



United Nations  
Educational, Scientific and  
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for Information Technologies  
in Education



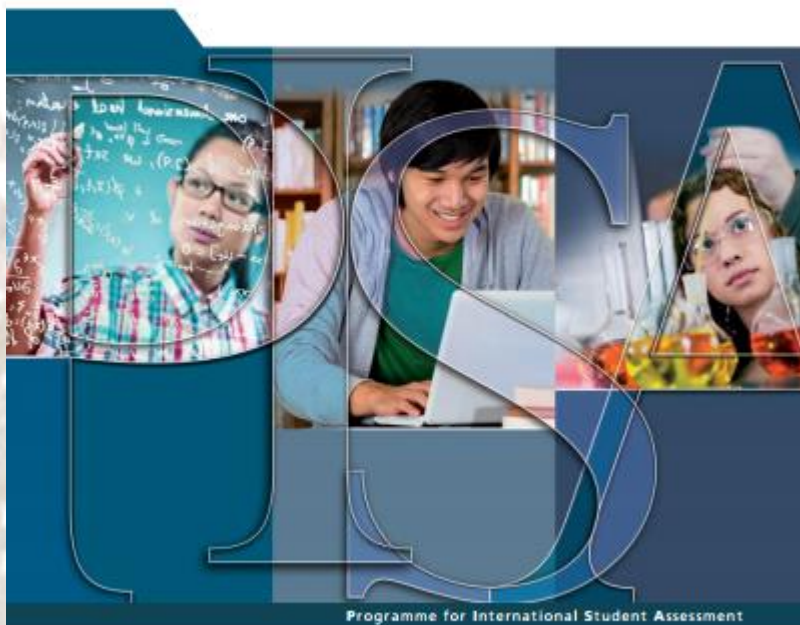
# Benchmarks for Quality Technology Enhanced Learning: Measuring Student Mobility in Higher Education



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**Students, Computers  
and Learning**  
MAKING THE CONNECTION



Recent OECD study  
published October 2015

<http://www.oecd.org/publications/students-computers-and-learning-9789264239555-en.htm>



# Benchmarks for Quality Technology Enhanced Learning: Measuring Student Mobility in Higher Education



## **Students' access to ICT at home**

Access to a home computer

Home Internet access

Students' experience using computers

## **Students' use of computers and the Internet outside of school**

How much time students spend online

Students' ICT-related activities outside of school

**How students' use of the Internet outside of school is related to their social well-being and engagement with school**

## **Students' use of computers at school**

Internet use at school

Computer use during mathematics instruction

Use of home computers for schoolwork

## **Drivers and barriers to integrating ICT into teaching and learning**

The school ICT infrastructure

## **How school infrastructure trends are related to the use of ICT**

Curricula and the use of ICT at school for instruction

**How ICT use is related to pedagogical practices in mathematics**



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## **Similarities and differences between paper-based and computer-based assessments**

Differences between digital and print reading  
Differences between computer-based and paper-based mathematics

Differences in test design and operational characteristics of computer- and paper-based assessments

## **Student performance in digital reading**

Average performance in digital reading

## **Trends in average digital reading performance**

Students at the different levels of proficiency in digital reading

Trends at the top and bottom of the performance distribution in digital reading

## **Differences in performance between print and digital reading**

Top performers in digital and print reading

Low performers in digital and print reading

## **Student performance in the computer-based assessment of mathematics**

Average performance in the computer-based assessment of mathematics

Differences in performance related to the use of ICT tools for solving mathematics problems



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## **Successful and unsuccessful navigation**

How navigation is related to success in digital reading tasks

## **The navigation behaviour of students in the PISA assessment of digital reading**

Student-level indices used to describe navigation behaviour

The typical navigation behaviour of students across countries/economies

## **The relationship between performance in digital reading and students' navigation behaviour.**

### **And many other issues:**

Access and experience gaps related to socio-economic status / Socio-economic differences in access to computers and the Internet / Socio-economic and gender differences in early exposure to computers / Differences in computer use related to socio-economic status

Rural/urban gaps in Internet access

Computer use at school. Use of computers at home for leisure and digital reading performance

How performance on computer-based tests is related to socio-economic status and computer literacy

Trends in the relationship between digital reading performance and socio-economic status

Technology investments and trade-offs

How learning outcomes are related to countries'/economies' investments in school ICT resources

How performance is associated with students' use of ICT for school

Research evidence on the impact of computer use on student performance

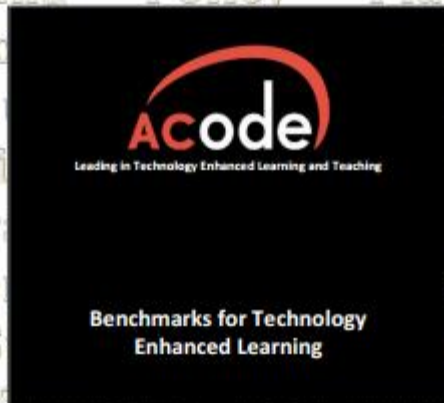
How students allocate effort and time to tasks? How do students navigate a simple website?



