

# Future-oriented Training for Higher Education and at the Secondary School Level



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UMUC.EDU

# Future Studies

## Plan for the presentation:

1. Introduction
2. Why should we study the future?
3. A short course in futuring and foresight
4. Building futures thinking into the classroom

Questions are OK at any time!

# University of Maryland University College

## University of Maryland University College (UMUC)



UMUC.EDU

# University of Maryland University College

## UMUC Mission

The mission of University of Maryland University College is improving the lives of adult learners. We will accomplish this by:

- Operating as Maryland's open university, serving working adults, military servicemen and servicewomen and their families, and veterans who reside in Maryland, across the United States, and around the world;

# University of Maryland University College

## UMUC Mission- continued

- Providing our students with affordable, open access to valued, quality higher education; and
- Serving as a recognized leader in career-relevant education, embracing innovation and change aligned with our purpose and sharing our perspectives and expertise.

# University of Maryland University College

## Background information:

- Founded in 1947 as a branch of UM College Park
- Open enrollment university
- Europe – 1949, Asia 1956
- In 1970 UMUC became an independent degree-granting institution within the University System of Maryland
- 140 locations on four continents

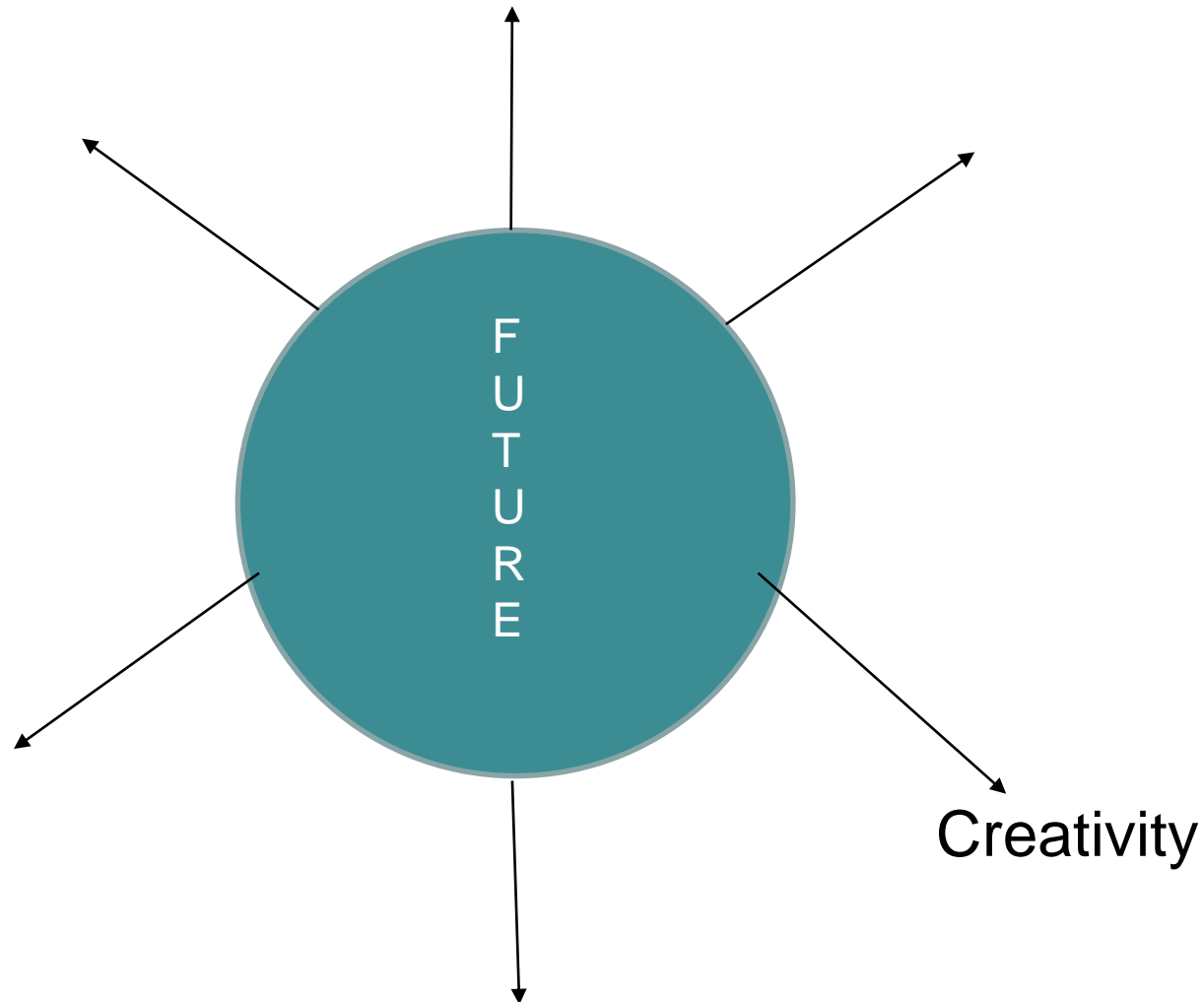
# University of Maryland University College

