



WORLD EDUCATION SERVICES

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October 26, 2020

Tools for Issuing, Authenticating, and Verifying Electronic Academic Records

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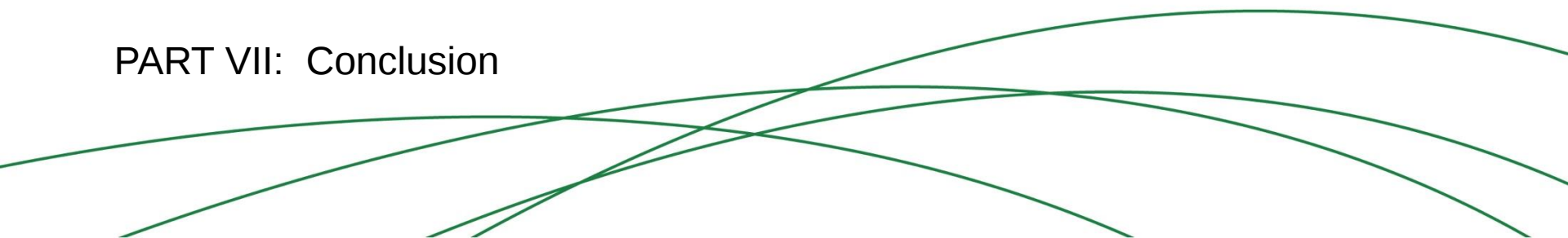
Evaluation Documentation Specialist

World Education Services

Agenda

- PART I: Defining Electronic Academic Records
 - PART II: Practical Challenges with Electronic Documents
 - PART III: Tips for Working with Electronic Academic Records

 - PART IV: Verification Portals
 - PART V: Practical Challenges with Verification Portals
 - PART VI: Tips for Working with Verification Portals

 - PART VII: Conclusion
- 
- Several thin, green, curved lines sweep across the bottom of the slide, creating a decorative, flowing pattern.

Part I

Defining Electronic Academic Records

Context: Policies, Initiatives, and Pandemic



Groningen Declaration Network

- Established in the Netherlands in 2012
- More than 100 signatories from 28 countries
- Leading and informing the global adoption of strategies towards the realization of a digital learner ecosystem



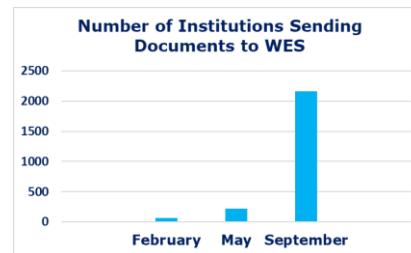
UNESCO Global Recognition Convention

- Transparent and non-discriminatory recognition of higher education qualifications
- Equitable access to quality higher education
- Encourages the use of technologies to ensure easy access to information

Digitization Initiatives

- **University-led efforts** (e.g., My eQuals, Digital Credentials Consortium, United Arab Emirates University Passport, Brunel University London VerifyAward, etc.)
- **Government-led efforts** (OpenCerts (Singapore), CHESICC (China), NAD (India), Diploma Registry (Norway), Europass Digital Credentials Infrastructure (EU), etc.)

Impact of COVID-19 on Digitization



Each third party is counted as one institution, not as the number of institutions it represents.

How Do We Define Digital Academic Records?

