



**Under Kingdom's Vision 2030,
KKU can help bring Asir Region's
Education and Admission Process with
International Standards in 3-5 years**

By Rizwan Ghani

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Overview

National Level Education Assessment Program for Grade 4, 8 and 12

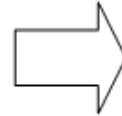
International Level Education Assessment Program for 15-year-olds

International Indicators of Education Systems (IIES)

Accelerated Education Programs (AEPs)

Entry Tests: Undergraduate and Graduate level

Professional Colleges Admission Tests (PCATs)



West is using education assessment programs, IIES, AEPs, entry and admission tests, their frameworks, testing formats, old question papers, common subjects, ITCs and ADM process for last 50 years to standardize, improve and develop its education system. **THESE STEPS ARE NOT LANGUAGE SPECIFIC.** KKU can use it to help bring Asir Region's education system and admission process with Intl standards in 3-5 years.



National Education Assessment Programs

	National Assessment of Educational Progress (NAEP) USA	Standard Assessment Tests (Sats) UK
Grade/Age	Grade 4, 8 and 12	Age 7,11 and 14* (2008/2016)
Assessments	1. Digitally based assessments (Universal Design Principles) 2. Main annual assessments (7 to 9 out of total 53 subjects) Mostly mathematics, reading, science, writing, technology, engineering and economics 3. Long term trend assessments	Mathematics, science, critical reasoning, reading, writing* (grammar, punctuation, spellings)
Available Material	Frameworks, test formats and old question papers by NAEP	Books, old question papers by private companies, STA
Testing Authority	NAEP	STA
Held	Annually (shifting to CBT)	Annually
Available Material Developed by	National Assessment Governing Board	Standards and Testing Agency (STA), private companies

NAEP: Digitally Based Assessments for 21st Century and Beyond

- Link Digital Based Assessment for 21st Century
<https://www.youtube.com/watch?v=-RJ4k0I6h2c&feature=youtu.be>

OECD Program for International Student Assessment (PISA)

PISA	http://www.oecd.org/pisa/aboutpisa/	CPS
Age	15-year-old (half million students took PISA exams in 2015 representing 28 million students from 72 countries)	 <p>PISA 2012 Results: Creative Problem Solving STUDENT SKILLS IN TACKLING REAL-LIFE PROBLEMS VOLUME 1</p> <p>OECD</p>
Subjects	Science, reading, mathematics, Collaborative Problem Solving (CPS), Financial Literacy. Tests are available in 90 languages including Arabic http://www.oecd.org/pisa/test/	
Available Material	Frameworks, testing formats, old question papers, reports, research data available from 70 plus countries.	
Authority	Organization of Economic Cooperation and Development (OECD)	 <p>Improving Financial Literacy ANALYSIS OF ISSUES AND POLICIES</p> <p>OECD</p>
Tests Held	Triennially (every three years) PISA 2015, 2018, 2021...	
CBT	Bridging 'digital gap' by shifting testing to digital devices including computer based testing (CBT)	
Registration in 2017-18	Register three years in advance to participate in PISA 2021 http://www.oecd.org/pisa/contacts/	

International Indicators of Education Systems (IIES)

Intl. Activities Program Center	 International Activities Program Publications & Products Staff TIMSS PISA PIRLS PIAAC TALIS CivEd ICILS Contact Us
1. G-20 Education Indicators Report	 <p>G-20 Indicators Report Comparative Indicators of Education in the United States and Other G-20 Countries: 2015 is a comparison of the education system in the United States with those in the other Group of 20 (G-20) countries.</p> <p> G-20 Indicators Report TIMSS 2015 Report PISA 2015 report PIAAC Prison Report International Data Explorer </p>
2. PIAAC	
3. PIRLS	
4. PISA	
5. TIMSS	
6. TLIS	
Link	https://nces.ed.gov/surveys/international/

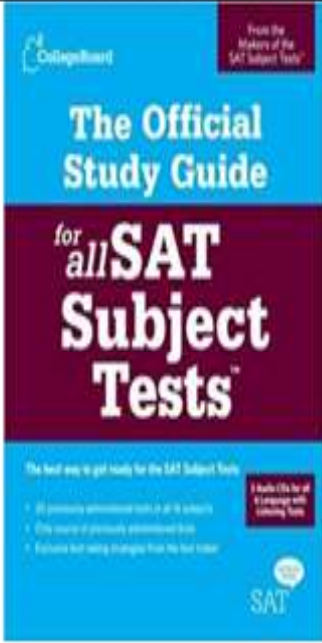

	Program for the International Assessment of Adult Competencies	See 2012/14 Results
	Progress in International Reading Literacy Study	See 2011 Results
	Program for International Student Assessment	See 2015 Results
	Trends in International Mathematics and Science Study	See 2015 Results
	Teaching and Learning International Survey	See 2013 Results

