET program, would only accept 2 or 3 of Gateway's technical courses into NKU's program and recommended Gateway pursue ABET accreditation.

# OUR RESEARCH:

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- ABET (Accreditation Board For Engineering and Technology)
  - Advantages primarily for university programs in mechanical, chemical, and aerospace engineering. It is essential for engineering programs preparing students for state engineering exam, not a good fit for 2-year schools because:
    - ABET is expensive
    - Upfront cost
    - Ongoing costs
    - Full-time faculty and staff dedicated to achieving and maintaining accreditation
- Lack of ABET has not precluded Gateway students from entering high-wage, high-demand careers in manufacturing
- Cincinnati State recently discontinued their ABET accreditation for all their Engineering Technology programs
- No KCTCS school has ABET accreditation

# FAST FORWARD 2016....TRANSFER ISSUE RESOLVED:

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- State's focus on transfer pathways to increase student success and lower student debt.
- Gateway2NKU Pathway Program continued to grow in numbers and success.
- Change in leadership positions at NKU and Gateway.
- Dr. Sadat (NKU), Dean Dee Wright (GCTC), and faculty member, Angie Praiswater (GCTC), revisit the AAS MET to BS MMET pathway.
  - Result:
    - AAS to BS in MME pathway signed September 2016 with no loss of credits - currently, there are 9 students in this pathway



## FURTHER INVESTIGATION. . . LISTENING TOUR INCLUDING:

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- Rhonda Whitaker
  - Rick Jordan
  - Dallas Trinkle
  - Wade Williams
  - Mike Vogt
  - Joe Creaghead
  - And others . . .
- ❖ GOAL: To learn if the articulation agreement completely addressed the problem cited by NKIP and the Coalition for Advanced Manufacturing

# WHAT I LEARNED:

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- Gateway program quality is understood by industry partners and NKU
- Gateway's program is committed to continuous improvement
- Gateway students are securing high-wage, high-demand jobs with many of them being hired before they complete their degree
- Program accreditation does not equate to articulation - articulation agreements are almost always program to program
- Transfer issue has been addressed at NKU without ABET accreditation

# QUESTION 2: RECRUITMENT

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# IS ABET THE BEST STRATEGY TO RECRUIT NEW STUDENTS?



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# WHAT I LEARNED:

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- Recruitment challenges are rooted in reshaping parents' and students' views about manufacturing as career, not program accreditation
- Coalition reorganized to strategically cover these areas:
  - Metrics
  - Marketing
  - Strategy

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  - Rick Jordan
  - Dallas Trinkle
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  - Joe Creaghead
  - And others . . .
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- ❖ GOAL: To learn if marketing and recruitment efforts were being addressed despite not having ABET accreditation

# LINGERING QUESTION:

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- Would ABET accreditation enable Gateway students to transfer to engineering programs at UK, U of L, or Purdue University?

# ANSWER:

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- Vast majority of Gateway students transfer to NKU
  - Data 2015-2016 AA/AS graduates:
    - 77% Transferred to NKU
    - 5% to UK
    - 0% to U of L and Purdue
- Curriculum of AAS in Manufacturing Engineering Technology is not designed, nor intended, to align with curriculum of engineering programs
- Engineering Technology Programs vs. Engineering Programs:
  - Engineering technology focuses on the application of engineering techniques
  - Engineering focuses on the development of concepts



# PRIORITIES TO MAXIMIZE RESOURCES:

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- **Full Implementation of Strategic Enrollment Management Plan**
  - Increase recruitment into programs
  - Heighten awareness of Gateway as a first choice for families of middle and high school students
  - Develop strong pathways from Social Service Centers to Gateway programs
  - Align college goals to incoming Performance Funding Measures

# PRIORITIES TO MAXIMIZE RESOURCES:

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- **SACSCOC 5-Year Report:**
  - Federal Requirements
  - Substantive Change
  - Assessment of Student Outcomes
  - College-Wide Participation
  - Changing Criteria in Play

# PRIORITIES TO MAXIMIZE RESOURCES:

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- **Regional College Strategy for Campuses:**
  - Urban
  - Center for Advanced Manufacturing
  - Allied Health and Nursing

# QUESTIONS?

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