



# Blended Learning in Universities in East Africa: Lessons from the PEBL Partnership

A summative evaluation of the Partnership for Blended and Enhanced Learning (PEBL) Partnership. May 2021

Authors: John Young, Dr Femi Nzegwu, Dr Veronika Schaeffler, Joseph Chiriyankandath, Fiona Khandoker, Sara Calamassi, Dr Kirk Perris, Dr George Onyango, Dr Lucy Ikiara,



# Contents

**Executive Summary** ..... i

**Acronyms and Abbreviations**..... vii

**1. Introduction**..... 1

**2. Background**..... 1

**3. The evaluation** ..... 4

**4. Key Findings** ..... 9

**5. Contribution** ..... 16

**6. Cross-cutting stories** ..... 17

**7. Lessons and Recommendations** ..... 18

**Annexes:**

**Programme design and structure** ..... 24

    Annex 1: The PEBL Partnership ..... 24

    Annex 2: PEBL Programme Design ..... 25

    Annex 3: The final Theory of Change ..... 26

**Results and evidence** ..... 27

    Annex 4: The Results Chart ..... 27

    Annex 5: Stories of change ..... 44

**Evaluation approach** ..... 50

    Annex 6: The ACU ToR for A Summative Evaluation of the PEBL Programme ..... 50

    Annex 7: Full Detailed List of Evaluation Questions ..... 53

    Annex 8: Detailed Evaluation Approach ..... 55

    Annex 9: PEBL documents reviewed for the evaluation ..... 59

## Blended Learning in Universities in East Africa: Lessons from the PEBL Partnership

A summative evaluation of the Partnership for Blended and Enhanced Learning (PEBL) Partnership. May 2021

**Report author:** John Young

**With contributions from:** Dr Femi Nzegwu, Dr Veronika Schaeffler, Joseph Chiriyankandath, Fiona Khandoker, Sara Calamassi, Dr Kirk Perris, Dr George Onyango, Dr Lucy Ikiara

[www.inasp.info](http://www.inasp.info)

**Contact:** [jyoung@inasp.info](mailto:jyoung@inasp.info)

Report dated: June 2021

© INASP 2021

This work is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence

Cover image: PEBL-PEDAL workshop, which took place in Nairobi in August 2019  
Credit: Panari Hotel, Nairobi

## Acknowledgements:

With many thanks to Alaka Bhatt who provided excellent administrative and logistical support to the evaluation team, and all the people who so generously provided information and contributed to the many workshops and consultations involved in this evaluation.

PEBL is funded by the UK's Foreign, Commonwealth and Development Office (FCDO) as part of FCDO's SPHEIR (Strategic Partnerships for Higher Education Innovation and Reform) programme to support higher education transformation in focus countries in Africa, Asia and the Middle East.



SPHEIR  
Strategic Partnerships  
for Higher Education  
Innovation and Reform



## Executive Summary

---

### Introduction

This report presents the results of a summative evaluation of the Partnership in Enhanced and Blended Learning Programme (PEBL) led by the Association of Commonwealth Universities (ACU). PEBL is part of the Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR) programme funded by the UK's Foreign, Commonwealth and Development Office (FCDO).

PEBL was designed in 2016 to transform the quality, relevance, scale, accessibility and affordability of higher education in East Africa. The partnership included five technical partners - the ACU, Commonwealth of Learning (COL), Commission for University Education, Kenya (CUE), Staff and Educational Development Association (SEDA), UK and the University of Edinburgh (UoE) - working with six "partner" and 18 "participant" universities in Kenya, Uganda, Rwanda and Tanzania.

The planned outcome "*Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality*" would be delivered through five outputs:

- An improved network of universities in for sharing degree-level blended learning courses.
- Strengthened and increased use of regional (OER Africa) and individual learning management systems (LMSs).
- Increased capacity of universities to support pedagogical approaches for blended learning.
- Strengthened quality assurance systems for blended learning courses.
- High-quality, credit-bearing blended learning courses included in university programmes.

### The evaluation

The evaluation, which took place between November 2020 and May 2021, was led by the International Network for Advancing Science and Policy (INASP) working closely with PEBL staff. It used a highly collaborative and participatory approach called Collaborative Outcomes Reporting, to develop a story of PEBL's performance against its own theory of change (ToC).

There were eight evaluation questions (EQs):

1. What evidence exists that the problem statements in the 2020 review of the ToC are valid?
2. What evidence is there that the expected outcome and outputs have been delivered?
3. Did the programme work in the way that was expected?
4. Were there any unexpected changes caused by the project, or by other factors?
5. Could there have been an easier or a better way to do it?
6. How sustainable are the observed changes?
7. Has the project delivered value for money?
8. What are the lessons from the project for the PEBL Partnership and other external stakeholders?

Evidence was distilled from PEBL's own documentation and additional evidence gathered through a wide range of methods including stories of change, interviews with different sets of stakeholders, focus group discussions, and email and online surveys. All of the evidence was summarised into a results chart, which was reviewed with stakeholders through four data validation workshops. The results were generated by the INASP and PEBL evaluation team and other partners in two co-analysis workshops. The recommendations were co-produced in a "summit workshop" involving around 25 PEBL stakeholders from across the partnership.

### Key findings

#### EQ 1: Is the programme addressing the key constraints to expanding capacity?

PEBL is clearly highly relevant. There is strong evidence to support four of the five problem statements in the ToC, but the evaluation also revealed other constraints including resistance from faculty, limited IT infrastructure for both students and staff, and the lack of consistency in the application of academic credits to blended learning courses.



## EQ 2&3: Achievement towards the outcome and outputs

Estimates of achievement towards the outcome and outputs included PEBL quantitative monitoring data, evaluation evidence and “estimates” by participants in the co-analysis workshops are shown in this figure. A score of 3 indicates 100% achieved.

### Impact

Assessing impact was beyond the scope of this evaluation, but there was some evidence that the conditions necessary for impact – that higher education commissions are putting procedures in place to support wider uptake – are emerging.



### **Outcome: Increased flexibility to expand capacity for blended learning without eroding quality.**

PEBL has made substantial progress towards this. All quantitative targets in the results framework have been exceeded substantially and this is supported by strong qualitative evidence. On the other hand, co-analysis workshop participants estimated only 90% achievement, which suggests that quantitative indicators only tell part of the story.

### **Output 1: Improved network of partner and participant universities.**

PEBL has achieved or exceeded its targets for this output. This matches well with the co-analysis estimate of 100%. Learning from other universities in the network and informal networking was highlighted as extremely useful.

### **Output 2: Online platform (OER Africa) and Individual Learning Management Systems used.**

Most quantitative targets for this output have been achieved or exceeded. However, the co-analysis workshop estimate was only 80%. There is good evidence that universities staff and students are better able to use their own Learning Management Systems (LMS), but technical issues and connectivity remain big problems.

### **Output 3: Increased capacity of partner and participant universities to support blended learning.**

Most targets in this area have been exceeded dramatically – over 3,217 individuals have enhanced capacity compared to the target of 800. The co-analysis workshop estimate of around 110% was more modest – reflecting the substantial challenges to further capacity development that remain.

### **Output 4: Strengthened Quality Assurance systems for blended learning courses.**

PEBL offered quality assurance (QA) training to all universities, but take-up has varied due to capacity and interest in different institutions. Most targets have been achieved or nearly achieved. This matches the co-analysis workshop estimate of 90% and there is strong qualitative evidence to support this.

### **Output 5: High quality, credit-bearing blended learning courses included in university programmes.**

PEBL data indicates that far more Higher Education Institutions (HEI) departments are shifting/transitioning to blended (223) than planned (33). The more modest estimate of around 110% in the co-analysis workshop recognises that this is due to the conversion of existing courses to blended or online formats rather than new blended courses.



### **The relative importance of the different outputs**

In the second co-analysis workshop we asked participants to assess how much each output contributed to the outcome using a sliding scale from 0 = 0% to 5 = 50%. The result is shown on the right.

Participants scored capacity development highest because the Training of Trainers (ToT) approach amplified its impact. They scored new module development lowest because most of the huge increase in blended and online learning material was conversion of existing materials rather than courses designed to be blended from the start.



### **EQ 4: Were there any unexpected changes?**

The project broadly unfolded as planned, though there were some unexpected changes including the conflation in the roles of partner and participant universities in the project and the decision not to set up a brand new LMS but to use the OER Africa platform. But there were several external factors which had an influence on project progress and impact. By far the most significant was the COVID-19 pandemic, which hugely accelerated the demand for online and blended learning.