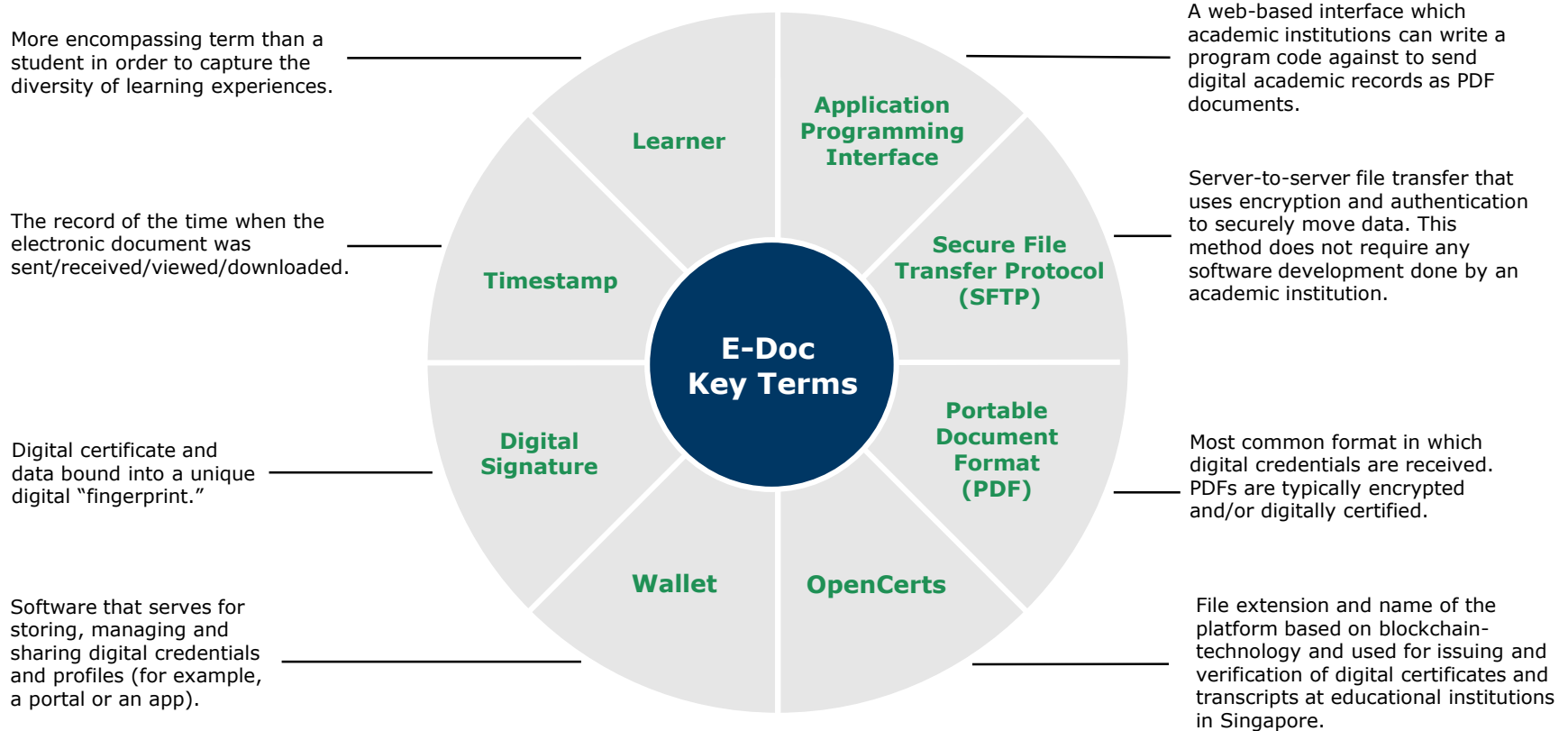
Paper Credentials

- Paper
- Envelope
- Stamp
- Signature
- Student
- Sent by post
- Received by post

Digital Credentials

- Portable Document Format (PDF)/OpenCerts
- Email/Platform/Wallet
- Digital Stamp, e-Seal and Timestamp
- Digital Signature/Certificate
- Learner
- Shared by email/document portal/app
- Accessed, Downloaded, Viewed

Glossary of New Terms



Methods of Receiving Electronic Academic Records at WES



Direct Transmission

- Secure File Transfer Protocol (SFTP)
- Application Programming Interface (API)

Examples: CHESICC, University of Mumbai, American University of Beirut, etc.



Institutional/Third Party Portals

- Documents accessed by logging into the portal
- Document access link received in an email

Examples: Digitary, Parchment and Credentials Solutions, National Student Clearinghouse, University of Birmingham, Purdue University, etc.



Email Attachments

- Encrypted and/or digitally certified PDFs
- Document sharing is regulated by data sharing agreements between WES and institutions

Examples: Leeds Beckett University, University College Cork, Indian Institute of Technology Madras, etc.

Authenticity of Digital Academic Records



Who?