## Background information:

- Bachelors, masters and doctoral degrees
- 90 individual degrees, specializations and certificates
- About 975 distinct online courses
- 80% of registrations are online
- Largest four-year public university in the USA
- About 90,000 students
- 75% of undergraduates work full time

# Exercise

Two minute exercise – what does Future mean?





# Why Study the Future?

*“The person who does not worry about the future will shortly have worries about the present.” —Chinese proverb*

*“The world’s greatest need is an appetite for the future. The sense of the future is behind all good policies. Unless we have it, we can give nothing either wise or decent to the world.” —C.P. Snow, 1905–1980*

*“Any useful idea about the future should appear to be ridiculous” – Jim Dator, University of Hawaii*

# Why Study the Future?

Studying the future involves thinking ahead. Why should we do it?

Change is accelerating, driven by technology, economic development and globalization.

Rapid change makes it necessary to understand the process of change and the future, because the world we will live in tomorrow will be significantly different than the one we live in today.

# Why Study the Future?

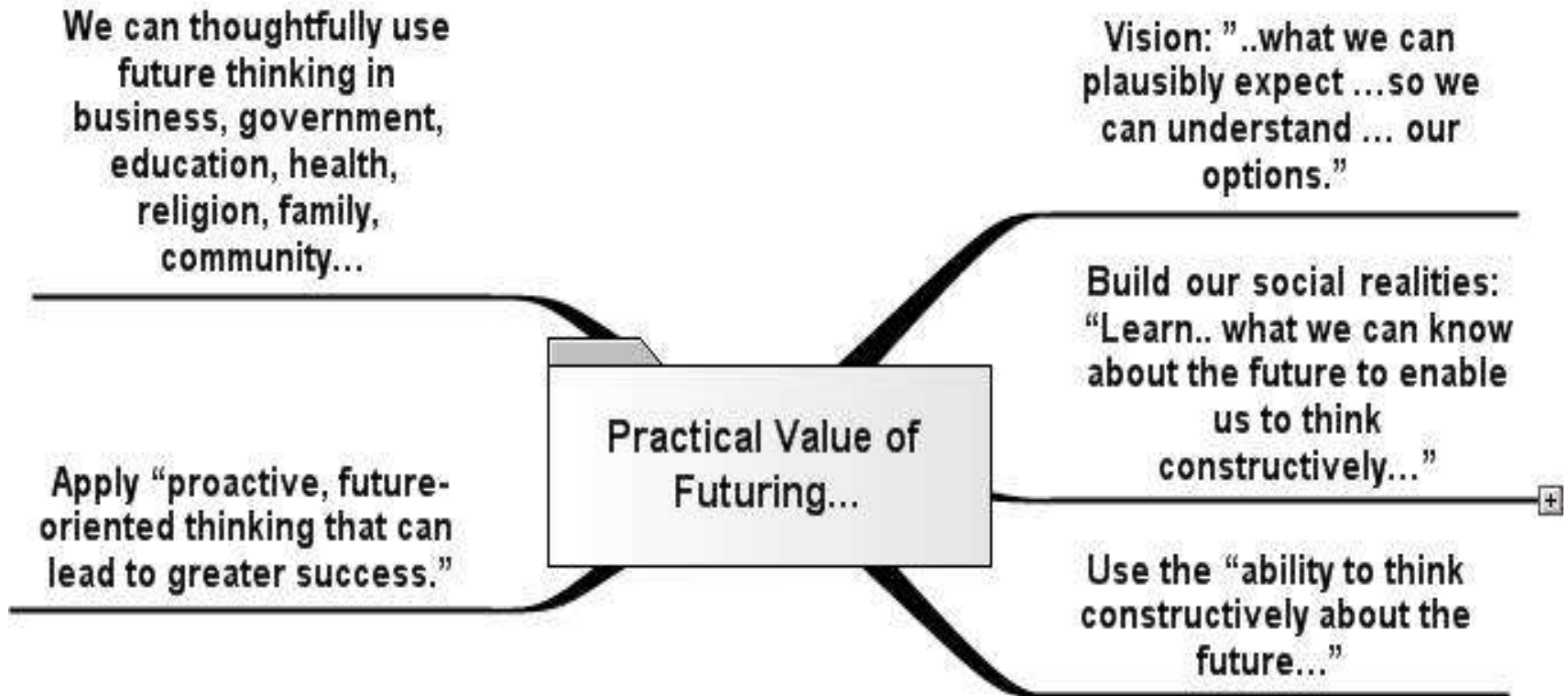
Studying the future –*continued*

If people and organizations anticipate change they have the opportunity to take advantage of to improve their lives and to impact the future in a positive way.

Looking at it another way, today's actions will impact and help shape the future for individuals and society as a whole.

Anticipating the future helps people and organizations achieve their goals.

# Why Study the Future?



**From the Future: An Owners Manual. 2002 World Future Society, USA**

# Why Study the Future?

Thinking about the future is important for business because:

- You can identify new products and services
- You can identify threats
- You can anticipate competitive actions
- You can study demographic change to forecast changes in the market
- You can take advantage of new technologies

# Why Study the Future?

Thinking about the future is important for Government because:

- Government must be aware of changes in public attitudes and priorities
- Demographic change can impact the role of government
- Technology raises new issues of policy, ethics and opportunity
- Anticipating needs can help governments plan effectively