### **EQ 5: Could there have been an easier or a better way to do it?**

The approach generally worked well but discussions during the co-analysis workshops suggested that more work with regulatory and coordinating bodies, more communication to raise awareness of the programme, more equitable support to all partners from the beginning, more tailored capacity development, and more involvement of students in module design would have been helpful.

### **EQ 6: How sustainable are the observed changes?**

There is much evidence to suggest that the changes PEBL has contributed to will be sustained. This includes close alignment with other initiatives, the training of trainers approach, which is already reaching beyond the PEBL partnership, and strengthened institutional quality assurance systems. Senior managers and QA leads were optimistic about sustainability in their own institutions, although further support by regulators was seen as crucial in ensuring a national sustainability.

### **EQ 7: Has the project delivered value for money?**

The project has delivered good value for money. It reduced the cost of module development from £11k to £7.25k over the three batches; combined separate activities into single events; and adopted the OER platform for sharing modules. The cascading ToT approach enabled the project to train far more staff than expected (76 cf target of 44) and produce more new courses (26 cf target of 18).

## **Contribution**

Assessing the contribution that a project or programme has made to observed results is extremely difficult. Performance stories do this by testing the ToC - assessing whether the expected outputs and outcome have been delivered and the assumptions were valid, and by assessing whether, and how much any external factors may have influenced the results. Based on the results against the ToC described in Section 4 we can already say with a high degree of confidence that PEBL activities undoubtedly contributed to the programme outputs and outcomes.

In the second co-analysis workshop we asked participants to estimate how much the external factors identified under evaluation question 4 influenced the overall outcome, and how much project work or these external factors contributed to the outcome and outputs. The results are shown below.

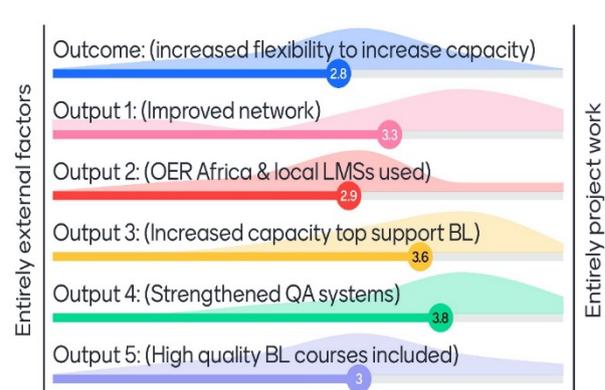
It is clear that, while some external factors had a major impact on the outcome, especially COVID-19, project work contributed more than 50% to the overall outcome, and between 50% (to the use of LMS) and 75% (to quality assurance systems) to delivery of the outputs.



### Impact of external factors on the outcome



### Contribution of project vs external factors



## Cross-cutting stories

Over and above the systematic and rather granular analysis of achievement against the outcomes and outputs described above, a number of more general cross-cutting stories about what shaped the programme emerged during the co-analysis workshops. These include:

- **The impact of COVID-19:** The arrival of the COVID-19 pandemic in March 2020 changed the whole context for the programme. Suddenly universities went into lockdown and created a huge incentive to get online and blended learning up and running and produce blended and online learning content. And PEBL the partnership was well enough established to be able to really help.
- **Establishing a regional cadre of experts:** The large number of people trained, and strong relationships established within and between partnership universities nationally and regionally is a resource that is already been called on non-PEBL universities.
- **The importance of quality assurance:** PEBL's emphasis on quality assurance (QA) based on internationally recognised standards, cadre of QA-trained university staff, and adoption into institution policies and processes has made a substantial contribution to ensuring blended and online learning is high quality and delivers good learning experiences for students.
- **Engaging policymakers and HECs:** The assumption that Higher Education Commissions (HEC) would support the programme and develop supportive policies and regulations as they learned about it was rather over-optimistic. Programmes aiming at policy and procedural reform need to engage with policymakers actively from the start.
- **Inter-institution sharing of modules:** There was less sharing of modules than had been hoped for – partly because of less support than hoped for from the HECs and the lack of a regional accreditation system.
- **The risk of increasing inequality:** The larger better resourced universities have done better than smaller less well-resourced ones, which risks increasing existing inequalities and widening the digital divide. The original division between “partner” and “participant” universities might have exacerbated this.

## Lessons

The main lessons from the evaluation were:

- The challenge
  - There is high and growing demand for more tertiary education in East Africa.
  - Teaching and departmental staff are overloaded.
  - The COVID-19 pandemic has exacerbated the problem.
- The general approach
  - PEBL's theory of change worked well, although it could be improved.
  - Simultaneous work on all five outputs was essential to achieve the outcome.
- The policy and regulatory environment
  - A supportive national regulatory and policy framework is essential for change.
  - Most universities did not have extensive enough policies in place to support change.



- Incentives
  - Personal incentives for university staff to switch to online or blended learning are key factors.
  - PEBL had little direct engagement with students.
- Capacity development
  - The training of trainers approach worked well provided sufficient trainers were trained.
  - One-off training doesn't work. Trainees need ongoing support to maintain quality.
- National and regional networking
  - National networking was useful, but regional networking less so.
  - The individual context of each country and institution needs to be considered.
- Quality Assurance
  - The blended learning rubric and tools worked well.
- Technology and infrastructure
  - Internet and associated technology remain a constraint.
  - IT skills and access remain weak:
- Risks
  - There is a risk that introducing blended learning can increase existing inequalities.
  - More attention should be paid to online data and digital safeguarding risks.
- Operational issues
  - A theory of change approach works well in complex environments.
  - Thorough analysis of the context is essential to design an effective programme.
  - Quantitative indicators do not tell the whole story; qualitative indicators are also needed.
  - Good communication and marketing is essential to promote wider uptake.

## Recommendations

### For the PEBL partnership

While there is not much time left before the end of FCDO funding for PEBL, there seems considerable enthusiasm among PEBL partners to continue to collaborate and extend and institutionalise progress so far. Recommendations for this included more work to:

- Raise awareness of the merits of blended learning and the needs of institutions to implement it.
- Promote supportive policies and regulations in HECs across the region.
- Ensure enhanced capacity is sustainable and can be shared to others.
- Establish national and regional standards for accreditation of blended learning.
- Address the risks around online data and digital safeguarding.
- Gather student views on the modules developed by PEBL partners.
- Explore post COVID-19 implications.

### For HECs and policymakers

- Put more emphasis on digital literacy in secondary schools.
- Establish policy and regulations to encourage blended and online learning.
- Foster an enabling environment for telecoms firms to provide affordable internet services.
- Provide subsidies to universities and students to make internet access more widespread and affordable.
- Foster standards for technology and IT infrastructure for universities, teachers and students.
- Adopt policies that encourage collaboration between HEIs, and support the universal application of BL.

### For University Managers

- Ensure online and blended learning meets national standards and addresses local needs and constraints.
- Create incentives to encourage teachers and students to support online and blended learning.
- Ensure IT and internet access on campus can support efficient LMS operation and use.



- Explore new methods to fund IT equipment for teachers and students.
- Support teachers' and students' access to the internet when away from the campus.
- Reassess physical facilities for online and blended learning, technology requirements and budgets.
- Review teacher time for development of modules vs delivery to students.
- Establish standards for online and blended materials, delivery, learning and accreditation / examination.
- Encourage collaboration between HEIs to improve the quality and availability of online and blended learning.

### For teachers

- Apply the principles of effective adult online and blended learning as embedded in the PEBL QA Rubric.
- Review approaches for special subjects requiring more contact time eg medicine.
- Make more use of assignments for learning and examination.

### For donor and operational agencies

- Detailed context analysis before starting to design a programme.
- Focus on existing policy gaps and/or support experimentation to identify policy options.
- Contextual complexity will almost certainly require a systemic / ToC-based approach.
- Ensure online and blended learning programmes reduce rather than increase the digital divide.
- Promote partnerships and collaboration across HEIs and between HEIs and HECs.
- Multiply impact through ToT with systems to ensure high quality of 2<sup>nd</sup> / 3<sup>rd</sup> generation trainers.
- More work on communication and engagement than has been possible in PEBL.
- Comparison with other approaches from other programmes elsewhere.