Verified Sender

Direct Institutional
Relationships
Trusted Sources



How?

Direct Transmission

Secure Technologies
Automated Workflow



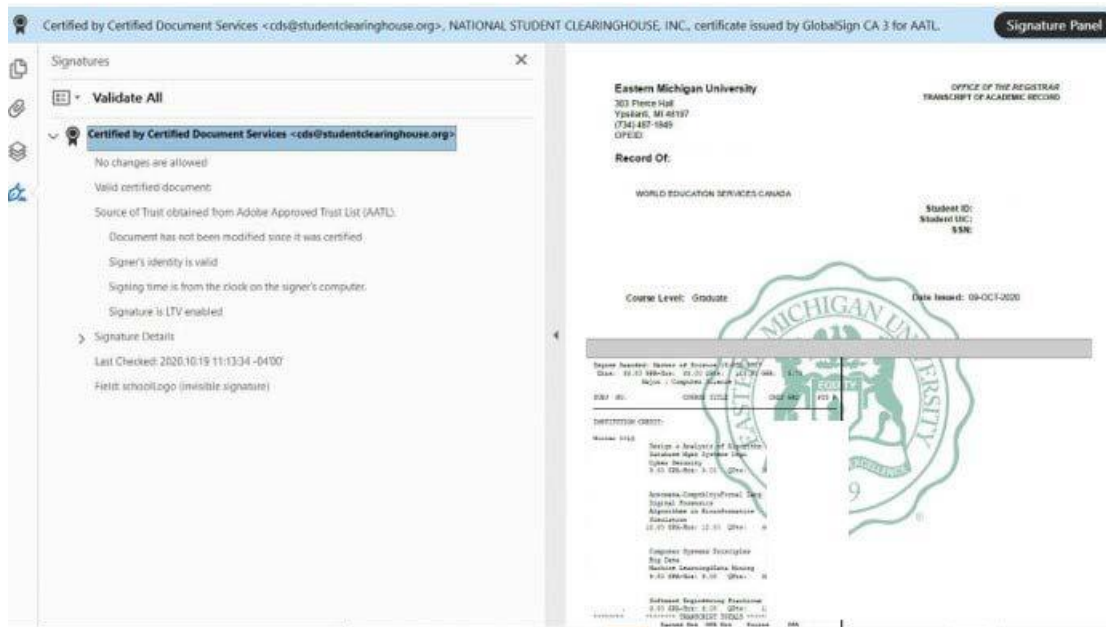
What?

Immutable Documents

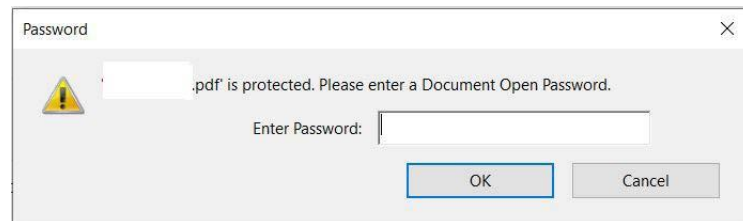
Encryption/Digital Certificate
Seamless verification

Digitally Signed and Encrypted PDFs

Digital Signature



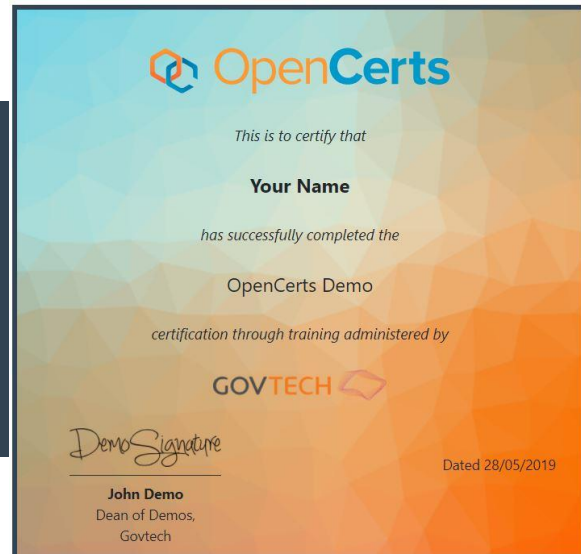
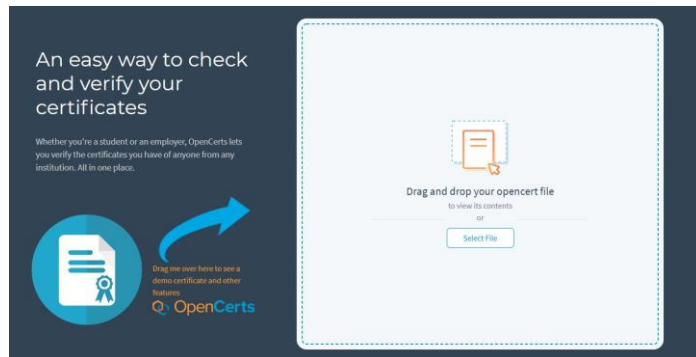
Encryption



