



# GENERAL EDUCATION AND STUDENT SUCCESS IN THE SUB-DEGREE SECTOR

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# Linda S. Bowman, Ph.D.

- From the two-year-degree sector
- Educated in General Education tradition
- Educated in Professional discipline
- Experience in private (self-financed) and public sectors
- Experience in policy development and implementation

# Exciting time in Higher Education-- Worldwide

- Paradigm shift to Learner-centeredness
- Advances in sciences of learning
- Development of interdisciplinary initiatives
- Implications of technology
- New models for scheduling & completion
- New/renewed interest in General Education
- Evolution & revolution of new economies
- New imperatives for education & training
- Reforms in remedial/development education
- Development of new CC Honors Colleges
- Concurrent credit in high schools (secondary)
- New models for institutions

# U.S. : Policy Goals 1960s and Beyond

- Universal Access: easy entry
- Termed Democracy's Colleges
- Opening doors; 2<sup>nd</sup> chance
- Post-war educational access goals
  - WW II; Vietnam
- Economic development
- Social responsibility
- Closing attainment gaps: females, minorities
- Work to be done: difficult exit

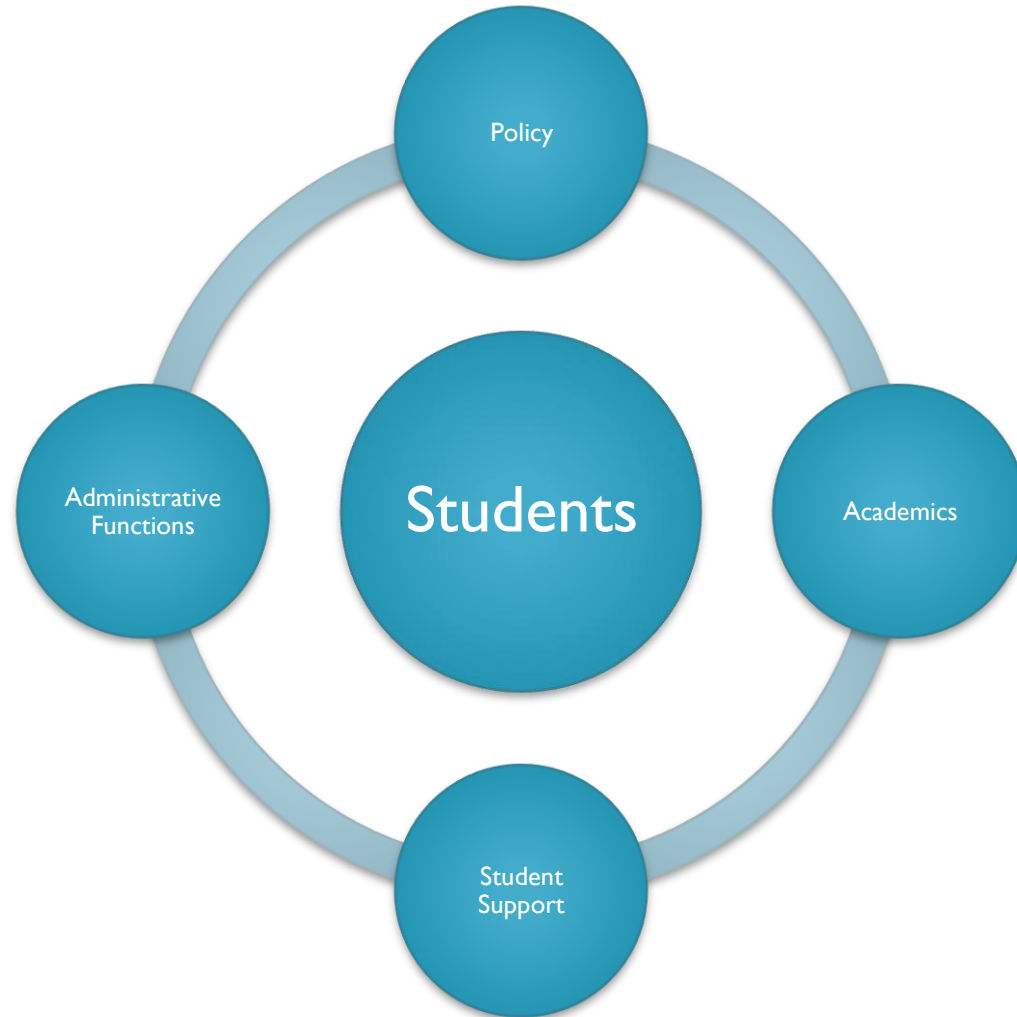
# Hong Kong: Policy Goals 2010

- Assuring growth in capacity of entire system
- Assuring students at sub-degree institutions can graduate in same time as native students
- Implementing 3-3-4
- Implementing GE
- Extending access