## Acronyms and Abbreviations

---

ACU - Association of Commonwealth Universities  
ALT - Association for Learning Technology  
BL – Blended Learning  
COL - Commonwealth of Learning, Canada  
COR - Collaborative Outcomes Reporting  
CUE - Commission for University Education in Kenya  
DV – Data Validation  
EQ - Evaluation Question  
EA – East Africa  
FCDO - UK Foreign, Commonwealth and Development Office  
FGD – Focus Group Discussion  
HEC – Higher Education Commission  
HEI – Higher Education Institute  
INASP - International Network for Advancing Science and Policy  
KEMU – Kenya Methodist University  
LMS – Learning Management System  
MEL – Monitoring Evaluation and Learning  
OECD DAC – Organisation for Economic Co-operation and Development - Development Assistance Committee  
OER Africa – Open Education Resources - Africa  
PEBL - Partnership in Enhanced and Blended Learning Programme  
**QA – Quality Assurance**  
RFP – Request for Proposals  
SEDA - Staff and Educational Development Association, UK  
SoC – Story of Change  
SPHEIR - Strategic Partnerships for Higher Education Innovation and Reform  
ToC - Theory of Change  
TOR – Terms of Reference  
ToT – Training of Trainers  
UoE - University of Edinburgh, UK  
UUCEA - Inter-University Council for East Africa  
VfM – Value for Money  
VLE – Virtual Learning Environment  
WB - World Bank  
WS – Workshop



## 1. Introduction

---

This report presents the results of a summative evaluation of the Partnership in Enhanced and Blended Learning Programme (PEBL) led by the Association of Commonwealth Universities (ACU). The evaluation was undertaken between October 2020 and May 2021. It was a highly participatory and collaborative process led by the International Network for Advancing Science and Policy (INASP).

The remainder of this report is organised in the following sections:

- Section 2: Background – programme context approach, evolution and Theory of Change (TOC).
- Section 3: The evaluation - purpose, objectives, users, evaluation questions, approach and methods.
- Section 4: Key findings – for each of the evaluation questions.
- Section 5: Contribution.
- Section 6: Cross-cutting stories.
- Section 7: Lessons and recommendations for further work in East Africa and elsewhere.

Additional information is provided in two sets of annexes.

- Programme design and structure:
  - The PEBL Partnership.
  - PEBL Programme Design.
  - The final Theory of Change.
- Evaluation results and evidence
  - Results chart: The full results against the evaluation questions, the key evidence and sources.
  - Stories of change: Some example stories of change.
- Evaluation approach
  - The Terms of Reference for the evaluation.
  - The full list of evaluation questions and sub-questions.
  - Detailed evaluation approach and methodology.
  - PEBL documents reviewed.

## 2. Background

---

### The context

PEBL was designed in 2016 in response to a call for proposals from the UK Foreign, Commonwealth and Development Office (FCDO) (then the Department for International Development) Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR) programme. The call was for collaborative partnerships to “transform the quality, relevance, scale, accessibility and affordability of higher education” in Sub-Saharan Africa, Asia and the Middle East “to address challenges and generate the job-ready, skilled graduates that business and societies need”.

PEBL was designed in collaboration with ACU university members in East and West Africa where “a rising graduate population and severe academic staff shortages was contributing to a widening gap between job market and graduate readiness, as well as increasing graduate unemployment (17.4% in Kenya according to World Bank), despite the graduate surplus. The problem was particularly acute in East African universities, where a 2014 study by the Inter-University Council for East Africa (IUCEA) found that 51% of Kenyan graduates lacked job-market skills with the figure rising to 52% in Rwanda, 61% in Tanzania and 63% for Ugandan graduates”<sup>1</sup>.

Further consultation with partners in Kenya, Tanzania, Uganda and Rwanda confirmed the fundamental problem as an acute shortage of academic staff, which led to a set of common issues affecting all universities though to varying degrees in each country:

---

<sup>1</sup> PEBL Plan of Work.



- Rapid increases in graduate enrolment over the past decade, which is likely to continue - especially in public universities.
- Uneven investment across the disciplines which has favoured some disciplines while leaving others to stagnate.
- Significant increases in workloads and pressure as academic and support staff try to respond to this which had a significant impact on the quality of teaching and learning.
- Rapid growth in ICT, though on-going challenges with weak infra-structure and poor connectivity.
- A strong desire to learn more about how to ICT could improve the ability of universities to meet the increasing demand for higher education.
- A disconnect between industry and graduate demand and some concerns that students are not being adequately trained, or trained in the right subjects, for the external employing sector.

### The original programme approach

The original programme design included a small group of "technical partners":

- Association of Commonwealth Universities UK (ACU), responsible for overall leadership, coordination and management
- Commonwealth of Learning, Canada (COL), lead on Quality Assurance (QA)
- Commission for University Education in Kenya (CUE), convening national HEC's, ensuring relevance to East Africa context
- Staff and Educational Development Association, UK (SEDA), lead on pedagogy
- University of Edinburgh, UK (UoE), lead on learning technology

The technical partners would support a small group of six "partner universities" in Kenya, Uganda, Tanzania and Rwanda, who would in turn support a wider set of 18 "participant universities" as shown in the following table.

**Table 1: Partner and Participating Universities**

Country	Partner Universities	Participating Universities
<b>Kenya</b>	Kenyatta University, Strathmore University.	Africa Nazarene University, Kenya Methodist University, Maseno University, Moi University, Riara University, St. Paul's University, University of Eastern Africa Baraton, United States International University, University of Nairobi
<b>Uganda</b>	Makerere University.	Bugema University, Kampala International University
<b>Tanzania</b>	Open University of Tanzania, State University of Zanzibar.	Mzumbe University, St. John's University of Tanzania
<b>Rwanda</b>	University of Rwanda.	Kibogora Polytechnic, Kigali Independent University (ULK), INES Ruhengeri, University of Technology and Arts of Byumba

The full partnership is shown in Annex 1.

The initial plan was that technical partners would support the educational development capacity of academics in partner universities by providing training on pedagogy, quality assurance and technological platforms, and the establishment of a central learning management system (LMS). Trained academics in the partner universities would then develop and deliver quality-assured, credit-bearing blended modules to students in their own and in participating universities. By participating in PEBL, East African universities would be able to expand the range of courses offered to students



enrolled in taught undergraduate and postgraduate degree programmes, which would contribute to economic growth.

The original goal was “*Higher education contributes to economic growth, sustainable development and poverty reduction*” and the original outcome was “*Greater flexibility in East African HE systems to expand capacity to meet demand without eroding quality*”. The outcome would be delivered by activities designed to deliver five outputs:

- Network of universities for sharing degree courses through blended learning.
- Online platform for sharing course materials.
- Capacity to support pedagogical approaches for blended learning.
- Strengthened QA systems for blended learning courses.
- High-quality, credit-bearing BL courses included within traditional programmes.

## Programme evolution

The project started in September 2017 with recruiting participating universities, establishing a programme steering committee, and detailed baseline studies and capacity needs assessments. An engagement meeting for all partners was organised to coincide with the first round of face-to-face training in quality assurance and pedagogy for blended learning. Work during the first year also included the development of a common approach to technology use by the UoE, a nine-month online course on Developing Blended Learning by SEDA for 24 academic staff from partner universities, who would then train others, the development of QA tools and a call for proposals for blended learning modules to be developed by Partner Universities, of which six were selected from 24 proposals.

In early 2018, the differentiation between partner and participating universities began to blur. Several participating universities expressed an interest in developing their own modules, and in the second round, nine modules were selected, six from partner universities and three from participating universities. Staff from participating universities also signed up for the SEDA online course. At about the same time a decision was also taken to use the Open Education Resources Africa Platform to share modules rather than build a bespoke system.

The programme structure and overall design at this stage is shown in Annex 2.

In 2020 there were two further evolutions. The first was not so much an evolution to the programme itself, but an evolution to the Theory of Change (ToC) of the programme and assumptions underpinning it. In mid-2020 IMC Worldwide were commissioned to review PEBL’s ToC and conduct an evaluability assessment to prepare for the final summative evaluation. This work coincided with the COVID-19 pandemic, which forced the programme to pivot to an entirely online operational model due to international and national travel restrictions.

## The revised theory of change

Through a review of programme documents and feedback on drafts, IMC and PEBL agreed a number of changes to the ToC:

Firstly, to crystallise the problems that the programme was addressing. These were identified as:

- Problem 1: Rising of number of students and acute shortages of academic staff in the higher education sector in East Africa.
- Problem 2: University courses in East Africa are taught by staff who aren’t always experienced and qualified and there is an over-reliance on visiting faculty and contract staff. Besides, there is a lack of collaboration among universities particularly on sharing resources, knowledge and expertise.
- Problem 3: Lack of operational online platforms for sharing of course materials across universities in East Africa and blended learning delivery remains random.
- Problem 4: Poor satisfaction of university students in terms of the learning experience in East Africa.