Accelerated Education Programs for 4-Year College Degrees

1. Advanced Placement (AP), College Level Education Programs (CLEP) and DANTES Subject Standardized Tests (DSST) for defense personnel allow **TO EARN COLLEGE CREDITS**, save up to a year (12-30 credit hrs) in time and cost of attendance. The books are available in different languages and cost around \$12-15 (Amazon).
2. They also allow adult learners including prisoners, people with special needs and those in remote areas to complete their college degree.
3. Help align local courses with international standards and acceptance by other universities.




Undergraduate Level Entry Tests

Undergraduate entry Test	Subjects	Common subjects
<p>1. SAT (1 and 2)</p> <p>2. American College Test (ACT)</p> <p>Each year 600,000 high school students take SAT tests:</p> <p>a. As proof of student's college readiness</p> <p>b. to show student's ability to take standardized tests</p> <p>Note: SAT is optional in some institutions in USA.</p>		<p>Critical reading, writing and mathematics</p> 
2. Additional subjects (SAT1 & 2)	As per college policy	As per undergrad specialty
<p>Link: https://en.wikipedia.org/wiki/SAT_Subject_Tests</p>		

Graduate Level Entry Test

Graduate Record Examination (GRE) test is used for admission in the USA higher education institutions, giving scholarships and getting research grants. <http://www.ets.org/gre/>.

GRE	Common Subjects	Other GRE subjects
	<ol style="list-style-type: none"> 1. Verbal Reasoning: <ol style="list-style-type: none"> a. Critical Reading b. Analytical Writing 2. Quantitative Reasoning: <ol style="list-style-type: none"> a. Mathematics 	<p>As per Department's policy. For example</p> <ol style="list-style-type: none"> a. Basic GRE only b. GRE plus additional subject as per applicant's specialty. c. Or as a requirement for scholarship, grant etc.
2. Addl requirements	As per Inst.'s policy	As per Dept.'s policy

Professional Colleges Admission Tests

- a. Students need to take computer based admission tests to enroll in professional colleges.
- b. These tests are usually of 7-hour duration.
- c. Registered candidates can access online practice tests for a fee <https://www.aamc.org/>.

Books: Medical College Admission Test (MCAT)



MCAT Biochemistry
Review

MCAT Physics and
Math Review

MCAT Biology
Review

MCAT Organic
Chemistry Review

MCAT Behavioral
Sciences Review


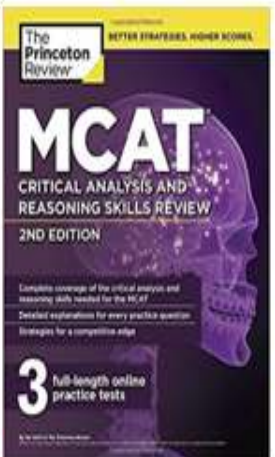


MCAT Critical
Analysis and
Reasoning Skills
Review

DAT, PCAT, Law,
Nursing, Optometry

<https://www.amazon.com/MCAT-Complete-7-Book-Subject-Review/dp/1506205593>

Common Subjects in Entry, Admission and Assessment Tests

The students in the West have to pass Critical Analysis and Reasoning Skill (CARS) comprising rhetoric analysis, keywords, outlining the passage and dissecting the arguments for admission in professional colleges. The common subjects for school and college level include critical reading, writing, mathematics, CARS, Calculus, CPS and Financial Literacy:

Undergraduate Level Entry Test (SAT,ACT)	Professional Colleges Admission Tests	Graduate level Entry Test (GRE)	Institution's requirements	PISA Books
				
Critical Reading, writing, maths	Critical Analysis and Reasoning Skills (CARS)	reading, analytical writing & maths	Calculus 1, 2 & 3	Financial Literacy 

America's STEM Policy

1. America has introduced STEM (science, technology, engineering and mathematics) Policy in schools and colleges to improve its competitiveness in science and technology developments at global level.
2. Accordingly, MA in STEM has been introduced, a large number of STEM teachers are being trained and incentives are being given to students to join STEM programs.
3. STEM programs are also being used in UK and Australia
<https://www.hotcoursesabroad.com/study-abroad-info/subject-guides/us-expands-stem-degree-programmes-list/>
4. UK has also introduced computer programming at school level, and artificial Intelligence (AI) and robotics in higher education institutions.

