

# Higher Education in the Brave New World: How Students Will Learn in the Context of How Professors Teach

This conference focuses on delivery and content that serves students in the future.

## A STUDENT PROFILE



The symposium held on the campus of Cal State Northridge on  
**September 30, October 1, 2013.**

This document is designed to help inform symposium participants as part  
of Common Platform information.

For a list of all Common Platform information please go to:  
**[www.csun.edu/csufuture/newworld\\_info.html](http://www.csun.edu/csufuture/newworld_info.html)**

# The Cal State Northridge: Student Body and Community Profile

The student body of Cal State Northridge is much like looking at the United Nations. It is diverse in every way imaginable. It has a complex identity that the education community is committed to accommodate. If we could paint a picture of the student body and how it would look on the first day of class, what image would we find?

**The following represents what a CSUN class room of students looks like in 2012.**



## College Ready Preparation

	State	National
English Comp	72%	67%
College Algebra	58%	46%
Social Science	58%	52%
Biology	35%	31%
All 4 ACT Benchmarks	31%	25%

## Mental and Emotional Challenges

**3.3 %** of CSUN students have reported a disability. This includes AD/HD, visual limitations, communication and learning disabilities, deafness, acquired brain injury, psychological disability, autism spectrum disorder, and other functional limitations.

## Actuary Life Predictors:

(Average birth year = 1991)

1. Life span: 100 + years
2. Work life: Until 80 years old
3. Number of vocations in a life time: 5

## Financials

Funding Source	# Students	Amount
Loans	16,647	\$136,913,419
Grants	19,011	162,578,234
Scholarships	1,330	2,506,307
Fed. Work Study	496	1,671,006

## And Also:

CSU students in the decade ahead will include a growing number of graduate students (with many midcareer adults among them) and working adults returning to complete degrees or change careers as well as a growing number of international students.

The CSU's growing number of fully online degrees attracts students from across the nation and increasingly across the globe studying in their different living and working context.

## Diversity Descriptions

### **CSUN Undergrads 2013**

#### Gender:

Male: 47.7 %  
Female: 52.3 %

#### Ethnicity:

White: 32.6 %  
Black: 5.6 %  
Latino: 23.8 %  
Asian: 9.6 %  
Other: 20.7 %

#### International:

7.6 %

#### Average Age:

Undergrad 22.7 years  
Graduate 31.4 years  
All 23.9 years

## Divergent & Exceptional Life Experience:

Veterans: 789 eligible to enroll  
Midcareer: 6,440

\* With 6,440 midcareer professionals at CSUN alone—that number has grown by about 20% a year recently. This pattern of growth is likely to continue in the decade ahead. This group is diverse, older, with different life and learning experiences.

[www.csun.edu/~instrsch](http://www.csun.edu/~instrsch)

[www.bls.gov/data/](http://www.bls.gov/data/)

[www.census.gov/#](http://www.census.gov/#)

[www.usa.gov/Topics/Reference-Shelf/Data.shtml](http://www.usa.gov/Topics/Reference-Shelf/Data.shtml)

[www.heritage.org/research/reports/2013/03/college 2020](http://www.heritage.org/research/reports/2013/03/college%2020)

<http://research.chronicle.com>

[college2020.com](http://college2020.com)

CSUN's Veterans Resource Center

[tsengcollege.csun.edu](http://tsengcollege.csun.edu)

<http://www.calstate.edu/sas/documents/Fall2012Profile.xls>

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# Teaching and Learning Models for 2020

As technology advances, so does the nature and quality of teaching tools available for proficient instruction, how will this impact Best Learning / Best Teaching Practices: now and for the future?

## TEACHING MODELS

1. Traditions delivery: AKA, seat time / face to face / in class. The students attend class where the teacher instructs. Assignments are taken home to reinforce the lectures.
2. On-line: The students do not attend class in a room but rather on their computer.
3. Flipped Class Room: Putting the lecture portion of the classroom online to free up in-class time for discussions, problem solving, and/or interactive activities.
4. MOOC: “Massive Open Online Courses” delivering learning content online open to anyone who wishes to take a course. There is no attendance limit.
5. Blended: Usually the mix of traditional class room time and on-line instruction.

## And Also:

Increasingly models for how a course is structured and taught are a “blank canvas.” A faculty member can craft a distinctive learning experience that considers the course content, the learning outcomes, the students, and their own style. Part of the course may be in the classroom with a solid reason for gathering and an engaged use of time together, part may be in small working groups, part virtual, part in the field ... the design of a course or assignment, and the orchestration of a complete and distinctive learning experience can indeed be innovative drafting that leads to a course that eludes category. As faculty have a wider range of instructional options the ability to create an exceptional learning experience expands—like shifting from a box of 8 to a box of 63 crayons—in the hands of those with imagination and dedication to add to knowledge and experience—and there are many such in the CSU today.