Secondly, to revise the Impact, Outcome and Output statements, which became:

- Impact: Performance of partner and participant universities in East Africa improved.
- Outcome: Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality.
- Output 1: Improved network of partner and participant universities in East Africa for sharing degree courses through blended learning.
- Output 2: Online platform (OER Africa) and Individual Learning Management Systems used across partner and participant universities in East Africa.
- Output 3: Increased capacity of partner and participant universities in East Africa to support pedagogical approaches for blended learning.
- Output 4: Strengthened Quality Assurance systems for blended learning courses across partner and participant universities in East Africa.
- Output 5: High-quality, credit-bearing blended learning courses included within regular programmes of partner and participant universities in East Africa.

Thirdly, to identify the assumptions that would need to be met for the project to succeed:

- Assumptions for outcome:
  - Institutions developing blended learning courses will convert entire degree programmes into blended formats. Institutions will develop a blended learning policy.
  - Higher Education Commissions in the four countries will support the implementation of blended learning.
  - Improving blended learning will deliver increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate demands without eroding quality.
- Assumption for Output 1: Institutional and personal incentives for further learning help to establish and maintain a network of universities sharing blended learning modules. Partner and participant universities support the project at leadership and operational levels.
- Assumption for Output 2: A minimum level of connectivity is in place across the partner and participant universities to ensure project viability and successful online collaboration.
- Assumption for Output 3: There is sufficient staff, expertise and time available to support blended learning.
- Assumption for Output 4: There are appropriate and effective quality assurance and accreditation mechanisms in partner and participant universities. There is demand from students for blended learning courses and universities successfully recruit students for courses.
- Assumption for Output 5: The PEBL project design facilitates and enable a robust selection of blended learning courses and an effective design.

The final ToC including activities is shown in Annex 3.

## 3. The evaluation

---

### Introduction

An external evaluation was a requirement of all projects funded under the SPHEIR programme. The evaluation was designed collaboratively by INASP and PEBL based on an ACU request for proposals (RFP). The RFP is attached as Annex 7. Designed from the start as a collaborative participatory exercise, the step in the evaluation design was to establish a core evaluation team with four members from INASP and four from PEBL. Further details of the core team and other contributors to the evaluation is provided below.

The summary description of the evaluation below is the result of initial core team meetings, a review of core programme documentation and an inception workshop.



## Purpose, objectives and users

The purpose and objectives of the evaluation were as follows:

**Purpose:** to find out to what extent the intended outcome “Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality” has been achieved.

**Objectives:**

1. To find out to what extent the intended outcome and outputs have been achieved.
2. To assess relevance, appropriateness and sustainability.
3. To assess efficiency.
4. To generate lessons to inform future programming (primarily by ACU and Partners).
5. To generate evidence to/and promote wider uptake.

The main users and how they will use the results are shown below in Table 2.

**Table 2: Potential users and uses of the results of the evaluation**

Users	Use
ACU Management team	To draw lessons about how to implement programmes like PEBL in the future, and evidence to support wider replication of successful results
Partner Universities	To draw lessons about how to leverage blended programmes in Partner Universities, and evidence for committees to support wider replication
Participant Universities	As for Partner Universities above
Technical Partners	(eg CoL) to draw lessons to inform development of wider work on blended learning
Higher Education Commissions (HECs)	(Esp. in Kenya) will use findings in process of developing guidelines for blended learning and informing policy
Students in partner and participant universities	No direct use (although hopefully benefitting from the results)
Teachers, Lecturers and Course Developers in partner and participant universities	Only indirectly, trickling down from the learning in partners (and some participant universities)
The SPHEIR Programme	As Partner Universities + HECs

## The evaluation questions

The evaluation questions are organised into groups broadly following the OECD DAC evaluation criteria (Relevance, Impact, Effectiveness, Sustainability, Efficiency), with an additional question on wider lessons. Summary versions of the questions are as follows.

### Relevance

1. **What evidence exists that the problem statements in the 2020 review of the ToC are the key constraints to expanding capacity to meet increasing student demand in East Africa?**  
Are there any others?

### Achievement of outcome and outputs (Impact):

2. **What evidence is there that the expected outcome and outputs have been delivered?** Were there any unexpected impact/outcome/outputs? How much did the project contribute to these?

### Appropriateness of the approach (Effectiveness)

3. **Did the programme work in the way that was expected?** (i.e. were the assumptions valid?)



4. Were there any unexpected changes, positive or negative, caused by the project, or by other factors?
5. Could there have been an easier or a better way to achieve the positive changes, or avoiding any negative ones?

### Sustainability

6. How sustainable are the observed changes?

### Efficiency

7. Has the project delivered value for money (VfM)? Has the VfM strategy been implemented? Whose perspective of value is included? Has the project delivered VfM?

### Wider lessons

8. What are the lessons from the project: for the ACU, PEBL partner and participant universities, Commission for University Education in Kenya and other Higher Education Councils SPHEIR Fund Management Team, British Council, FCDO and other external stakeholders?

The full detailed list of evaluation questions is presented in Annex 8.

## Approach and methods

The evaluation used a collaborative outcomes reporting (COR)<sup>2</sup> approach to develop a performance story.<sup>3</sup> This is a theory-based (i.e. starts from a Theory of Change (ToC), realist (i.e. takes account of the context) approach to assess whether the intervention achieved the intended outcomes. It is also highly participatory, involving a wide range of project stakeholders to co-analyse the evidence and co-produce the final conclusions and recommendations. It is both summative – i.e. identifying the results, and utilisation-focused – i.e. identifying what worked well and should be scaled up, what didn't work well and should be avoided, and how projects like this can be implemented most effectively. And involving all stakeholders makes it much more likely that the results will be used. Performance story reports describe the intervention's programme context and aims, relate to a plausible results chain, and are backed by empirical evidence. The aim is to tell the 'story' of the intervention's performance using multiple lines of evidence.

The approach aims to make as much use as possible of existing data, then collect additional data using different methods to enable triangulation, to assemble the evidence into a results chart based on the evaluation questions, and then to analyse the results collaboratively – usually through a series of workshops.

### Initial document review

A total of around 40 documents were reviewed to gather evidence against all of the evaluation questions and identify areas where additional data is needed. A full list is provided in Annex 5.

### Additional data collection

The methods used to collect additional data were:

- **Stories of change:** PEBL stakeholders were invited to submit stories of change illustrating how the provision of blended and online learning has changed during the life of the project. 10 stories were received from nine universities – two from partner institutions and seven from participating institutions. A brief summary of the results and an example story is provided in Annex 6.

---

<sup>2</sup> [www.managingforimpact.org/tool/collaborative-outcomes-reporting](http://www.managingforimpact.org/tool/collaborative-outcomes-reporting)

<sup>3</sup> Dart, J., & Mayne, J. Performance Story. In S. Mathison (Ed.), *Encyclopedia of Evaluation*. (pp. 307-309). Sage Publications, Inc. (2005) doi: 10.4135/9781412950558.n410



- **Interviews with 16 university teachers** to explore the knowledge they have acquired from the programme, the value and application of that knowledge and the sustainability of the new approaches in their universities.
- **Interviews with nine senior university managers** to explore their commitment to promoting quality blended learning and how they intend to do this.
- **Interviews with eight quality assurance leads** from the universities and CoL to explore the approach to quality assurance, how it is being implemented and its sustainability within the network institutions.
- **An interview with one representative from a regulatory body** to explore efforts to date to enable blended learning become a standard feature of higher education in East Africa and how they will help to advance this.
- **Email questions** to the PEBL project team in ACU and partner and participating universities and other organisations and **participation in already-planned Focus Group Discussions (FGDs)** to explore the degree of cross-institution knowledge sharing, clarity of terminology, and the rationale for some project adaptations.
- **Context analysis** – a limited literature-based context analysis of blended learning in East Africa to help determine PEBL's contribution to any changes in teaching and learning approaches experienced in partner and participant universities.
- **Survey of students** – a survey (via Survey Monkey) to students to gather their views of the programme (29 responses were received).
- **Focus group discussion** – the evaluation team also capitalised on existing PEBL Monitoring and Learning focus group discussions to explore additional questions emerging through the data collection phase.