Opencerts

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{
  "schema": "opencerts/v2.0",
  "data": {
    "id": "364999b4-48d-443e-9ebb-3aa3eb567941:string:53b75bbe",
    "name": "ece7899c-2060-44b0-bafe-1b0b0f7651a1:string:govtech Demo Certificate",
    "description": "3d529651-2c6d-4da4-98ce-9ebaf5e3e390:string:govtech Demo Certificate",
    "issuance": "b0f78a87-67a8-43c2-91ca-f29d53489bd:string:2019-05-29T00:00:00+08:00",
    "admission": "8be53a7a-81e1-4b36-b03d-a15d7e5557b7:string:2017-08-01T00:00:00+08:00",
    "graduation": "ced7652e-ec49-4319-9393-d78084525e8d:string:2022-08-01T00:00:00+08:00",
    "template": {
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      "url": "a59366a8-09f7-49c6-a7ce-228f64f04fb7:string:https://demo-renderer.opencerts.io"
    },
    "issuers": [
      {
        "name": "096ac57b-d578-459c-b77a-3aaf5df4584:string:govtech",
        "url": "23ef3d1b-09e0-41b6-84b4-b99c18605c0:string:https://tech.gov.sg",
        "certificateStore": "c0c50609-43ed-4b55-ab46-91ec8f9432e7:string:ew007040224f6562461633c0baffd359ebb2fc9ba"
      }
    ],
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      "email": "2f30a86d-b262-4e9c-97d6-4ae76ef08376:string:XXXXXXXXXX",
      "course": "79c32487-9462-45a4-bfb2-f0ed2b48d53c:string:govtech Demo"
    },
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      {
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```



Part II

Practical Challenges with Electronic Documents

Practical Challenges with E-Document Access: Expiry Date

- 1 Downloaded documents appear illegible.
- 2 Attempt re-accessing the documents.
- 3 Expiry date is set on the documents.
- 4 "According to policy this PDF has been removed from viewing and is no longer accessible. The time is past 7PM CDT of the 2nd business day since the initial download of this transcript."
- 5 Train staff to re-access the documents within the specified time limit and, whenever possible, inform applicants that they should not set an expiry date.