# Differences between HK and US

- Public and private institutions in US
- Public and private institutions in HK
  - Funding
  - Policy levers
  - Coordinating Boards

# Key Similarity: Focus on Students

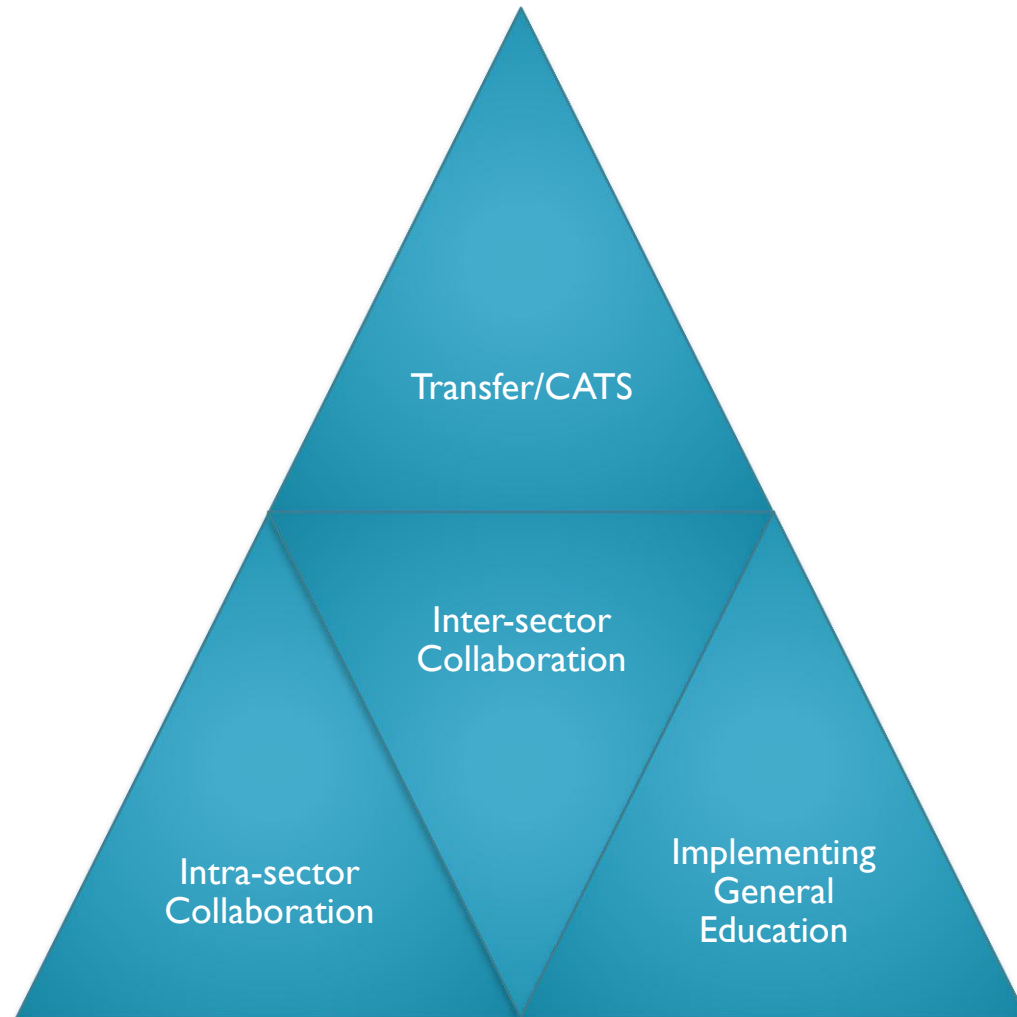


# GE and Transfer as organizing framework

- GE and Transfer: the right thing to do for students, for families, for economies, for the future
- Opportunity to achieve broader institutional goals
- Possibility to utilize GE and Transfer to frame strategic plan for institutions