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Benchmarking Quality Open  
Distance eLearning Systems  
Technology Help Enhanced  
Learning Policy Planning  
Develop... ation  
Comm... ching  
Learni... ment  
Integr... cture  
Support... agogy  
ICT S... ment  
Staff Students Benchmarking  
Quality Systems Distance  
eLearning Help Technology  
Systems Enhanced Learning  
Policy ICT Planning Courses  
Development TEL Open  
Delegation Communications  
Teaching ACODE Quality



2014

The Australasian  
Council on Open,  
Distance and e-learning

[http://www.acode.edu.au/pluginfile.php/579/mod\\_resource/content/3/TEL\\_Benchmarks.pdf](http://www.acode.edu.au/pluginfile.php/579/mod_resource/content/3/TEL_Benchmarks.pdf)



# Benchmarks for Quality Technology Enhanced Learning: Measuring Student Mobility in Higher Education



Benchmark 1: Institution-wide policy and governance for technology enhanced learning

Benchmark 2: Planning for institution-wide quality improvement of technology enhanced learning

Benchmark 3: Information technology systems, services and support for technology enhanced learning

Benchmark 4: The application of technology enhanced learning services

Benchmark 5: Staff professional development for the effective use of technology enhanced learning

Benchmark 6: Staff support for the use of technology enhanced learning

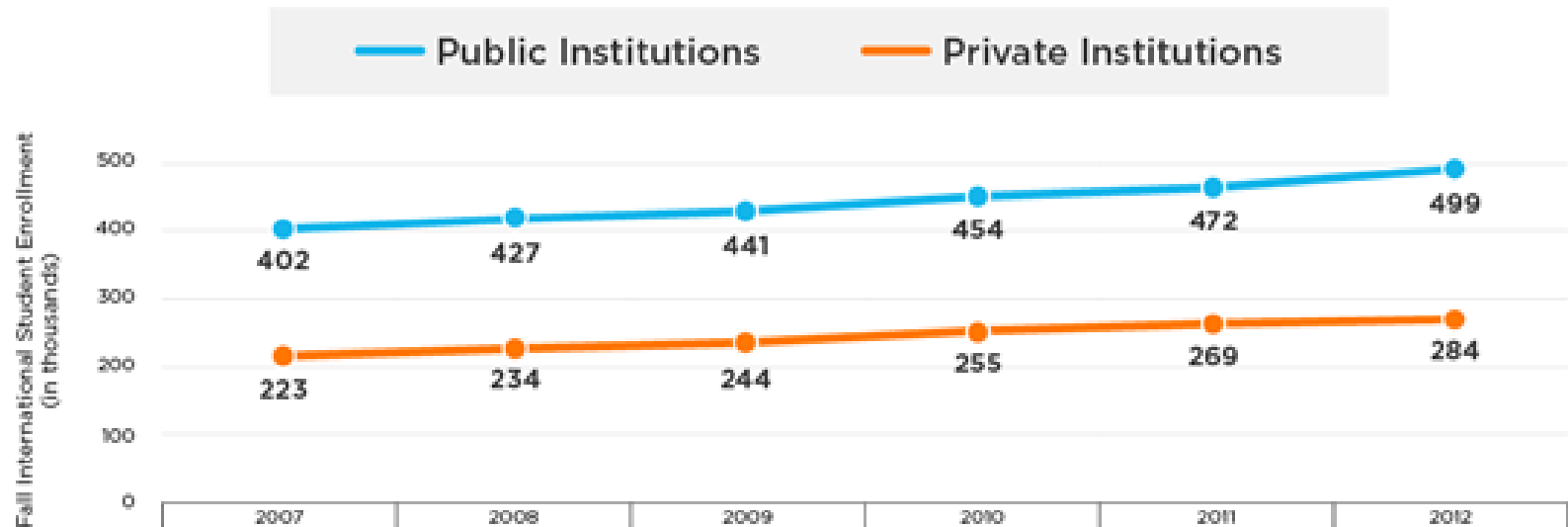
Benchmark 7: Student training for the effective use of technology enhanced learning

Benchmark 8: Student support for the use of technology enhanced learning





## Nonresident Alien Enrollments by Type of Institution, 2007-2012



Source: NCES (2013), "Total Fall Enrollment in Degree-Granting Postsecondary Institutions, by Level and Control of Institution and Race/Ethnicity of Student: Selected Years, 1976 Through 2012".