- It is important to anticipate the complete range of the consequences of government initiatives

# Why Study the Future?

Studying the future – why teach it?

Futures studies help students:

- gain an understanding of the factors that drive change
- Become aware of probable and possible future directions
- To imagine alternative futures
- Identify preferred directions
- Exercise critical thinking and problem solving skills

# Why Study the Future?

Future and foresight is a serious field of study

University Futures & Foresight Programs (Partial list)

University of Houston - MS

Hawaii Research Center for Future Studies (Undergraduate and Graduate studies) MA, PhD

Turku School of Economics (Finland) – MA

Tamkang University (Taiwan) – integrated in the curriculum

Swinburne U of Technology (Australia) MS, PhD

European Business School & Institute for Future Studies (Germany)  
Msc, MBA, PhD in Corporate Foresight

University of Kerala (India) Mphil, PhD

CNAM, Department of Management (France) PhD



# Why Study the Future?

Future and foresight is a serious field of study.

## Journals: (Partial List)

European Journal of Futures Research

Journal of Future Studies

Foresight: The Journal of Future Studies, Strategic Thinking and Policy

International Journal of Foresight and Innovation Policy

World Future Review: A Journal of Strategic Foresight

World Futures: The Journal of New Paradigm Research

Future Studies Research Journal

# Future Studies in the Classroom

## Developing Futures Thinking

Create a course in Future Studies

Build futures thinking and foresight into any class

# Future Studies in the Classroom

## Futures course description

Investigate the future in a changing world. Using tools and perspectives across fields of study and cultures, students expand foresight and build the future. Acquire an appreciation for the complexity of our global society and its diversity (Anne Arundel Community College, 2016)

# Future Studies in the Classroom

## Futures course description

Futuristics and Political Design is an advanced undergraduate course taught only at the University of Hawaii at Manoa campus. The objective of the course is to have students develop their ideas about preferred forms of governance. Students do this by designing a governing system for people living on Mars in the mid 21st Century. (University of Hawaii Manoa, 2016)

# Short Course in Future Studies

Lets take a very short course in future studies.