Dimensions of Education

“The Six Classes That Will Make Any College Grad Employable”

<http://www.forbes.com/sites/billconerly/2012/08/21/how-to-make-a-college-graduate-employable/>

Univ. of Wisconsin-Madison

Teaching and Learning Excellence

<https://tle.wisc.edu/tleblogs/ambrower/college-2020-according-chronicle-higher-education/>

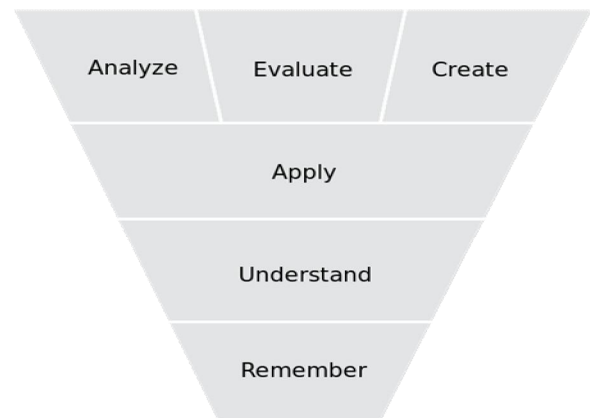
Linda Darling-Hammond, “The Flat World in Education,” Teachers College Press, 2010

<https://ed.stanford.edu/faculty/ldh>

[http://fora.tv/2010/08/02/Linda\\_Darling-Hammond\\_The\\_Flat\\_World\\_and\\_Education](http://fora.tv/2010/08/02/Linda_Darling-Hammond_The_Flat_World_and_Education)

[www.csun.edu/it/lecture-capture](http://www.csun.edu/it/lecture-capture)

<http://www.educause.edu/library/massive-open-online-course-mooc>



Categories in the cognitive domain of Bloom's Taxonomy (Anderson & Krathwohl, 2001)

## How Learning Works

1. There is not just one type of learner.
  - A. “**Active learners**” do well in almost any circumstance.
  - B. “**Passive learners**” require help. Percentage.
2. Research on learning as a science has been going on for over 100 years. The brain has not changed in how it learns.
3. Current research on the Brain and how it works has added support to effective learning processes.
4. No matter what delivery or teaching model, there are five principles that must be employed to overcome obstacles to student learning.
  - A. Cultivate student **motivation** by highlighting the value of the course that are success oriented and supportive.
  - B. Build on students’ **prior knowledge** and experiences.
  - C. Encourage the **organization** of knowledge in explicit structures.
  - D. Provide many opportunities for targeted **practice and feedback**.
  - E. Design for **deep learning** and progression to **mastery**.
5. Benjamin Bloom among others has also identified the phases of cognitive development (higher order reasoning). Course design and instructional strategies play a large role in moving students to the levels of reasoning and habits of mind so values both within higher education and increasingly within the world of career/professional practice.

# The College Graduate in 2020



## Getting a Job and Becoming a Participating Citizen in 2020 !

The world of the student is becoming more global.

Knowledge is doubling every 5 years.

Technology is reframing all aspects of business and social life.

What does everyone want and expect from public higher education in the future?



### Regional Employers and Community

Employers need people who are:

1. Ready to compete in a world economy
2. A degree that means something dependable
3. There will be jobs that don't exist yet
4. Self motivated
5. Problem solvers
6. Critical thinkers
7. Collaborative team players
8. Trustworthy and honest.
9. Civic minded citizens, informed voters
10. Communicate community values and standards

### Educators

Educators are tied to mission which promises:

1. A certain standard in education
2. Help students become more Employable
3. Help students become contributing members of society.



### The Student (and family)

1. The student expects the rewards from the promise of being a college graduate.
2. Expediency to Degree
3. Mitigate the debt of education
4. A college experience that is useable
5. The information learned will make them ready for a job.
6. Upward mobility

### The "Millennial Generation" Stats

1. Smaller % believe America is the greatest country
2. Less patriotic
3. 75% never married or single
4. Millennials represent 45.8 million people
5. 15% of men, 20% of women have 4 years college
6. 2% have Veteran status
7. Millennials are more optimistic than other generations

### The Changing Reality:

The essential life and career skills for the 21st century have, in many ways, merged. It about refined higher order reasoning skills; purposeful innovation; a sophisticated ability to define, analyze, and solve complex problems; the ability to learn at a high level (basically the skills of research and scholarship applied to a wide range of career, community, and life questions); and to work well and communicate effectively with a changing array of other talented professionals (often in a global context). There is also a growing expectation that graduates will have a highly varied work and personal life. Authors like Daniel Pink suggest that careers for those with university educations will look increasingly like what used to be considered "freelancers". They will direct their own career, choose among opportunities, add to education as needed (and they will have access to that needed additional education), and move around more easily, physically and virtually, in a global marketplace. In his book "Rise of the Creative Class," Richard Florida paints a similar picture of a different world of employment for those with distinctive capabilities in any field. So, one could say that in the end, we are preparing graduates to be public scholars, Renaissance individuals in an emerging new age, thinkers and creative artists in a wide range of fields in career and life. In that light – how evolving, engaged, and innovative does the classroom (physical or virtual) need to be? Do today's faculty really need to be thinkers and creative artists in the classroom and in their discipline?