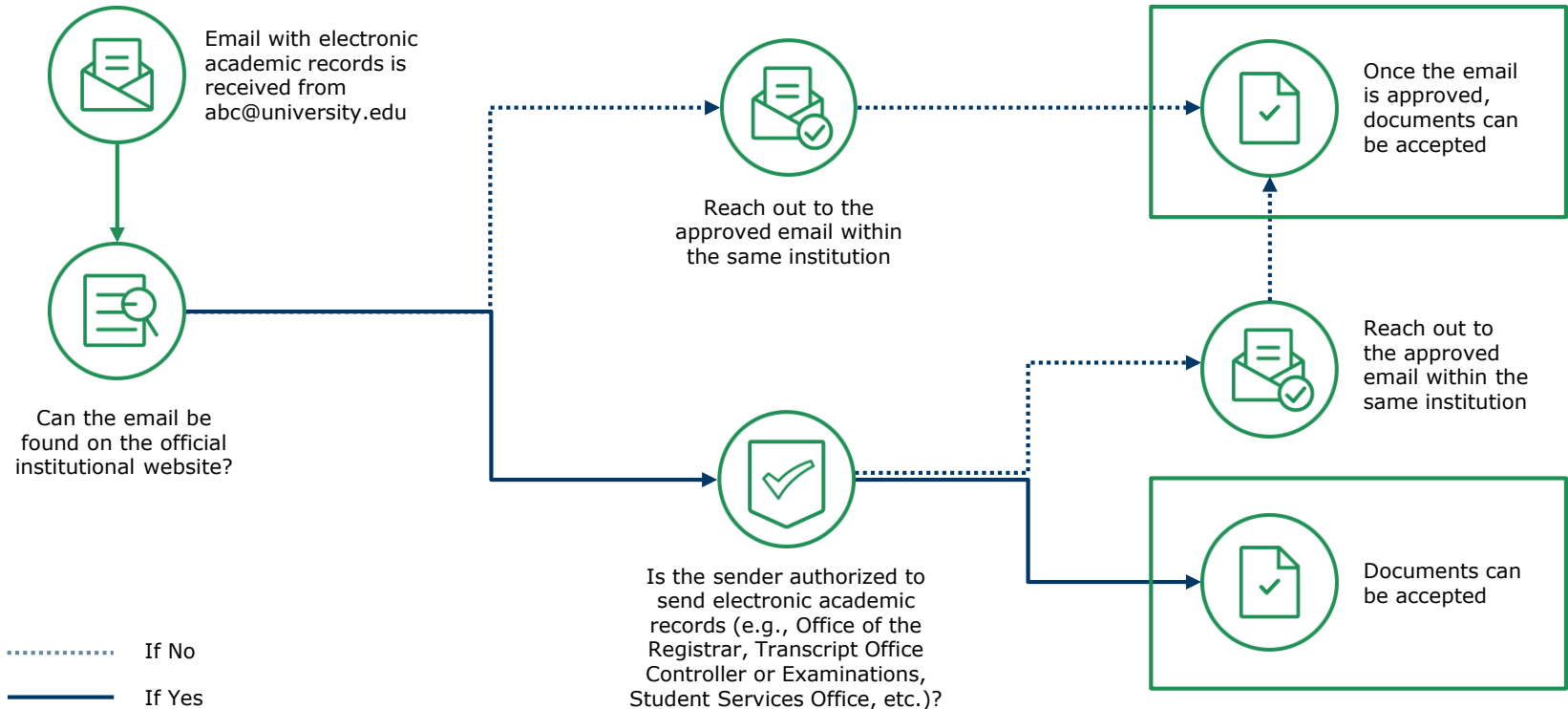
Practical Challenges with E-Document Access: Privacy Concerns

- 1 Institutional platform has been vetted for document sharing, and applicants have been informed that they can share the documents with WES via the platform.
- 2 An applicant misinterprets document requirements and shares documents using applicant's own personal username and password for the platform.
- 3 Train staff not to access the documents due to privacy concerns.
- 4 Inform applicants that documents have to be shared without the use of personal login information.

Practical Challenges with E-Document Access: Partial Digitization

- 1 Institution has an electronic document portal, but it only stores documents of students who have graduated after a certain date. The documents of earlier graduates are not available through the portal.
- 2 Offer another method of document sharing for graduates whose documents are not shareable via the platform.
- 3 Furthermore, the documents that are not available through the portal are only partially digitized.
- 4 Inform applicant of an appropriate way to send their documents depending on their year of graduation.
- 5 Inform staff about three different methods of receiving documents from this institution.

Practical Challenges with E-Document Access: Verifying Email Sources



Part III

Tips for Working with Digital Academic Records

Tips for Managing Electronic Documents

Openness

Remain open to new technologies, but carefully vet each new source.

Standardization

Standardize internal procedures in order to manage diversity of sources efficiently.

Support

Engage IT, Data Management, and Communications.

Build

Build comprehensive databases of verified electronic document sources.

Research

Keep up with the research in the field.

Train

Conduct regular staff trainings on accessing and processing electronic academic records.

Part IV

Verification Portals

Do We Still Need Verification Portals?



