

Industry Professionals

Shaping Our Future Workforce: A Summit
for U.S. Shipbuilding & Repair

John Tuttle

Competency Levels At Graduation

- So Much to Do So Little Time
 - U/G cannot really be expected to have experience
 - limited time
 - Raw skills needed to lead to a successful career
 - Engineering fundamentals
 - Learning how to learn
 - Exposure to problem-solving
 - Employers responsibility to nurture raw talent into mature professionals
 - On the job' training / experience supports development of engineering judgement.

Priorities

- **Vision(Future Marine Industry)**
 - **SYSTEM thinking will pervade (top down approach)**
 - **Product design, a formal technology in itself**
 - **Total system approach will involve whole enterprise**
 - **More collaborative**
 - **Concurrent processes**
 - **Computer network intensive**
 - **Widely dispersed multi-disciplinary teams**
 - **Complex environment**
 - **Innovation is key to survival**

Preparing Graduates for What Employers Want

- **Essential**

- Ready to work
- Knowledge of fundamentals
- Understanding of fundamental software used in area of education
- Introduction to marine standards
- Eager to learn

- **Desired**

- Some work experience
- Application software experience
- Willing to travel
- Introduction to business concepts
- Certification
- Entrepreneurial spirit

Questions

- Industry views about competency levels at graduation compatible with Universities delivering students with a sound engineering education but little practical experience?
- What is the balance between competency development in school and subsequent on the job training and experience?
- Is the development of an employee's skills the employer's or the individual's responsibility? Or both?
- Should the employer provide guidance on what competencies an employee needs at different levels? Should they provide opportunities for them to achieve these competences?