# Exercise

## Futures Exercise

Think about the next 30 days.

- What important events do you anticipate?
- What will you be doing?
- You have 3 minutes

Now do the same thing for the next year

- What important events do you anticipate?
- What will you be doing?
- You have five minutes

# Exercise

## Questions

What changed from one month to one year?

Which entries have a high probability of success?

Which entries have a low probability of success?

What did you learn about your immediate future? Does that learning suggest that you change things?

# Short Course on Future Studies

With all due respect to the Crystal ball, Tarot cards or Bali's traditional healers - Balian, dukun or shamans; future studies is different. It is based on established principles and the rigorous application of productive techniques.





# Short Course on Future Studies

How can we think ahead? It is not easy to do but futurists have identified a large number of techniques which can help us.

The choice of technique depends on the issue(s) to be addressed and the level of comfort the futurist has with the technique. Said another way, we all have our favorites.

# Short Course on Future Studies

## Futuring Techniques – a Long List

Backcasting  
Brainstorming  
Computer  
Modeling  
Creative problem  
solving  
Cross impact  
analysis  
Delphi  
Surveys  
Delphi Technique  
Driving Force  
Identification

Forecasting  
Mind Mapping  
Modeling  
Multiple  
Futures  
Methods  
Planning  
Scanning  
Scenario-  
building  
Simulation and  
Games  
Surveying

Environmental  
Scanning  
Synergy developing  
tools  
Trend analysis  
Understanding change  
Understanding the past  
helps to frame the  
future  
Virtual worlds  
Visioning  
Webbing  
Wildcards

# Short Course in Future Studies

Lets look a few of the futuring techniques  
and how they might be applied in a  
classroom.

# Short Course on Future Studies

## Brainstorming (What will things be like?)

- Determine the problem or topic that you want to brainstorm
- Assemble a small group  
Each person provides ideas to address the problem or topic
- No ideas are rejected, all ideas are recorded

Application – A marketing class might want to brainstorm ideas about the market for technology in Indonesia in 10 years given the continuing urbanization of the country.

(forecast by the United Nations)