The delivery of paper-based documents is still widely practiced – about 50% of documents received at WES are still paper based.



Documents of credentials from countries or institutions with higher incidence of credential fraud need to be verified.



Institutions may not have the capacity and support to digitize student records.



Supporting Learner's agency: some institutions only allow documents to be shared from a student's personal email address (not the institutional/third party portal's email ID), in which case documents will need to be verified through online portals.

When Do We Use Verification Portals?

When documents are sent from academic institutions

- Griffith University
- Mahatma Gandhi University
- Panjab University
- University of Queensland

When documents are sent from national agencies

- Intermediate and Secondary Education Boards (Bangladesh)
- Higher Education Commission (Pakistan)
- West African Examinations Council (Nigeria, Ghana, Sierra Leone)

When documents are sent from applicant email addresses

- National University of Singapore
- University College Dublin

Part V

Practical Challenges with Verification Portals

Practical Challenges with Verification Portals: Missing Information

Step 1

Verification results may not all be on one page – they may be separated by year, credential, or major.

Step 2

Searching for verification results can be time-consuming and can cause information to be missed.

Step 3

If no information is found online, verify by contacting the institution or agency directly.

Panjab University, Chandigarh
Examination Results

HOME OLD RESULTS ENTRANCE RESULTS CONTACT US

September, 2020 (Semester) Results

Panjab University Examination Results
Panjab University | Result Home | Toppers | Login

Semester Results

- September, 2020
- December, 2019
- September, 2019
- May, 2019
- December, 2018
- November, 2018
- May, 2018
- December, 2017
- May, 2017
- December, 2016
- May, 2016
- December, 2015

Results

Entrance Test 2015

- CET (PG)-2015 (Masters in Remote Sensing & GIS)
- CET (PG)-2015 (Masters in Disaster Management)
- Ph.D. 2015
- LLM 2015
- MBA (Executive) 2015
- CET BDS 2015
- PULEET 2015
- M.Ed. 2015
- CETPG 2015
- PGLAW 2015
- UGLAW 2015
- PUTHAT 2015
- CETUG 2015

Entrance Test 2014

- Ph.D. 2014
- CET BDS 2014
- CET BHMS 2014
- MBA (Executive) 2014
- PULEET 2014
- PG Law 2014
- M.Ed. 2014
- CETPG 2014
- CETUG 2014
- UG LAW 2014 (BA/BCom LLB)
- PUTHAT (Hotel management & Tourism)
- Ph.D. 2013

Examination 2014

- BA Part-I (General), October, 2014 [1/9/2015]
- B.Sc. Hon's (Bio-Technology) First Year, October, 2014 [12/22/2014]
- B.Sc. (Fashion Designing) 1st Year, October, 2014 [12/22/2014]
- B.Sc. (General) First Year, October, 2014 [12/22/2014]
- B.Sc. Hon's (Bio-Informatics) First Year, October, 2014 [12/19/2014]
- B.Sc. Hon's (Bio-Technology) Second Year, October, 2014 [12/19/2014]
- B.Sc. (Fashion Designing) Second Year, October, 2014 [12/19/2014]
- B.A. 2nd Year (Compartment) October 2014 [12/15/2014]
- B.Sc. (Microbial and Food Technology) 2nd Year October, 2014 [12/15/2014]
- B.Sc. 2nd Year (Compartment) October, 2014 [12/8/2014]
- B.Sc. Third Year (Compartment) October, 2014 [12/4/2014]
- BA Part-3 (Compartment) October, 2014 [12/4/2014]
- B.Com 1st (Compartment) October, 2014 [11/29/2014]
- B.Com. 2nd Year (Compartment) October, 2014 [11/25/2014]
- B.B.A. 1st Year (Compartment) October, 2014 [11/20/2014]
- B.B.A. 2nd Year (Compartment) October, 2014 [11/20/2014]
- B.B.A. 3rd Year (Compartment) October, 2014 [11/20/2014]
- B.Com Third Year (Compartment) October, 2014 [11/19/2014]
- BCA Part-1 (Compartment) October, 2014 [11/18/2014]
- B.C.A. Second Year (Compartment) Examination, October, 2014 [11/14/2014]
- B.C.A. Third Year (Compartment) Examination, October, 2014 [11/14/2014]
- B.Sc. (4 Year Course) Agriculture 2nd Semester [9/26/2014]
- B.Sc. (4 Year Course) Agriculture 4th Semester [9/26/2014]
- B.Ed. 1st Year (U.S.O.L.) [8/20/2014]
- B.Ed. (U.S.O.L.) 2nd Year [8/8/2014]
- LL.B 4th Semester [8/4/2014]
- LL.B 2nd Semester [8/1/2014]
- B.A.LLB 2nd Semester [7/31/2014]
- B.Com. LLB 2nd Semester [7/31/2014]
- B.A. LLB. 4th Semester [7/30/2014]
- B.Com LL.B. 4th Semester [7/30/2014]