# Critical Components to Attain Goals



# Success strategies for high transfer rates

- Data-based decision-making
- Collaborative campus programming
- Supportive administrative offices
- High faculty engagement
- Valuing students
- Culture of performance and accountability
  - US Pell Institute

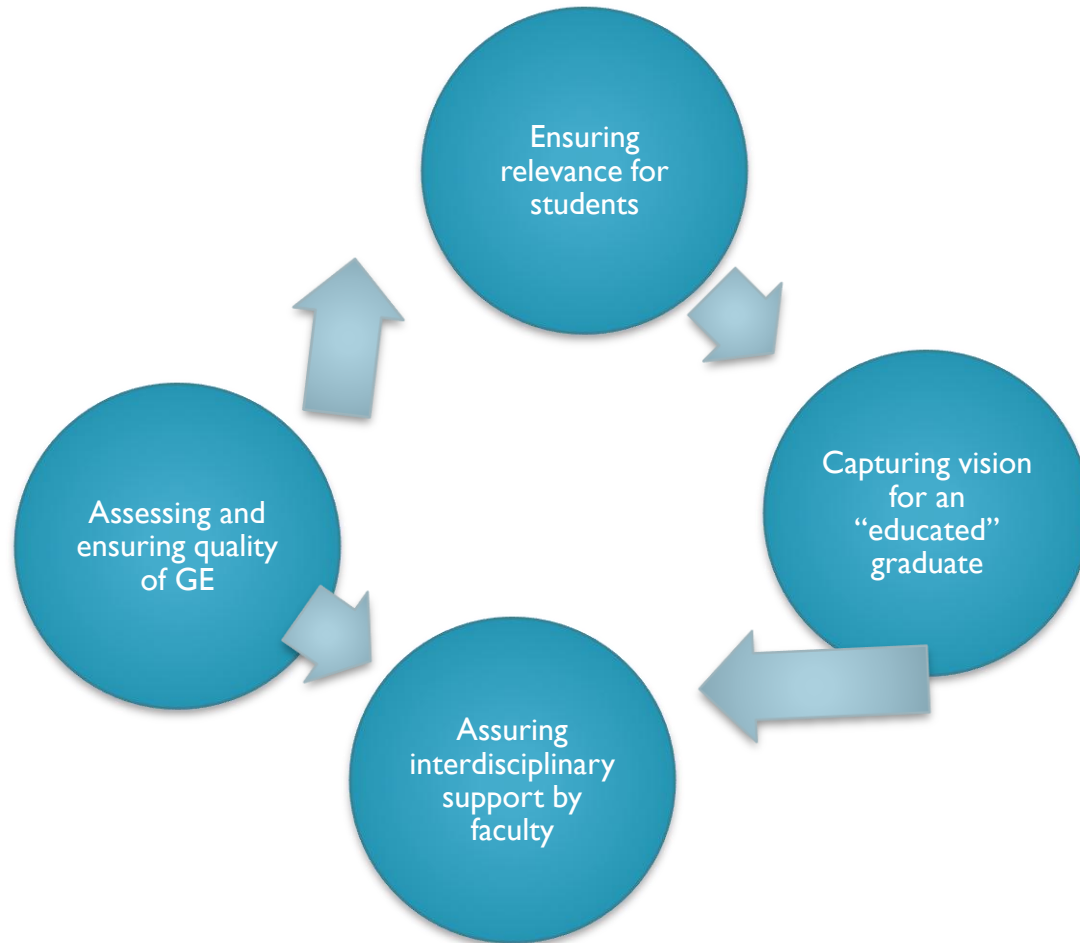
# Role of Leadership: Formal and Informal

- Defining the parameters
- Articulating the benefits
- Creating a culture of collaboration—  
internal/external
- Providing support in dynamic  
environment
- Honoring the past/preparing the future
- Strengthening a culture of accountability
- Ensuring a culture of quality assurance

# Collaboration within the Sub-degree sector

- Balancing Competition v Collaboration
- Defining shared interests
- Acknowledging differences: Associate Degree, Higher Diploma
- Creating environments for sharing
- Overcoming barriers to change
- Collaborating on student learning research