World Education Services, 2015  
International Student Mobility Trends 2015: An Economic Perspective. [wes.org/IAS](http://wes.org/IAS)

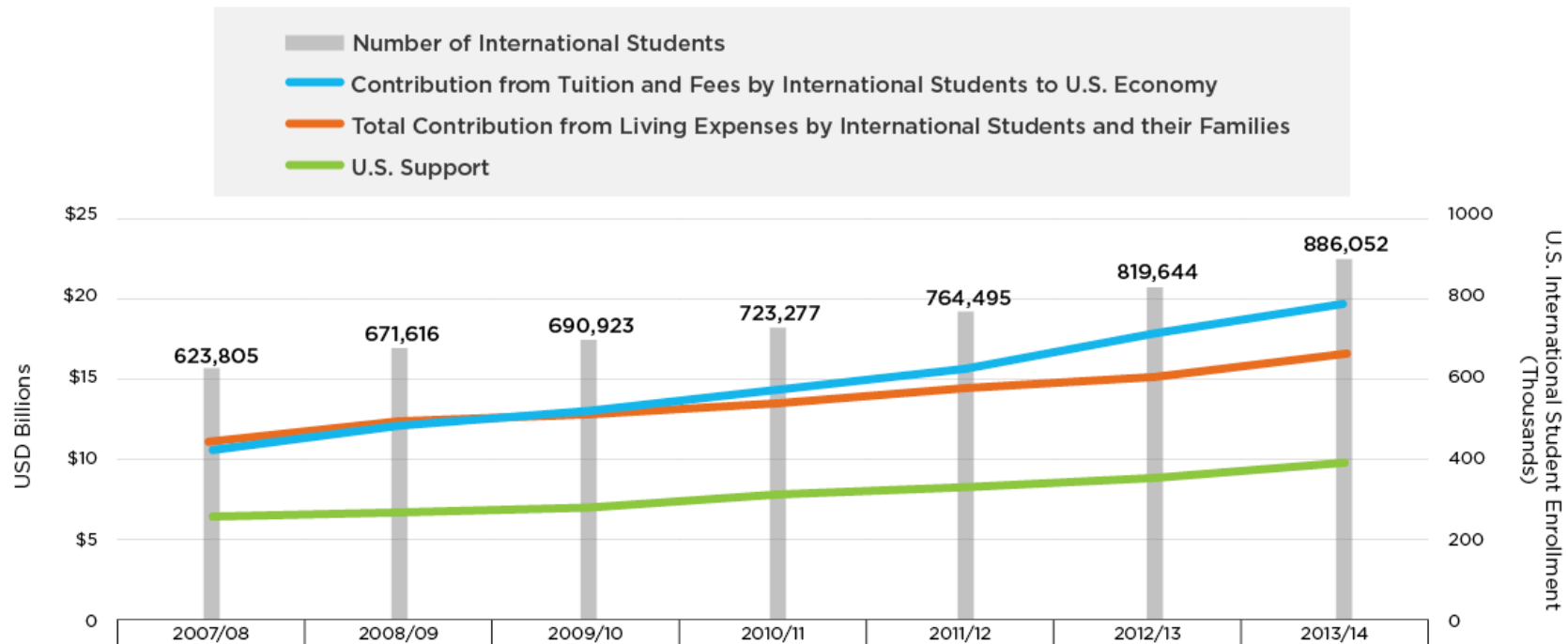




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## Contributions to U.S. Economy by Source, 2008-2014



Source: NAESA report on the Economic Benefits of International Students to the U.S. (2014).

World Education Services, 2015  
International Student Mobility Trends 2015: An Economic Perspective. wes.org/RAS



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## International Enrollment and Net Contribution by International Students by Selected States and Institutions

	INTERNATIONAL STUDENTS			NET CONTRIBUTIONS		
	2007/08	2013/14	% CHANGE	2007/08	2013/14	% CHANGE
California	85,009	121,647	43%	\$2,452,266,000	\$4,076,031,000	66%
New York	69,940	98,906	41%	\$1,952,694,000	\$3,295,094,000	69%
Texas	51,823	64,277	24%	\$1,055,421,000	\$1,459,523,000	38%
University of California, Los Angeles	5,557	9,579	72%	\$179,060,600	\$387,043,600	116%
SUNY Stony Brook University	2,626	4,737	80%	\$46,230,500	\$113,772,800	146%
University of North Texas, Denton	2,241	3,081	37%	\$40,369,400	\$59,272,400	47%

Source: Based on data from the NAFSA International Student Economic Value Tool



**Thank you for your attention!**

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