Practical Challenges with Verification Portals: Trust Your Expertise

1

Information on the document is verified online using the verification portal.

2

The document looks suspicious (e.g., poor document formatting, non-standard signature or stamp, non-standard seal on the envelope)

3

Verify the document's authenticity by contacting the institution or agency directly.

THE WEST AFRICAN EXAMINATIONS COUNCIL

OBW



21, HUSSEY STREET,
PRIVATE MAIL BAG 1022,
YABA, LAGOS, NIGERIA.
TEL:01-8961016

Ref: [REDACTED] **CONFIDENTIAL**

December 8, 2018

REFERENCE NO: 3902263
WORLD EDUCATION SERVICES,
ATTENTION: DOCUMENTATION CENTER,
2, CARLTON STREET, SUITE 1400,
TORONTO, ONTARIO M5B 1J3,
CANADA.

CONFIRMATION OF RESULT

NAME OF EXAM: MAY/JUNE 2006 W.A.S.S.C.E.
NAME OF SCHOOL: Girls' Model Secondary School, Abudu
CANDIDATE'S NUMBER: [REDACTED]
CANDIDATE'S NAME: [REDACTED]
ADDRESS: [REDACTED]
SEX: [REDACTED]
DATE OF BIRTH: [REDACTED]

Please find forwarded to you the confirmed result of the above named candidate.
The details of her performance at the examination are as follows:

SUBJECT	GRADE	INTERPRETATION
ECONOMICS	[REDACTED]	[REDACTED]
GEOGRAPHY	[REDACTED]	[REDACTED]
GOVERNMENT	[REDACTED]	[REDACTED]
ENGLISH LANG	[REDACTED]	[REDACTED]
MATHEMATICS	[REDACTED]	[REDACTED]
AGRIC SCIENCE	[REDACTED]	[REDACTED]
BIOLOGY	[REDACTED]	[REDACTED]
CHEMISTRY	[REDACTED]	[REDACTED]
PHYSICS	[REDACTED]	[REDACTED]

NO OF SUBJECTS LISTED: NINE

You will have to satisfy yourself that [REDACTED] is one and the same person.

Certified by:



ONIKUNURE F.O. (NRS)
RESULTS OFFICER



SUBJECT

ECONOMICS
GEOGRAPHY
GOVERNMENT
ENGLISH LANG
MATHEMATICS
AGRIC SCIENCE
BIOLOGY
CHEMISTRY
PHYSICS

WAECDIRECT ONLINE - RESULTS

<https://www.waecd>



Click here to visit our corporate website

Results

Candidate Information

Examination Number [REDACTED]
Candidate Name [REDACTED]
Examination MAY/JUNE WASSCE 2006
Centre Girls' Model Secondary School, Abudu

Subject Grades

ECONOMICS
GEOGRAPHY
GOVERNMENT
ENGLISH LANGUAGE
MATHEMATICS
AGRICULTURAL SCIENCE
BIOLOGY
CHEMISTRY
PHYSICS

Card Information

Card Use 1 of 5
Click Here to Print



Practical Challenges with Verification Portals

Information Discrepancies



When a stamp number from the document is entered, online verification shows different credential/year of award than paper document. This does not imply that the document is fraudulent.



Contact HEC and inform them of the online record discrepancy.



Wait for a reply from HEC and check the online record again once the information has been updated.