International Testing Centers (Continued)

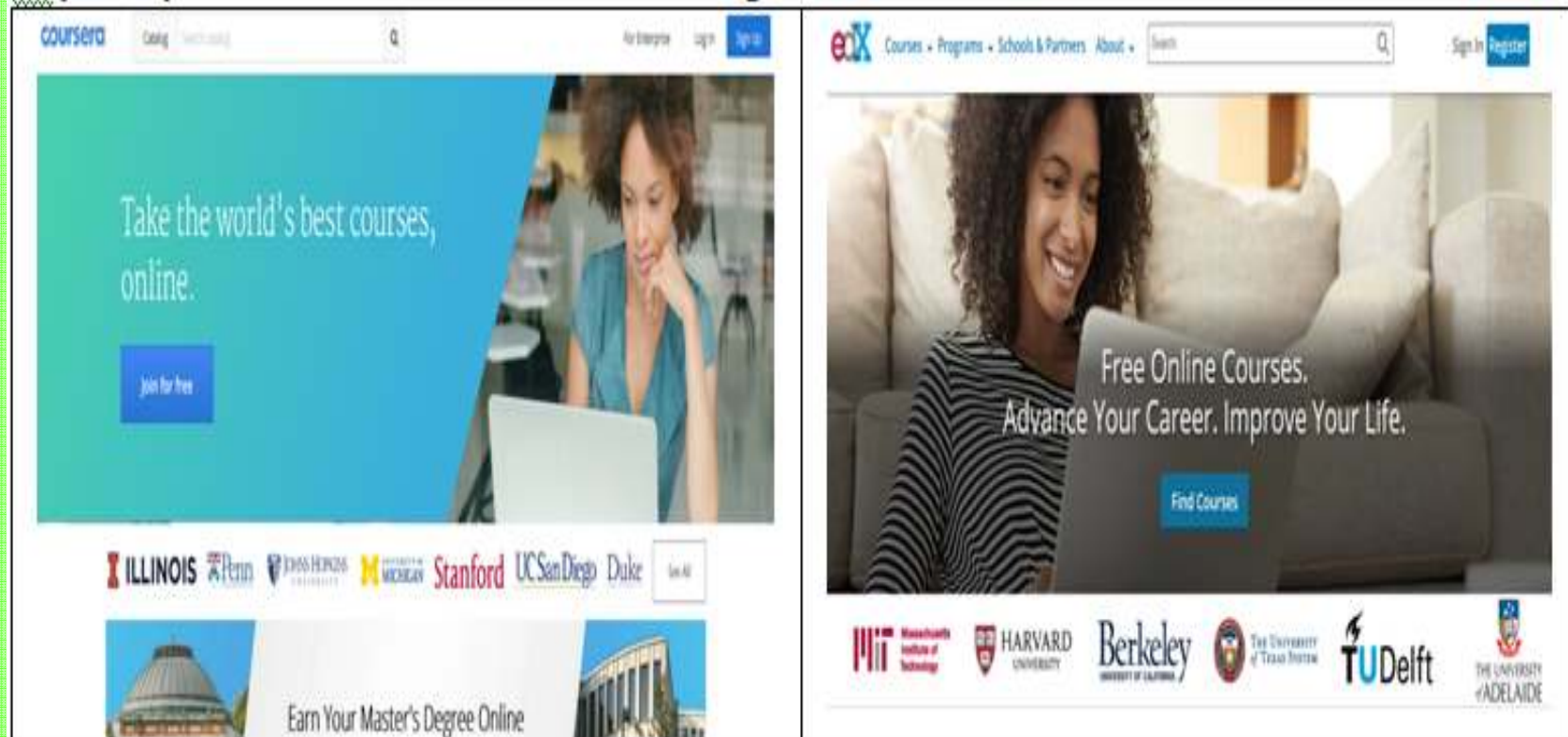
- 1. ITCs are standard part of education in the West. They are used to meet growing use of digital devices and CBT (entry and admission tests, practice tests, professional examinations), online education and earning college credits.**
- 2. ITCs help increase awareness of students about digital education, use of digital devices, international education courses, AEPs, examinations, tests and assessment programs.**
- 3. ITCs cut cost and time of education. Many students cannot afford to take education, examinations or tests in other cities or countries due to high cost of travelling, boarding and lodging.**