### Quality assurance assessment

To assess PEBL's quality assurance approaches on project, course development and course delivery levels, we analysed how far the approaches met the criteria that are outlined in the following standards of good practice: Principles for Digital Development;<sup>4</sup> Association for Learning Technology (ALT 2011), 'Developing and Reviewing Online Courses: Items for Consideration';<sup>5</sup> and INASP's Scoping & Design Decision Tool (unpublished).

### The results chart

All the evidence collected during the evaluation was aggregated into a results chart based on the ToC and evaluation questions. The chart is designed to provide a succinct summary of the key evidence used to answer the evaluation questions and the source, and to allow triangulation for evidence from different sources. The chart is organised in five columns:

- Column 1: The evaluation question (or sub question)
- Column 2: The evaluation team's answer to the question based on the evidence.
- Column 3: A summary of the evidence gathered relevant to that evaluation question.
- Column 4: The source of that evidence (eg documentation, stories of change, interviews etc).

The full results chart is provided in Annex 4.

### Data validation

An early draft of the results chart was reviewed by stakeholders who had contributed evidence in four two- to three-hour online data validation workshops. They were designed to bring together the key stakeholder groups relevant for specific evaluation questions:

- With **students and teachers** focusing especially on EQ 2 (Outcome & Outputs) & 4 (unexpected changes).

---

<sup>4</sup> See: <https://digitalprinciples.org>

<sup>5</sup> See: <https://altc.alt.ac.uk/blog/2011/11/developing-and-reviewing-online-courses-items-for-consideration>



- With **senior managers** focusing on EQs 1 (constraints), 2.0 (Outcome) and 6 (Sustainability).
- With **the QA team** focusing on EQ 2.0 (Outcome and Outputs, especially QA systems, and high-quality courses).
- With **ACU + PEBL team and regulators** focusing on EQ 2.0 (Outcome) 5 (other ways of doing it) & 7 (VfM).

The workshops used a combination of individual work using mentimeter and plenary work to review the evidence. The focus was on the summary evidence in column 3. Participants were asked to assess the quality of the evidence, whether the summary “sounded right” to them and whether there was anything missing. Detailed notes were taken during the workshops, the results chart was amended, and the revised version was sent to the participants for further comments.

### Co-analysis workshops

The core evaluation team, and a small number of other stakeholders then reviewed the results chart again in two similar online mixed methods workshops:

- An initial four-hour workshop for the core team focusing on the statements in column 2 – ie the answers to the evaluation questions. The key questions in this workshop were (for each answer): Does the statement make sense? Does the evidence support it? Do we agree with it or need to change it and, if so, how? And do we need more evidence?

Following this workshop, the results chart was revised again, and re-circulated for further comment before:

- A second three-hour workshop for the core evaluation team, but this time also including additional stakeholders from PEBL partners. This workshop looked at three higher-level issues:
  - A prioritisation of the other factors that had influenced the programme (ie the results of evaluation question 4) and an assessment of how much programme activities had contributed to the observed outputs and outcome;
  - The key lessons emerging from the evaluation for PEBL partners and for other stakeholders wishing to implement similar projects; and
  - Whether there could have been an easier way of achieving the same results.

### The summit workshop

The summit workshop brought together a much larger group of stakeholders to review the findings of the evaluation and co-produce the recommendations.

Further details of the approach, methods and timeline are provided in Annex 8.

### Contributors

As will have been clear from the above, the evaluation was a highly participatory and collaborative process. For the sake of transparency, the key contributors to the evaluation and their roles were as follows:

From INASP:

- John Young: Team leader, design the performance story and results chart, stories of change, design and facilitation of the online workshops and reporting.
- Dr Femi Nzegwu: Qualitative and quantitative data lead, lead on designing the surveys, interviews and other approaches to collect and analyse additional evidence, interviews with senior university staff and regulators, contribution to results chart, workshops and reports.
- Dr Veronika Schaeffler: Blended learning lead, methodology for assessing quality assurance, interviews with QA staff, contribution to results chart workshops and reports.
- Joseph Chiriyankandath: background literature review, teacher interviews and workshop rapporteur, contribution to results chart and reports.
- Alaka Bhatt: evaluation management and logistics, literature review on blended learning in East Africa.



From PEBL:

- Fiona Khandoker: ACU PEBL Programme Manager. Overall evaluation management and communication within ACU and the PEBL Partnership and contributions to core team meetings and workshops.
- Sara Calamassi: ACU PEBL Project Officer. Internal ACU and PEBL Partnership coordination and contribution to core team meetings and workshops.
- Dr Kirk Perris: Education Adviser, Commonwealth of Learning. Providing a long-term perspective as a Technical Partner, specific support on QA work and contributing to core team meetings and workshops.
- Dr George Onyango: Dean, Digital School Kenyatta University. Providing a Partner University perspective, mobilising other contributors across the network and contributing to core team meetings and workshops.
- Dr Lucy Ikiara: Director of Quality Assurance at Kenya Methodist University. Providing a Participant University perspective, a Story of Change author and contributing to core team meetings and workshops.

Nine staff from PEBL partner universities wrote stories of change, 16 teachers, nine senior staff and eight quality assurance leads contributed through interviews. One student, two teachers, two senior managers, two quality assurance leads, three story of change authors attended the data validation workshops, five representatives from the wider PEBL partnership attended the second co-analysis workshop, and around 25 attended the final summit workshop.

## 4. Key findings

---

### Introduction

In this section we summarise the key findings of the evaluation against the first 7 evaluation questions. The 8<sup>th</sup> – lessons – is covered in Section 5. More detailed answers and evidence underpinning them are provided in the full results chart in Annex 4.

### EQ 1: Is the programme addressing the key constraints to expanding capacity?

PEBL is highly relevant. The evaluation revealed strong evidence to support the importance of four of the five constraints to expanding the capacity of universities to meet increasing student demand in East Africa:

- Rising student numbers and academic staff shortages: There has been an exponential growth in the number of students in universities in the region, and universities struggle to meet the demand. The lecturer student ratio in the four project countries was around 1:27 in 2017 compared to 1:16 in the UK and 1:12 in the USA.<sup>6</sup>
- Staff are overwhelmed: In addition to an absolute shortage of qualified teachers, they are often overwhelmed by other responsibilities and/or need to get other jobs. 50% of staff in Kenya's universities have additional part-time teaching jobs, universities have limited finances to support content development and technology, and digital literacy among staff is often low.
- Lack of online platforms: A study by the Universal Journal for Educational Research showed that 48% of academic respondents were unaware of whether their institution even had a LMS (Learning Management System), and in a SEDA capacity survey 20% of academics expressed concerns regarding the technological capacity of their institution.
- Weak QA systems: Nearly half the attendees at a CoL (Commonwealth of Learning) workshop indicated that their university did not have adequate QA processes in place for either online or blended learning. This was confirmed in the QA lead interviews.

---

<sup>6</sup> Source: <https://www.indexmundi.com/facts/indicators/SE.TER.ENRL.TC.ZS/rankings>

While the evaluation found much evidence of high student and teacher satisfaction with the online and blended learning delivered through PEBL, there was no evidence that student satisfaction with their previous learning experience was poor, although also no evidence to the contrary.

The evaluation did, however, reveal a number of additional constraints to improving the capacity of universities to meet increasing student demand through blended learning. These included resistance from faculty, limited IT infrastructure for both students and staff, lack of clarity around blended learning, and the lack of consistency in the application of academic credits to blended learning courses.

### EQ 2&3: Achievements vs theory of change and did it work as expected?

We have combined answers to EQ 2 "What evidence is there that the expected outcome and outputs have been delivered?" and EQ 3 "Did the programme work in the way that was expected (ie were the assumptions valid)" in this section.

Our assessments below include PEBL quantitative progress indicators, the various qualitative assessments described above in the methodology section, and some "estimates" by participants in the co-analysis workshops. Those estimates of the achievement of the programme at Outcome and Output level are provided in Figure 1 below.

**Figure 1: Estimate of achievement at outcome and output levels**



### Impact

Assessing impact was beyond the scope of this evaluation, but there was some evidence that the condition necessary for impact – that higher education commissions are putting procedures in place to support wider uptake – are emerging. Some HECs are changing their policies and guidelines - especially CUE in Kenya, which has been involved in the project since the beginning. The project has made an effort to inform others, notably in Tanzania, where the latest release of standards and guidelines has an entire chapter on online and distance learning. But rather archaic guidelines, standards and frameworks in others have not yet been revamped and there is a great lack of consistency in the approaches regarding the drafting of guidelines which take place in all four countries involved in the project.