# Critical Components of GE



# Implementing General Education with Transfer as a Goal

- Critical foundation: understanding GE in four-year sector
- Collaboration across the two-year sector
- Individualization within institutions

# Establishing the Rationale for General Education

- providing a context for critical thinking and problem solving
- thinking outside of the program of study
- tackling problems and proposing multiple solutions
- expanding one's context
- creating new insights (from personal reflection and thoughts of previous Fulbright scholars in Hong Kong)

# Implementing Best Practices in GE

- Student-centered Teaching & Learning
- Learning Styles
- *Brain Rules*: Dr. John Medina
- Role of Technology
- Effective Implementation of GE
  - Design
  - Training
  - Support
  - Quality Assurance
- Research on student learning
- Closing the assessment loop



# Approaches to the Teaching and Learning Partnership

- Students as partners
- Case studies
- Group work
- Backward course design
- Flipping
- Interdisciplinary approaches:
  - [http://www.denverpost.com/news/ci\\_20249700/fake-crimes-teach-real-lesson](http://www.denverpost.com/news/ci_20249700/fake-crimes-teach-real-lesson)

# Critical Role of Assessment of Student Outcomes

- How do we understand the assessment of GE?
  - In courses-as we have
  - In programs-in GE as well as professional disciplines
  - In colleges-whole person assessment for graduates
  - In the sub-degree sector-defining credentials, e.g. Qualifications Framework (HK); e.g. Work Keys (US)

# Key Result: Transfer

- Student-centered System
  - Defined Pathways
  - Easily navigated
- CATS (Credit Accumulation and Transfer System)

# Colorado Career Cluster Model



COLORADO COMMUNITY  
COLLEGE SYSTEM

## Management and Administration

- Administrative Services
- Business Information Technology
- Corporate/General Management
- Human Resource Management
- Operations Management

## Marketing

- Marketing Communications
- Marketing Management
- Marketing Research
- Merchandising
- Professional Sales/Sales Management

## Finance

- Accounting
- Banking Services
- Corporate Finance
- Insurance
- Securities & Investments

## Government & Public Administration

- Foreign Service
- Governance
- Legal Services
- Planning
- Public Management & Administration
- Regulation
- Revenue & Taxation

## Business, Marketing & Public Administration

## Hospitality, Human Services & Education

## Hospitality & Tourism

- Lodging
- Recreation, Amusements & Attractions
- Restaurants, Food & Beverage Services
- Travel & Tourism

## Human Services

- Consumer Services
- Counseling & Mental Health Services
- Early Childhood Development
- Family & Community Services
- Personal Care Services

## Education & Training

- Administration and Administrative Support
- Professional Support Services
- Teaching and Training

## Agriculture, Food & Natural Resources

- Animal Science\*
- Agribusiness Systems
- Food Products & Processing Systems\*
- Natural Resource & Environmental Systems\*
- Plant Science\*
- Power, Structural & Technical Systems\*

## Energy

- Electromechanical Generation & Maintenance\*
- Electrical Energy Transmission & Distribution\*
- Energy Efficiency & Environmental Technology\*
- Fossil Energy Extraction, Processing & Distribution\*
- Renewable Energy Production\*

\* STEM affiliated pathway

## Agriculture, Natural Resources & Energy

## Postsecondary & Workforce Readiness

Foundation knowledge & skills for all career pathways include:

- Academic Content Knowledge
- Civic Responsibility
- Collaboration
- Communication
- Creativity & Innovation
- Critical Thinking/Problem Solving
- Find/Use Information Technology
- Global & Cultural Awareness
- Personal Responsibility
- Work Ethic

Specialized CTE Pathways include:

Alternative Cooperative Education (ACE), FACS CORE & World of Work

## Health Science, Criminal Justice & Public Safety

## Health Science

- Biotechnology Research & Development\*
- Diagnostic Services\*
- Health Informatics
- Supportive Services
- Therapeutic Services\*

## Law, Public Safety, Corrections & Security

- Correction Services
- Emergency & Fire Management Services\*
- Law Enforcement Services
- Security & Protective Services