International Testing Centers (Continued)

- 4. Non availability of ITCs undermine chances of students to get admission in professional colleges, higher education institutions, getting grants, scholarships, competing at international level and in turn getting good jobs because all these steps are interconnected.**
- 5. ITCs can help translate hard work of students into measureable results by familiarizing them with digital education, international frameworks, testing formats and CBT of 7 to 9 hour duration.**
- 6. The West is using digital education, international frameworks, testing formats, assessment programs, CBT and ITCs to standardize education, get degrees recognized, win grants,scholarships, attract international students and get jobs for graduates.**

ITCs and Free Online Courses

Encourage students to use ITCs to do free online courses (Coursera www.coursera.org, edX www.edx.org) during summers and their free time to improve their education. A mechanism can be put in place to allow students to earn college credits for these courses with authentic results:



Admission Process in the West and Asia

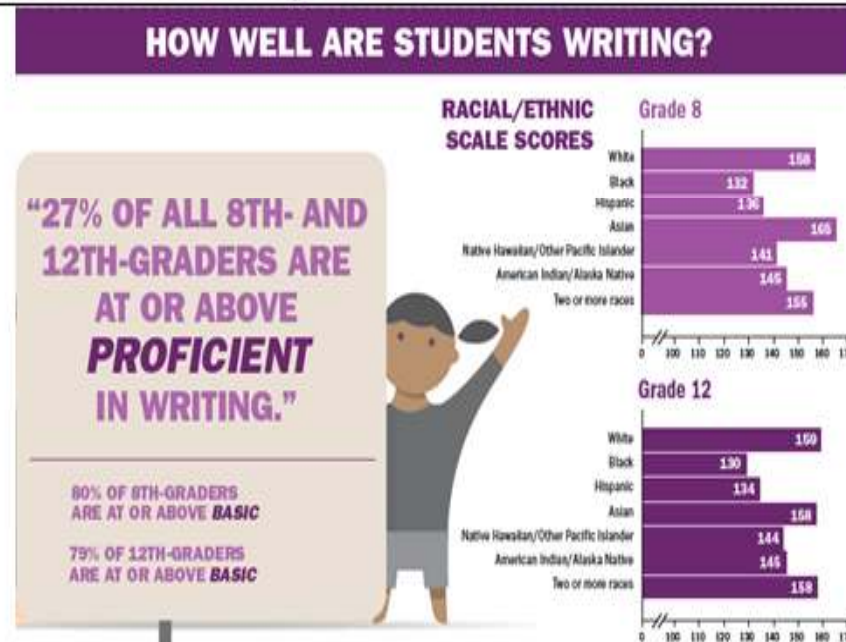
It requires basic qualification and standard entry test like SAT/GRE or professional college admission test to get admission, grant and or scholarship in the education institution. It needs evaluation of academic qualifications by the concerned authority.

1. Association of American Medical Colleges (AAMC) USA <https://www.aamc.org/>.
for students, applicants, **EDUCATION INSTITUTIONS**, market (books), professionals.
2. University and College Admission Services (UCAS) UK <https://www.ucas.com/>.
3. Italian Medical College Admission Test (IMAT) held in 16 countries annually for 23 govt universities https://en.wikipedia.org/wiki/International_Medical_Admissions_Test.
4. Admission in English medium higher education institutions of Germany.
<http://www.daad.de/en/> and Scandinavian countries offering support for research and innovation <https://www.topuniversities.com/student-info/choosing-university/why-study-scandinavian-university>.
5. Admission in English medium education institutions of China
http://www.chinauniversitystudy.com/engineering_programs_in_china.html.