### Outcome: Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality

PEBL has made substantial progress towards the outcome. All quantitative targets in the results framework at outcome level have been exceeded. 3556 students have registered for blended learning (target = 3000), 17 HIEs have expanded capacity to incorporate blended learning in planning (target = 11), 16 courses had been developed by March 2021 that meet quality benchmarks, though this will increase to 26 by June 2021 (target = 18). On the other hand, participants in the co-analysis workshop estimated around 90%, which suggests that quantitative indicators only tell part of the story.

However, there is strong qualitative evidence from the stories of change, senior manager interviews and student survey that PEBL has contributed to increased flexibility through greater staff capacity,



better technology, and better infrastructure and has facilitated the integration of technology into all aspects of teaching and learning. Teachers are better able to teach anywhere and anytime and to connect with and share resources with students – even in remote areas. Better ways of assessing learning outcomes are emerging and the adoption of PEBL's industry-standard quality assurance tools within project universities should ensure high-quality learning. On the other hand, students still have limited access as end-users with a significant number accessing lessons on their mobile device.

This has happened broadly as expected - ie the assumptions proved correct, although sometimes not for the expected reason:

- All institutions have converted much of their teaching into blended or fully online formats 2020 and 2021, and some have converted entire degree programmes. But much of this was forced on them by the COVID-19 pandemic rather than policies and procedures promoted by PEBL.
- There has been less support from national regulatory bodies (Higher Education Commissions) than hoped for – except in Kenya – and there remains some reticence in other countries and differing views on what is blended learning, and what policies are needed to support it.
- PEBL has enabled institutions in the network to meet increasing student demand without eroding quality. But while all institutions in the network have benefitted, partner universities seem to have benefitted rather more than participant universities.

### Output 1: Improved network of partner and participant universities in East Africa for sharing degree courses through blended learning

PEBL has achieved or exceeded its targets for this output. By April 2021, 17 of the 23 PEBL universities in the region are developing or delivering PEBL blended learning modules of which seven are in Kenya, four in Rwanda, three in Uganda, and three in Tanzania. The target was 11. Within these universities, there are at least 223 departments involved in either developing or delivering modules, far exceeding the target of 33. This matches well with the co-analysis estimate of 100%.

Learning from other universities in the network and informal networking was highlighted as extremely useful in the stories of change and teacher interviews, but it is unclear whether this will continue beyond the end of the project. MEL reports indicate that sharing of learning between institutions is more or less on target, but the stories of change and interviews suggest that, while there has been much sharing of materials within universities, not all institutions feel able to share the content they have developed via the network because of the quality of content. Others are reluctant to use content they have not developed themselves because it has not been accredited by national regulatory bodies.

This has happened broadly as expected – institutional and personal incentives, and leadership and operational levels in and between the partners has contributed substantially. But there are currently no mechanisms for recognising and rewarding the intellectual property rights of the lecturers who curate courses. In addition, the COVID-19 lockdown seems to have been a major driver of taking up online/blended learning within and across the partner universities.

### Output 2: Online platform (OER Africa) and Individual Learning Management Systems used across partner and participant universities in East Africa

PEBL MEL data indicates that most quantitative targets for this output have been achieved or exceeded. 64 academics have been trained on technological platforms (target = 64); student satisfaction with the Learning Management System (LMS) is 73% (slightly less than the target of 75%); but academics' satisfaction with the platforms is 96% (target = 90%). Again, this matches well with the co-analysis workshop estimate of 80%.

Teacher interviews and the stories of change indicate that universities in the network have invested in improving, and training staff and students to use their own LSM, especially during the COVID-19 pandemic. But technical issues and internet connectivity remain big problems especially for students. Modules posted on OER Africa have been downloaded more than 1000 times by students from other institutions.

The assumption for this output was that a minimum level of connectivity is in place across the partner and participant universities to ensure project viability and successful online collaboration. While this has been met in most of the universities, cost remains a key constraint as well as staff skills to use it, and challenges with the normal institutional and national internet access and power supply continue to



impact the success of the project. Similarly, while most students have basic access to the internet, cost, speed and reliability remain serious constraints - especially for students in remote areas who face power cuts and internet restrictions regularly in addition to cost barriers.

### Output 3: Increased capacity of partner and participant universities in East Africa to support pedagogical approaches for blended learning

PEBL has clearly contributed to a substantial increase in capacity to support blended learning in universities in the network. PEBL MEL data indicates that 76 academics have enhanced capacity to support online and blended learning (cf a target of 44), although the number of HEIs that give greater priority to staff capacity development in pedagogical approaches is slightly below target – 16 (cf a target of 17). Overall, 3,217 individuals have enhanced capacity to deliver blended learning (target = 800). It would appear that the co-analysis workshop estimate of around 110% was rather modest.

Interviews with teachers and senior staff support this. The initial SEDA training of 24 staff across the network has been multiplied dramatically. Email reports from partner universities show that ANU's six PEBL-trained staff have trained a further 54, KEMU has trained 180, Bugema 293, Makerere 1,540 and Kenyatta University has trained 1150 out of a total of 1200 lecturers. This is hugely in excess of the achievements reported in the results framework. There is also evidence of PEBL-trained staff training staff in universities outside the network. And large numbers of students have enrolled on blended learning courses – 9,164 in Kenya, 2,911 in Uganda, 502 in Rwanda and 512 in Tanzania. But a PEBL survey in 2020 highlighted a number of challenges to further capacity development. These include lack of skills in students/lecturers to adopt blended learning (67%); lack of national frameworks (56%); inadequate IT systems/support; perception that blended learning results in increased workloads (42%); lack of institutional support and skills (18%); and a general reluctance from staff and students to adopt blended learning (18%).

The assumption for this output – that there is sufficient staff, expertise and time available to support blended learning has proved correct. Skills, interest and especially the time to attend training have been constraints, but the PEBL training seems to have been effective and the train the trainers approach proved an effective way to scale up. But, while PEBL training has been offered equally to all institutions, uptake has been variable – higher in partner than participating universities. Not all are confident that there is sufficient expertise/resource available, or that training will continue.

### Output 4: Strengthened Quality Assurance systems for blended learning courses across partner and participant universities in East Africa

PEBL offered quality assurance (QA) training to all institutions in the network, but take-up has varied due to capacity and interest in different institutions. So, while PEBL MEL data shows that the target for HEIs ability to quality assure courses has been reached (11), the number of action plans produced has not (14 cf a target of 23 – although this is likely to increase to 20 by the end of June). This is also reflected in the co-analysis estimate of 90%.

But there is strong qualitative evidence that PEBL has contributed to strengthened QA systems for blended learning across the network. COL's trainings, workshops and QA tools have enhanced the capacity of staff and institutions in the PEBL network on QA of blended learning. PEBL-designed QA approaches meet most criteria of recognised standards of good practice, though there is little evidence that users, ie students, have been involved in the design – one of the key standards. PEBL-designed QA approaches have been institutionalised in some universities. There is no doubt that the COVID-19 pandemic accelerated the adoption of blended learning and the development of related QA systems within the institutions.

There were two assumptions for this output: that there are appropriate and effective quality assurance and accreditation mechanisms in partner and participant universities; and that there is demand from students for blended learning courses and universities successfully recruit students for these courses. There were few quality assurance mechanisms for blended learning in universities in East Africa before PEBL, but strong demand for blended and online learning from students. QA tools developed by PEBL before the COVID-19 pandemic were incorporated into QA policies and processes in universities across the network. QA leads are very aware of the importance of national QA accreditation mechanisms and promoted the involvement of the regulatory bodies in the project. However, the perceived HECs' ownership of this regulatory process varies in the countries. Student perception of blended learning is positive, and increasing numbers are opting for fully online courses.



## Output 5: High-quality, credit-bearing blended learning courses included within regular programmes of partner and participant universities in East Africa

PEBL MEL data indicates that the number of HEI departments producing blended learning by March 2021 (223) greatly exceeded the target (33). As of September 2020, 16 modules had been successfully developed and uploaded on OER Africa to be made available for use by universities in the network. A further 10 will be added by June 2021 – again greatly exceeding the target (18). The rather modest score of around 110% estimated in the co-analysis workshop recognises that this huge over-achievement is actually the conversion of existing courses to online and blended formats rather than the development of new blended courses.