UNIVERSITY OF THE PUNJAB

Serial No. [REDACTED] Roll No. [REDACTED]
Regd. No. [REDACTED]

RESULT INTIMATION CARD
PASS RESULT INTIMATION

Name of the Candidate: [REDACTED]
Father's Name: [REDACTED]

Candidate mentioned above is hereby informed that
He has passed the B.A. Annual Examination in the [REDACTED] in the [REDACTED] examination was passed as [REDACTED]

Marks obtained by him in each subject are given below:-

S. No.	Subjects / Papers	Marks Obtained	Maximum Marks	Remarks
1.	Isl. Studies/Ethics and Pak. Studies (Comp.)	[REDACTED]	100	
2.	English Language (Comp. B.A.)	[REDACTED]	200	
3.	Islamic Studies	[REDACTED]	200	
4.	Journalism	[REDACTED]	200	
5.	Arabic (opt)	[REDACTED]	100	
TOTAL		[REDACTED]	800	

Note: This result intimation is issued, errors and omissions excepted, as a notice only. An entry appearing in it does not in itself confer any right or privilege independently to the grant of a proper Certificate / Diploma / Degree which will be issued under the regulations in due course.
Senate Hall, Lahore.

Dated: [REDACTED]

Asst. Controller/Admission Officer

Higher Education Commission, Pakistan
Facilitating Institutes of Higher Learning to serve as an Engine of Growth for the Socio-Economic Development of Pakistan

Foreign Embassy Admin Screen

Stamp Number [REDACTED]

CNIC [REDACTED]
kg 12345 123456789

Attestation Type [REDACTED]

RESET SEARCH CLOSE

Part VI

Tips for Working with Verification Portals

Tips Using Verification Portals



Security

Verification portal website must be vetted for its security by IT department:

- The encryption should meet security standards.
- SSL certificate should be secure and current.



Http



Https



Cross-Examining Information

Information on the verification portal must be compared with the information on the documents whenever possible. If the document still looks suspicious, contact the institution for further confirmation. Rely on experience and expertise.



Protect Applicants' Personal Information

WES considers information such as Government ID, Passport ID, SIN, and other sensitive personal information. WES does not require this information from applicants and will not enter them in verification portals.



Payment Requests

Carefully examine payment requests. If a payment request originates from the institution, contact the applicant and inform them of this request.

Part VII

Conclusion

Further Transition from Analogue to Digital

Now	Efforts We Are Making	Future
The volume of digital academic records is increasing. The need to use verification portals is decreasing. There is diversity of electronic document sources and document security features. Extent of digitization varies among institutions. Learners feel empowered by the opportunity to control when, where, and how they share their academic credentials. Credential evaluation reports are completed faster, more efficiently, and more securely with digital documents.	Enable more academic institutions to digitize their records by providing technological solutions and sharing information about the benefits of using digital academic records. Manage databases and standardize workflows in order to efficiently accommodate the diversity of digital document sources. Train staff how to work with digital educational credentials in the input and throughput phase of credential evaluation.	More institutions will be issuing and receiving secure and trusted digital academic records. Credentials will be delivered as standardized data. Learner agency will increase. Digital credential networks will be open and share common standards.

Online Resources

1. Digital Student Data and Recognition, NUFFIC, Netherlands
<https://www.nuffic.nl/en/subjects/recognition-projects/digirec>
2. Groningen Declaration Network
<https://www.groningendeclaration.org>
3. What is the Global Convention on higher education?
<https://en.unesco.org/news/what-global-convention-higher-education>
4. Building the Digital Credential Infrastructure for the Future
<https://digitalcredentials.mit.edu/wp-content/uploads/2020/02/white-paper-building-digital-credential-infrastructure-future.pdf>
5. Digital credentialing: implications for the recognition of learning across borders
<https://unesdoc.unesco.org/ark:/48223/pf0000264428>
6. World Education News and Reviews
<https://wenr.wes.org/>





QUESTIONS AND COMMENTS



WORLD EDUCATION SERVICES

Our Expertise. Your Success.

THANK YOU

Need more information?

Ddilas@wes.org

Fdelarosa@wes.org