\* STEM affiliated pathway

## STEM (Science, Technology, Engineering & Math)

See also STEM affiliated pathways noted by \*

- Research, Exploration & Innovation
- Design, Development & Application

## Arts, A/V Technology and Communication

- Audio/Video Technology & Film
- Journalism & Broadcasting
- Performing Arts
- Printing/Publishing
- Visual & Design Arts

## Information Technology

- Information Support and Services
- Interactive Media
- Network Systems & Telecommunications\*
- Programming & Software Engineering\*

## STEM, Arts, Design & Information Technology

## Skilled Trades & Technical Sciences

## Architecture & Construction

- Construction
- Design & Pre-construction\*
- Maintenance & Operations

## Manufacturing

- Health, Safety & Environmental Assurance
- Logistics & Inventory Control
- Manufacturing Production
- Maintenance, Installation & Repair
- Production/Process Technology\*
- Quality Assurance

## Transportation, Distribution & Logistics

- Facility & Mobile Equipment Maintenance
- Health, Safety & Environmental Management
- Logistics, Planning & Management Services
- Planning, Management & Regulation
- Sales & Service
- Transportation Operations
- Transportation/Systems Infrastructure
- Warehousing & Distribution Center Operations

\* STEM affiliated pathway

# Lessons from the States

- California: access without sustainability
- Florida: comprehensive approach to degree transfer
- Washington state: universal transfer of the Associate of Arts
- Colorado experience: making progress through policy-making

# Colorado's Transfer Journey: What Lessons Might Apply?

- Creation of CCNS in two-year sector
- Conversations with four-year sector
- Most-willing participants first: Private universities--Regis U and others
- Implementation with the public sector universities:
  - Needed laws and rules to implement:
    - Transferable Core
    - Transferable Generalist AA and AS
    - Transferable Designated Degrees

# Colorado Department of Higher Education: At the State Level

- For students and parents:
  - <http://highered.colorado.gov/Academics/Transfers/Students.html>
- For educators and administrators:
  - <http://highered.colorado.gov/Academics/Transfers/>

# 2-year College System-wide Approach to Transfer

- <http://www.cccs.edu/edservices//transfer.html>



# At the institutional level

- <http://www.ccaurora.edu/programs-classes/transfer-options/transfer-degrees>

# Key Efforts

- Determining how meet multiple interests: students, public agenda, higher education institutions
- Seeking “most willing” partners first
- Accumulating successes
- Building external support

# Tell the story: the Spokespersons

- U.S. President Barack Obama

“our community colleges...a career pathway to the children of so many working families.” *State of the Union Address, 28 January 2010*

- Dr. Jill Biden, community college faculty and wife of U.S. Vice President Joe Biden:

“This is the moment for community colleges. Our work has just begun.” *Chronicle of Higher Education, 14 April 2010*

# US Rationale for Support for Transfer

- By 2020, 70% of jobs require post-secondary education
- Colorado: 41% of Adults have A.D. or higher
- Therefore, 29% skills gap
- 56% enter university; only 1/2 graduate
- Attainment gap: whites v minorities
- Traditional models not meeting needs
- Danger of 1<sup>st</sup> generation to be less educated than previous
- Students do as well or better
  - GPA & graduation rates
- Universities seen as *Academically Adrift*

# Hong Kong Rationale for Support for Transfer

- Expanded transfer placements: 4,000
- Past: 18% to university
- Education and skills needed for new economy
- Dangers of bifurcated society
- Role of career ladders
- Everyone's best interest