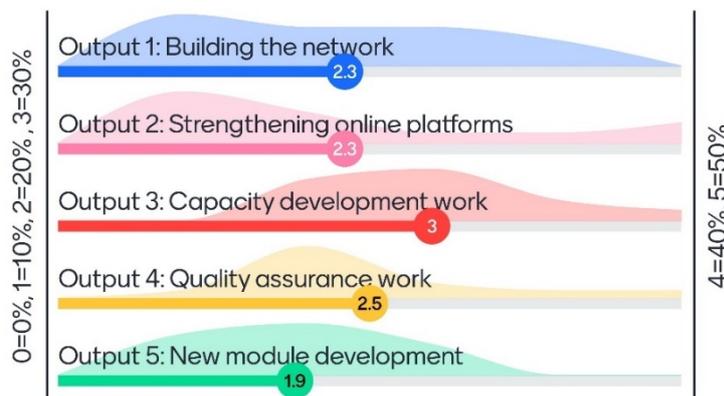
But student satisfaction is high. PEBL trained staff have led the expansion of online and blended learning, although it is unclear how much of the drive for this was caused by the pandemic or by PEBL. Some partner universities are embedding blended learning in policy, structures and processes. There is evidence in some countries that higher education regulators have been incorporating blended learning into national policies.

The assumption for this output was that the PEBL project design would facilitate and enable a robust selection of blended learning courses and their effective design. The PEBL project design does provide a mechanism for the selection of modules, and the QA process helped assure the quality. But the cascading of training down from the few who received SEDA training varied capacity across institutions. This meant that some applied a rather more rigid one-directional approach to the module design process than intended, which has hampered a truly robust and fully participatory design that promotes mutuality of learning.

### The relative importance of the different outputs

In addition to the assessment of achievement against the outcome and outputs based on analysis of the evidence collected during the evaluation, we were interested to explore the relative importance of each output in delivering the outcome. We did this in the second co-analysis workshop where we asked participants to assess how much each output contributed to the outcome using a sliding scale from 0 = 0% to 5 = 50%. The result is shown below in Figure 2.

**Figure 2: Contribution of outputs to the outcome**



Participants were then asked to explain why they scored the outputs differently:

- The most comments (seven) were on capacity development. Comments included: capacity development underpinned the whole project; staff who attended the SEDA training were able to train others; staff had the capacity to be able to respond to the pandemic; and improving capacity contributes to sustainability.
- Three comments were on strengthened QA systems: that high quality is essential for effective learning; QA skills enabled staff to produce high-quality modules; and the adoption of the QA rubric and other elements contributed to sustainability.
- The two comments on building the network were contradictory: building the network contributed least; and that while indirect, building the network was still important.



- Two were about strengthening the platforms. The comments were that it was a key priority, and that is enabled partners to share materials easily.

#### **EQ 4: Were there any unexpected changes?**

The project broadly unfolded according to the plan, though there were some unexpected changes.

For example, the original PEBL plan was for partner universities to develop modules for use by participant universities, but, after the first training, participant universities also started producing modules. This led to a conflation in the roles of partner and participant universities in the project. By the end of the project, 19 of the 26 modules were developed by partner universities and seven by participating universities.

Another internal change was the decision not to set up a brand new LMS for the programme but to use the OER Africa platform. That was partly due to the prohibitive cost of developing a new platform, but also because of a policy change in OER early in PEBL to allow storage and sharing of materials that had not been developed by the OER project itself.

There were several external factors which had an influence on project progress and impact.

By far the most significant was the COVID-19 pandemic. While the lockdown delayed the number of new modules being produced, it hugely accelerated the demand for online and blended learning, the conversion of existing courses to online or blended courses, the improvement of technology and access, and the development of policies, processes and structures to support online and blended learning.

Other factors that affected progress included staff turnover in ACU and some of the universities and the level of pre-existing policy commitment in the universities. In addition, inter-university politics has acted as an inhibiting factor in the sharing of both knowledge and content between institutions across the network outside the direction of the PEBL project.

#### **EQ 5: Could there have been an easier or a better way to do it?**

The evidence collected during the evaluation suggest that the approach generally worked well and did not reveal any radical alternatives. However, discussions during the co-analysis workshops identified a number of ways in which the programme could have been improved:

- At Outcome level
  - More work with regulatory and coordinating bodies: Involving the HECs as partners from the beginning, getting greater clarity of what was needed from them from the universities, partner/participant universities, tasking them with developing guidelines for blended learning. Involving the Inter University Council because one of their core mandates is to promote university education.
- In Output 1 (building the network)
  - More communication and marketing to raise awareness of the programme outside the PEBL network and embed it across the region.
  - More equitable support to all partners from the beginning: Tailored, needs-led support especially to universities lagging behind to ensure 'equitable collaboration' across the network.
  - More work and incentives to encourage partners to work together on modules etc.
- In Output 2 (Online platform / LMS)
  - More research on how students use LMSs.
  - More support to partner universities' own LMSs.
- In Output 3 (Capacity development)
  - More tailored capacity development based on individual institution needs.
  - Training for students and more emphasis on their experience of using the modules.
  - More support to the institutions and students on technology and technology access.
  - More careful design of the training of trainer approach to ensure quality is retained.



- In Output 4 (Quality Assurance)
  - Clearer definition of standards and expectations, particular in terms of data security/privacy, institutional context considerations, and equity aspects such as accessibility and inclusivity.
  - More training on the QA rubric within institutions.
- In Output 5 (Modules and courses)
  - More resources for credit-bearing module development including collaboration between universities across East Africa on module developments.
  - More co-development of modules by partner universities.
  - Involving pre online learning and current students in module design.
- Additional work (not already part of an existing output)
  - More work at the start of the programme to come up with a common understanding of what blended learning is – especially with technical partners.
  - More work to ensure that effective internet infrastructure, access and gadgets is not a constraint. The ability of a single programme to address this is very limited, but it might have been possible to do more with national bodies.

### **EQ 6: How sustainable are the observed changes?**

There is much evidence to suggest that the changes PEBL has contributed to will be sustained. This includes the close alignment with SEDA and other initiatives, the training of trainers approach, which has been expanded to include other staff, and many of the universities have set up their own training programmes, as well as the strengthened institutional quality assurance systems.

PEBL also contributed to system-level changes, which will also contribute to sustainability. These include supporting the Open University of Kenya and contributing to the development of the Uganda National Digital Agenda. There is also much evidence that the COVID-19 crisis has also contributed to this momentum towards sustainability.

Most senior managers and QA leads were quite optimistic, about the sustainability of this blended learning approach in their own institutions, although the level did differ between institutions.

The role of the regulators, however, remains crucial in ensuring a level of sustainability that has institutional depth, quality and scope. Their lack of engagement or limited engagement at best, does create a risk to this vision – as more than institutional capacity or expertise is needed. Issues of standardisation have to be addressed if the full benefit of shared resources is to be realised.

So while institutions may express optimism for the future, the scope to operate and spread the benefits of this learning approach remains limited, unless regulators can be actively engaged. Some QA leads also raised concerns about having sufficient funding and resources for continuous capacity building.

### **EQ 7: Has the project delivered value for money (VfM)?**

The project has made clear efforts to implement all three areas of its VfM framework: efficiency; economy; and effectiveness, sustainability, and leverage.

It has reduced the cost of module development from £11k to £7.25k over the three batches. It has combined separate activities eg engagement, pedagogy and QA workshops and training sessions into a single week-long event. After reviewing options, PEBL decided not to develop its own learning system but to adopt the OER Africa platform for sharing modules which universities could access through their own Virtual Learning Environments (VLE).

The cascading train-the-trainer approach enabled the project to train far more staff in developing blended learning modules (76 cf target of 44) and more new courses were produced than planned (26 cf target of 18).

While the early impact of COVID-19 slowed the development of new courses, there is no doubt that the incentive to switch to online and blended learning due to the lockdown contributed to increased investment in infrastructure, training, quality assurance and online module development leading to much wider take-up of PEBL blended learning approaches in departments across the universities (223 cf target of 33).

## 5. Contribution

Assessing the contribution that a project or programme has made to observed results is extremely difficult. In randomised control trials a randomly selected treatment group (ie the people who get the benefit of the project) are compared with a control group (similar people in a similar environment) so that in theory the only factor which could have contributed to any differences is the project or programme itself. However, errors in randomisation, dropouts from the treatment group, variability in project delivery with different groups, and contamination of the control group (ie people in the control group getting some of the benefits of the project) can make that much less than certain.

Performance stories take a different approach. They test the theory of change - assessing whether the expected outputs and outcome have been delivered and the assumptions were valid – and explore the external environment and assess whether, and how much, any external factors may have influenced the results.

