

# THE FUTURE GIST

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## Possible Futures for GRCC



# A FUTURES CONTEXT

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- ❑ What will student success look like in 2015?
  - ❑ What external factors will help or hinder student success in the future?
  - ❑ How will GRCC structure itself to provide for student success in 2015?
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# THE KNOWABLE FUTURE

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- ❑ We have an aging society
  - ❑ Birthrates are slowing down
  - ❑ Many Baby Boomers will reach traditional retirement age over the next 10 yrs.
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# THE KNOWABLE FUTURE

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- ❑ There will not be a sufficient number of new workers available to replace or to fill newly created positions
  - ❑ The level of education of incoming workers will be the same or less than that of the previous generation for the first time in U.S. history.
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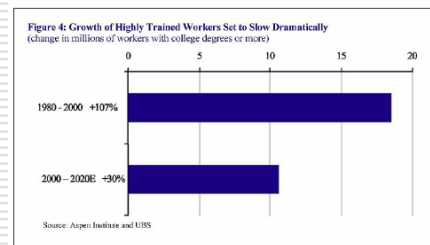
## Growth in the U.S. Workforce Will Dramatically Decrease

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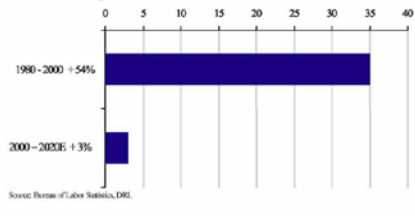
## Growth of Highly Trained Workers Will Slow Dramatically

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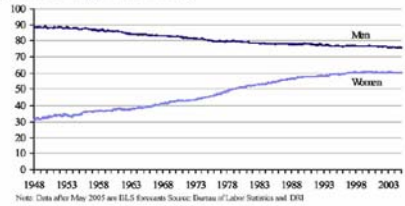
## Growth of Prime Age Workers Will Slow Dramatically

Figure 3: Growth of "Prime Age" Workers Set to Slow Dramatically (millions of workers age 25-54)



## Workforce Participation Has Levelled Off for Women

Figure 2: Labor Force Participation Has Stabilized for Women But Is Declining for Men (percentage of adult population in labor force)



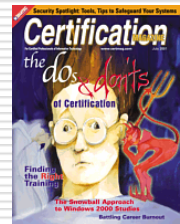
## Three Trends Converging

- Slower Overall Labor Force Growth
- An Older Labor Force



## Three Trends Converging

- A Skills Gap



## Education Will Be Hit Hard

- The Skills Gap
- The Older Worker
- Retirement



## What structural changes will have to be made at GRCC?

- Exploit the Opportunities
- Restructure the Way We Teach
- Use Technology to its Fullest Potential
- Restructure Retirement

## Exploit the Opportunities

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- ❑ Continue to dialog with key employers
  - ❑ Deliver skills JIT, On-Site, etc.
  - ❑ Increase flexibility and productivity
  - ❑ Specialize in the education & training/retraining of the older worker
  - ❑ Leverage technology to provide learning
  - ❑ Archive/record tacit institutional knowledge
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## Restructure the Way We Teach

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- ❑ Video/Digital recording of redundant lectures - [Streaming Video](#)
  - ❑ Use [Collaborative Learning](#) strategies
  - ❑ Let the [Games](#) begin
  - ❑ Use contextual, [Project-Based](#) learning
  - ❑ Reduce in-classroom activity by > 50%
  - ❑ Mediate faculty/student interaction (Dialog, Discussion, etc.) over the Internet
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## Use Technology to its Fullest Potential

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- ❑ Move all commercial transactions to the Internet
  - ❑ Shift from expensive proprietary software toward free, open source software for all routine administrative and business operations (and possibly academic operations)
  - ❑ Install WLANs to provide faculty, administrators and students with high-speed wireless Internet access in lieu of any further hardwiring of classrooms, dormitories, etc.
  - ❑ Outsource in-house computing operations to an outside utility
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## Use Physical Technology to Re-Engineer Social Technology

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- ❑ Restructuring Industrial Era Institutions - the real information revolution. (The Fifth Wave)
  - ❑ Re-engineering work, Outsource in-house computing operations to an outside utility
  - ❑ Use open innovation vs. proprietary information as a Continuous Improvement Strategy
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## Restructure Retirement

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- ❑ Retrain mature Faculty for [Multidisciplinary Instructional Development Teams](#) that will facilitate student success in 2015.
  - ❑ Develop a mentoring program using mature faculty members who mentor new faculty
  - ❑ Provide ample [Professional Development & Training Opportunities](#) to empower mature faculty to achieve academic & technologic skills necessary for re-engineering the work of teaching/learning/student success
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## Restructure Retirement

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- ❑ Use Flexible Scheduling
  - ❑ Job-Sharing
  - ❑ The Opportunity to Work from Home
  - ❑ Flexible Part-Time Positions
  - ❑ Benefits in Lieu of Pay
  - ❑ Opportunities to Do Something New
  - ❑ Delay Retirement (Early retirement buy-out is only a short-term solution.)
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## The Knowledge Worker

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**Most learners will learn to be knowledge workers as production work goes the way of agriculture.**

**What does a knowledge worker look like?**

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## What Do Successful Learners Learn?

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- How to find valid [Information](#) sources
  - How to ask good questions
  - Critical thinking-Problem-solving
  - JIT Skills-High-tech, Adv. Manf.
  - Developmental Ed. (High-touch)
  - Pre-Engineering-Excitement about creating/designing new things.
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## What Do Successful Learners Learn?

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- Relevant and up-to-date occupational programs
  - Academic content in context
  - Multi-disciplinary science & math
  - Teamwork/Innovation
  - Introduce technologies that lead to creative destruction
  - How to manage change/futures study
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## Emerging Jobs or Technologies

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- Life Sciences
    - Pharmaceuticals
    - Research
    - Bio-Informatics
  - Nanotechnology
    - Materials Science
    - Manufacturing
  - Homeland Security
    - Bio-Metrics (facial-feature ID)
    - Retinal scans
    - Security-related products and services
    - Cyber-security
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## Emerging Jobs or Technologies

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- Engineers and Designers
    - MEMS
    - Electronics
  - Alternative Energy
    - Geo-thermal
    - Resurgence of nuclear power plants
    - Hydrogen Fuel Cells
    - Bio-Diesel
    - Solar
    - Wind
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## Parting Thoughts

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We are at the very beginning of time for the human race. It is not unreasonable that we grapple with problems. But there are tens of thousands of years in the future. Our responsibility is to do what we can, learn what we can, improve the solutions, and pass them on.

--- Richard Feynman

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# Parting Thoughts

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Develop a shared meaning of  
Student Success at GRCC in 2015

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- Think** long-term
  - Reflect**
  - Share** your thoughts with others
  - Listen** to others
  - Act** upon your preferred future for student success at GRCC as one force
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