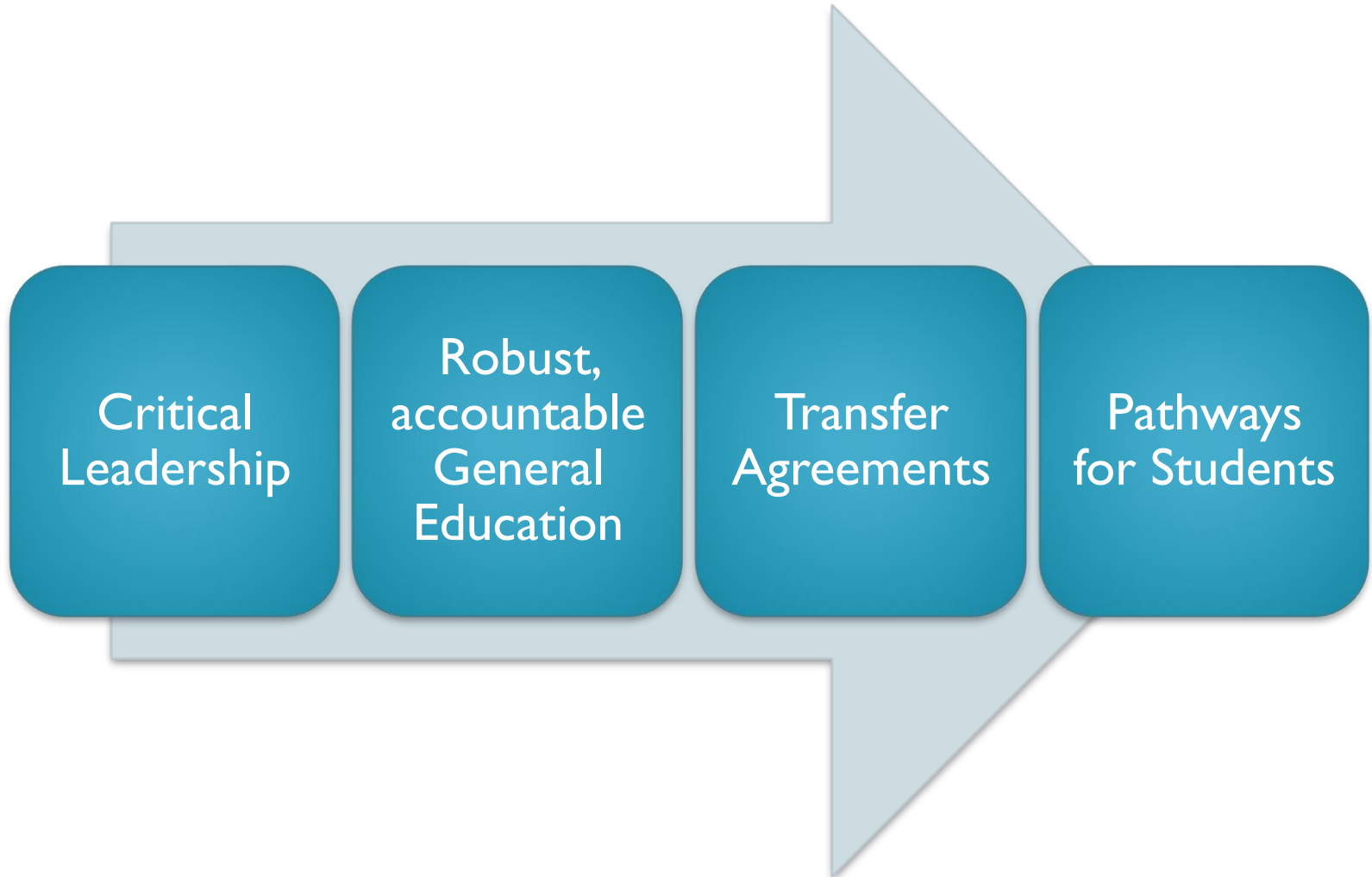
# Challenges for Hong Kong's Sub-degree Sector

- Within the sector:
  - Dilemma of differentiation
  - Strength in commonalities
  - Importance of quality assurance
  - Realities of competition and the market
  - Ensuring unimpeachable quality
- Outside of the sector:
  - Need to define self-interest for universities
  - Scarcity of upper division placements
  - Public information campaign—the benefits of greater access

# Sub-degree Sector: Advancing the Arguments for Transfer

- Academic staff are teaching experts
- Research into student learning
- Prime driver is student success
- Communities need education and training
- Hong Kong's students deserve a chance- and a second chance

# Key Components for Success





# The Future is Promising

- For individual students
  - Employability
  - “Along the way” credential
- For society
  - Broader economic prosperity
  - Changing generations
  - Ensuring the future

# Key Questions for Consideration

- What are the drivers for successful implementation of GE?
- What are the barriers? How will we overcome them?
- What are the incentives for society for transfer?
- What are the incentives for sub-degree providers and community colleges?
- What are the incentives—now or needed—for the universities?
- Who are potential additional partners?