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A BALANCED APPROACH TO TEACHING A MANUFACTURING COURSE UTILIZING PROBLEM-BASED LEARNING

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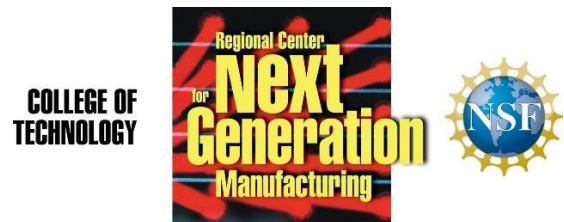


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A Balanced Approach to Teaching and Learning

Our *Balanced Approach to Teaching and Learning* model addresses the three components to teaching and learning (student, teacher, curriculum), the interactions between them and the effect on learning outcomes.

This model develops student readiness through the education-to-career pathway by working with educators to understand the difference and balance between:

- **A Good Student and a Good Learner**

Moving from answering questions to asking questions by developing self-regulation, problem-solving, and critical thinking skills

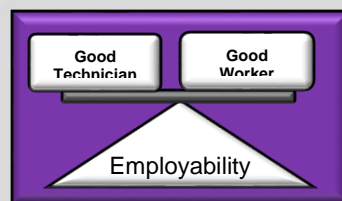
- **Teacher-centered teaching and student-centered teaching**

Moving from lectured instruction to facilitating learning

- **Technical skills and employability skills**

Moving from content knowledge to application of knowledge and the development of problem solving and critical thinking.

Outcomes of this balanced approach meets the demands of the 21st century skill set.

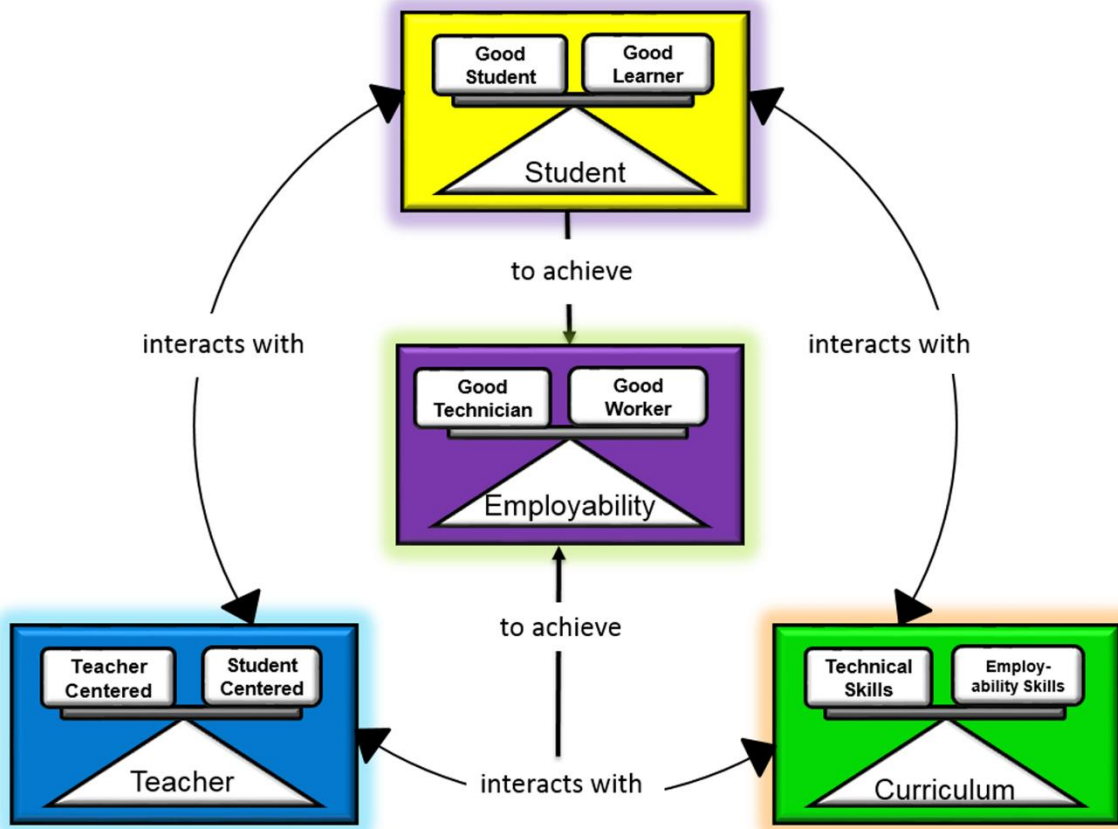


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A Balanced Approach to Teaching a Manufacturing Course



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Practicum Overview

The web-based practicum is designed to support the needs of instructors to develop:

- Curriculum that balances content knowledge with application of knowledge to solve real world novel problems that occur in the workplace
- Student learning skills necessary to problem solve
- Student center teaching approaches to facilitate learning

Each of the 4 component of the Teaching and Learning model is broken down into a unit.

- The Role of the **Student** in the Learning Process
- The Role of the **Teacher** in the Learning Process
- The Role of **Curriculum** Development in the Learning Process
- Assessment of **Student Learning Outcomes** as Measured by Employability Skills.

Each unit will include:

- Unit Overview / Introduction
- Learning Goals and Outcomes
- Resources – Overview of Key Concepts and Additional In-depth Resources
- Threaded Discussions - Engage in asynchronous discussions with colleagues and facilitators on the reframing and implementation of curriculum
- Participant Postings – Post your ideas and work for feedback and sharing with colleagues and facilitators

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Participation

The real learning from this practicum will occur when you try out a new idea and evaluate the outcomes.

These new ideas will come from many places, the key concepts of the model, suggested activities, discussions with the facilitators and your colleagues, and feedback from your students.

Doing Precedes Understanding. Learning is a reiterative process. You will be engaged in the learning process as you engage your students. Try out a new idea, share what you did and the outcome, evaluate the effectiveness, build on that experience, and try again.

You will need to engage in the threaded discussions to really have an impact on moving your learning forward. The more you engage with the ideas and participate in the threaded discussions, the more impact you will have on improving the learning outcomes and employability of your students.

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