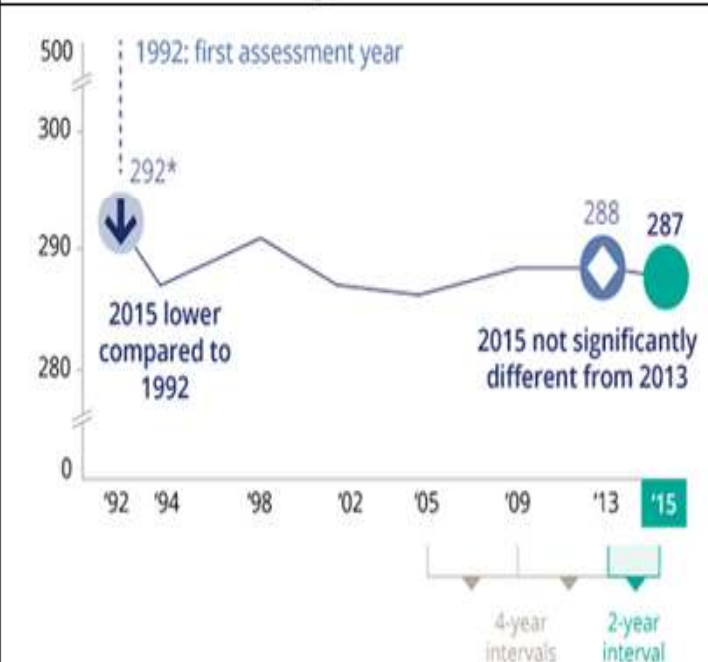
NAEP Results Show Challenges in Education at National Level

Despite using frameworks, CBT and structured approach, the NAEP scores show challenges to standardize education at national level:

Grade 12 Writing Result 2011



Grade 12 Reading Result 2015



Levels: Basic, proficient, advanced. Students who used computers to draft and revise their writing and those who used thesaurus scored higher.

PISA Results Show Challenges and Competition in Education at Intl Level

Despite using frameworks, CBT and structured approach, the PISA scores of USA and UK show the challenges to standardize national education with international standards:

Subjects	2012 (65 countries)	2015 (72 countries)
	USA / UK	USA / UK
Reading	36 th / 26 th	24 th / 21 st
Science	36 th / 26 th	25 th / 15 th
Mathematics	36 th / 26 th	39 th / 27 th
Collaborative Problem Solving (CPS)	X	X
Financial Literacy	X	X
OECD Frameworks: www.oecd.org		
PISA 2015 Results: https://www.theguardian.com/education/2016/dec/06/english-schools-core-subject-test-results-international-oecd-pisa		

Recommendations (Continued)

- 1. Use NAEP, its frameworks and testing formats to assess students at grade 4, 8 and 12.**
- 2. Use PISA, its frameworks and testing formats to assess 15-year-old students.**
- 3. Apply for registration to participate in PISA 2021 (triennial event).**
- 4. Establish International Activities Center to participate in IIES to keep pace with latest developments in education, adult literacy and helping community including people with special needs.**
- 5. Introduce Accelerated Education Programs (AEPs) for 4-year college degrees to save time, cost of attendance for students and help align local courses with international standards. Accordingly issue exemption lists of AP and CLEG Courses for AEPs.**

Recommendations (Continued)

Introduce/improve:

- 6. entry tests for undergraduate (SAT) and graduate levels (GRE) so that all students can apply for admission, scholarships and grants in education institutions in Saudi Arabia and the West.**
- 7. common subjects of SAT and GRE at school and college levels so that all students can prepare for SAT and GRE.**
- 8. professional colleges admission tests (PCATs).**
- 9. common subjects in entry tests, PCATs and PISA so that students can prepare for admissions, scholarships, grants and assessment programs.**
- 10. mathematics, science, reading and writing at school level because they are tested in assessment programs, entry tests, PCATs, PISA and education institutions.**

Recommendations (Continued)

- 11. Introduce STEM policy, MA in STEM, rhetoric, writing, computer programming at school level, incentives for students to join STEM, and allocate funding for AI and robotics to improve competitiveness in science and technology at national and international levels.**
- 12. Establish ITCs across the region including KKU so that students, professionals, adults including people with special needs and public have access to std education, complete AEPs, national and international entry tests, PCATs, practice tests, improve computer and keyboard skills, professional courses, online education, grants, scholarships, transparency and AUTHENTIC results.**
- 13. Encourage students to use ITCs to do free online courses to improve their education and a mechanism can be put in place to allow students to earn college credits for these courses with authentic results.**

Recommendations (Continued)

- 14. Introduce/improve admission process including assessment of our academic qualifications, taking standard test and aligning the application process with Intl standards.**
- 15. Introduce/improve use of digital devices and CBT to align education standards with national (NAEP) and international standards (PISA), prepare for online entry and admission tests and bridge digital gap with international education standards.**
- 16. KKU can help Asir Region's School Education Directorate to align school education with international standards and improve school education for higher education institutions.**
- 17. Presidency, deanships, quality control, research, translation and media awareness setups can help KKU bring Asir Region's education and admission process with international standards in next 3-5 years as part of their mission, goals and community service under Kingdom's Vision 2030.**

Questions

Conclusion

Thank you