# Short Course on Future Studies

## SWOT

- Strengths?
  - Weaknesses?
  - Opportunities?
  - Threats?
- Add Future Impact
- 
- ```
graph LR; A[Strengths?] --> D[Add Future Impact]; B[Weaknesses?] --> D; C[Opportunities?] --> D; E[Threats?] --> D;
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# Short Course on Future Studies

Historical Analysis (learning from the past)

Historical events used to anticipate the outcome of current developments and is based on an assumption that the future will perform much like the past.

Application: In the past, private foreign debt in Indonesia declined as the rupiah lost value. A finance class may want to assume that the rupiah increases by 5%, and forecast how will that impact private sector investment?”

# SWOT Exercise

For Universitas Terbuka, list:

- A strength
- A weakness
- An opportunity
- A threat

Now think where Universitas Terbuka will be in five years if these items are right.

# Short Course on Future Studies

Gaming (Understanding how things might be)

The simulation of a real-world situation by means of humans playing different roles.

Creating and understanding the substance and process of a situation by experiencing model rather than the actual reality.

Application: A class in education could game how things would be if Universitas Terbuka was 50% online.



# Short Course on Future Studies

Trend Analysis: (Continuing today into the future)

Trends can be easily extrapolated into the future, or the basic trend modified (slightly) to reflect current and anticipated changes.

Application: Ask the class what trends they think will continue on their current track and which ones will be altered. Why?

<http://ag.arizona.edu/futures/tou/sem2-techniques.html> - Technological Forecasting

# Short Course on Future Studies

## Delphi Techniques (Collective wisdom)

- 1.) Assemble a group of experts to answer questions
- 2) Pose questions in a “series of rounds.” Responses are anonymous

Results are judgments, hence, expert opinions, gathered by survey research methods

Application: Try it on any subject in a class

# Short Course on Future Studies

## **Backcasting:**

(How do we create the future?)

A method of “forecasting” or planning

”... a way to get a group to envision a desirable future and then determine what must happen in order for that goal to be reached.”

Application – Goal: increased home ownership in Indonesia

# Short Course in Future Studies

## Wild Cards

Future surprises with potentially significant consequences are called “Wild cards.” For example:

- 1885 Oil discovered in Sumatra
- 1957 First satellite is launched into space
- 1971 First Personal Computer (Kenbak) was sold
- 1991 Breakup of the Soviet Union
- 2004 Indian Ocean Tsunami
- 2007 Introduction of the smart phone (iPhone)

# Exercise

## Wild Cards

What are the wild cards that you anticipate in the near future? How would you respond?

What are the wild cards you anticipate in the long term? They can be personal or external. How would you respond?

# Future Studies in the Classroom

## Futuring

### When and where should it be learned

#### When?

- During a current learning experience
- Across the developmental lifetime
- Anytime, anywhere
- Life long learning

#### Where?

- Some place, some time
- Anywhere
- Embedded in the daily experience
- The time-space dimension has been eliminated

# Future Studies in the Classroom

Exercises: Start with the end first - What should learners “get out of the exercise?” Some possible futures outcomes might include:

To understand the factors that might influence a future state.

To use math or statistics to estimate a future state or condition.

To use writing and thinking strategies to outline a future scenario for any discipline or field... society itself.. the list goes on.

# Future Studies in the Classroom

Include the future in an exercise. Some ways:

Use existing information and ask learners to project it into a future time.

Use future predictions and learners critique the process by which the - estimate or scenario was made.

Use an existing future thinker's view and ask learners to think creatively about the possibilities.



# Exercise

## Creating futures exercises in the classroom

# 14 Ways to Think About the Future

1. We can have some idea about what might happen the future.\*
2. “Thinking in futures means putting the future first.” \*\*\*
3. There are many futures and the future is not already determined. Trends, events and the choices we make now all influence the long-term future. \* Anticipate and prepare for future needs. \*\*
4. Think long term as well as short term. \*\*
5. “Think in uncertainties.” \*\*\* The most-probable, most plausible futures and our preferred futures are all equally useful\*

# 14 ways to think about the Future

6. “The world as a drama where each player is dependent on and influences all other players on the scene.” \*\*\*
7. “Think in systems means thinking from the outside in, thinking in levels and inter-connections, independence and dependencies.” \*\*\*
9. Dream productively – the future suggests creativity. \*\*
10. Learn from your predecessors. \*\*
11. Use poor information when necessary. \*\*

# 14 Ways to Think About a Futures Lesson

12. **You need futures tools** – it's not just magic carpets and crystal balls.\*\*\*

13. Telling stories about possible but unlikely futures is useful.\*

14. Make something happen .\*\*\*

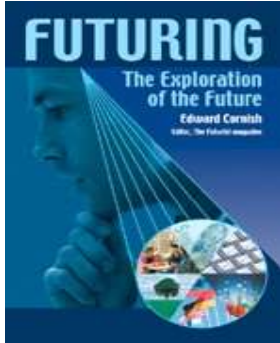
Adapted from :Bishop, Peter. "Thinking like a futurist: 15 questions to stretch your mind." The Futurist 32.n5 (June-July 1998): 39(4). Academic OneFile. Gale. Anne Arundel Community College. 13 Aug.

\*2008 <<http://find.galegroup.com.ezproxy.aacc.edu/itx/start.do?prodId=AONE>>.

\*\* Adapted From Cornish, Ed. *Futuring: The Exploration of the Future*. World Future Society, Bethesda, 2004.

\*\*\* Adapted or extracted from *Scenario Planning: The Link Between Future and Strategy* by Mats Lindgren, Hans Bandhold

# Books



Canton , James *The Extreme Future*: New York: Dutton, 2006.

Garland, Eric. *Future, Inc.* New York: AMACOM, 2007

Gardner, Howard. *Five Minds for the Future*. Harvard Business Press, 2007.

Heimstra, Glen. *Turning the Future into Revenue What Businesses and Individuals Need to Know to Shape Their Futures*. Hoboken, New Jersey: John Wiley, 2006.

Annotated bibliography... <http://www.metafuture.org/bio.htm>

Thank you!

Questions?