In this section we present the results of some estimations made by participants in the second co-analysis workshop of the impact of the external factors identified under evaluation question 4 on the overall outcome, and the relative importance of programme activities and external factors in delivering the outcome and outputs.

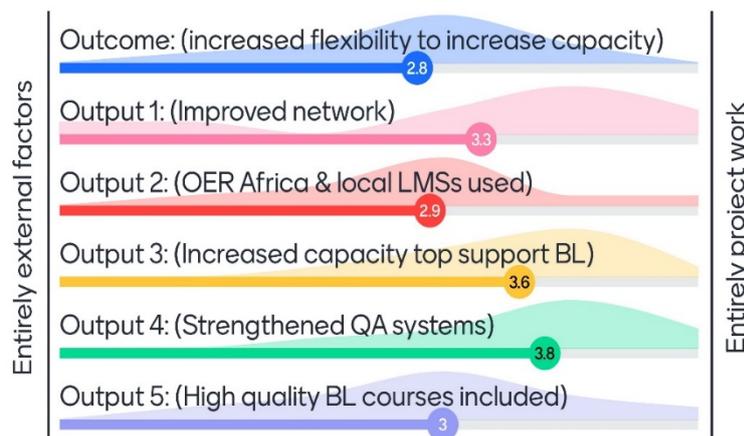
In the second co-analysis workshop we asked participants to estimate how much the external factors identified under evaluation question 4 influenced the overall outcome using a scale from 0 = none to 5 = completely. The results are shown below in Figure 3.

**Figure 3: Impact of external factors on the outcome**



Participants were also asked to estimate the relative contribution of external factors and programme activities to the outcome and outputs between 0 = entirely external factors and 5 = entirely project work. The results are shown below in Figure 4.

**Figure 4: The contribution of project work and external factors to the outcome and outputs**





Based on the results against the theory of change and assumptions described in Section 4 we can already say with a high degree of confidence that PEBL activities undoubtedly contributed to the programme outputs and outcomes.

Some external factors had a major impact on the outcome, especially COVID-19. However, based on the exercises in the co-analysis workshop, it is clear that varied capacity and skills in different partner universities and technology, project work contributed more than 50% to the overall outcome, and between 50% (to the use of LMS) and 75% (to quality assurance systems) to delivery of the outputs.

## 6. Cross-cutting stories

---

Over and above the systematic and rather granular analysis of achievement against the outcomes and outputs described in the previous section, some more general stories about what shaped the programme emerged during the co-analysis workshops. These are described and illustrated below.

### The impact of COVID-19

The arrival of the COVID-19 pandemic in March 2020 changed the whole context of the programme. In-person events, such as meetings with Higher Education Commissioners and Vice Chancellors, had to be cancelled. Development of the second round of modules was delayed, since academics at partner and participant universities were busy with moving their classes online and upskilling their peers. On the positive side, the pandemic introduced a huge incentive for universities to switch to online and blended learning – as illustrated by one story of change author who said:

*“When schools and universities were forced to close [by COVID-19] there was an urgent need to find a safe way for students to continue learning, Wham!! In came blended learning.”*

Another, from Uganda, said:

*“The National Council for higher Education (NCHE) mandate for all universities to study online during the COVID-19 period.”*

This led to accelerated investment in strengthening staff capacity, building infrastructure, collaborating with internet providers, converting existing courses to online or blended courses and developing QA policies and procedures. The interviews with teachers revealed that:

*“institutions have fast-tracked the adoption of blended learning converting a large proportion, if not all their modules into a blended format rather than just modules conceptualised under PEBL auspices”.*

PEBL was there at the right time and had already done enough to be able to help universities to respond.

### Establishing a regional cadre of experts

PEBL has contributed substantially to establishing a regional cadre of experts who can extend the approach in their own and other institutions. The training of trainers model generally worked very well through the project. It has allowed those trained in PEBL related courses to be able to effectively cascade what they had learnt to other members of staff in their institution, thus creating a cadre of blended learning experts in the region. This model was especially effective considering the COVID-19 pandemic. One member of staff who benefitted from the training facilitated by PEBL commented:

*“we trained the whole university during COVID, when everybody was at home, we did basic training.”*

However, one drawback was the lack of opportunities to share expertise and network beyond PEBL activities. Most of the networking that has taking place has been through informal structures. One staff member commented that they would like to see more formalised cooperation whereby they could:

*“meet other lecturers from different universities... who are experienced in using blended learning. I think that kind of mentorship or coaching is needed between our university and staff from a different university.”*



## The importance of quality assurance

The implementation of QA tools in the institutions was essential to ensure the high quality of the BL modules. As one QA lead said:

*“We are happy to have that QA rubric because nowadays university lecturers in IC [Information & Communication] sector ensure that, whenever they are preparing, they are reviewing, even when they are broadening material in their learning management platform, they follow that QA rubric. For us, that’s a big achievement.”*

The PEBL QA approach addressed most quality criteria that, according to good practice standards, would be expected, although some more attention may need to be given to data security and privacy, and equity criteria to ensure accessibility and inclusivity for all students and lecturers. Many QA leads were optimistic that sufficient structures have been set up in their institutions to ensure the sustainability of high-quality blended learning. Involvement of the national Higher Education Commissions in PEBL’s QA work has been seen as a driving factor. As one QA lead expressed it:

*“In Kenya, we were a bit lucky, because the commission for university education in Kenya was part of the QA team when we were developing the rubric. [...] so to a large extent, the QA is based on the Kenyan way, the Kenyan thinking of quality assurance. [...] It is aligned to the expectations of the commission [...]”*

## Engaging policymakers and HECs

There is no doubt that the COVID-19 pandemic accelerated the adoption of blended learning and the development of QA systems within the institutions. However, the absence of formal support, standards, frameworks, and guidelines from the HECs impeded effective transition. Some HECs are changing their policies and guidelines, especially CUE in Kenya. One story of change author said about CUE:

*“a policy to support the same has been put in place and the commission for higher education is in full support of blended learning”*

This support is probably because CUE has been involved in the project since the beginning. Others are catching up, for example TCU in Tanzania recently released standards and guidelines with an entire chapter on online and distance learning.

Despite the above, archaic policies and frameworks have not yet been revamped. One of the learnings is that HECs in all four countries should have been engaged as partners. In addition, the project should have provided more clarity on what universities need from them. Attempts should have been made at the beginning of the project to organise more face-to-face meetings that could lead to tangible outputs.

## Inter-institution sharing of modules.

MEL reports indicate that sharing of learning between institutions is more or less on target, but the stories of change and interviews suggest that, while there has been much sharing of materials within universities, not all institutions feel able to share the content they have developed via the network because of the quality of content. Others are reluctant to use content they have not developed themselves because it has not been accredited by national regulatory bodies. There is also the issue of a lack of consistency across the region with regards to academic credits and quality assurance requirements. Some academics in the network intimated that rivalry and inter-university politics also impacted upon the sharing of knowledge and content among institutions. Other academics suggested it was against university policy to share content and raised the issue of a lack of institutional cooperation regarding issues such as payment, staff time and institutional status.

## The risk of increasing inequality

Institutional capacity to deliver the PEBL project varies across the partnership. The partnership includes large, well-resourced institutions that have been able to embed the required infrastructure to support the PEBL approach, curate quality learning resources and equip a sizeable core of staff and students with the necessary skills. Many such institutions were already embracing blended learning before the project started. PEBL also includes other smaller institutions, whose teachers and students



have far fewer resources to deliver, and engage in, a blended approach to their teaching and learning, and were much less aware of the approach. Those in the former group have tended to do better than those in the latter. This was exacerbated at the start of the project by the separation of institutions into partner universities, who would produce and share, and participating universities, who would use the blended learning modules produced by the project. Although this separation was rapidly changed, so that all universities had similar access to training from the programme, access to other PEBL resources, and their own limited resources made it more difficult for smaller universities to scale up and apply the training. While generally improving access to learning for all, there is a risk that projects promoting blended learning can actually increase existing inequalities.

## 7. Lessons and recommendations

---

### Lessons

The following lessons were developed during the second co-analysis workshop. They include lessons on the challenge, the general approach, specific elements of the PEBL approach and general operational lessons.

#### The challenge

- **There is high and growing demand for more tertiary education in East Africa.** Student numbers are increasing rapidly but staff : student ratios are well below those in developed countries.
- **Staff are overloaded,** IT, technology and online and blended learning pedagogy skills are low, and many need to take second jobs to earn a decent living.
- **The COVID-19 pandemic has exacerbated the problem** and provided a huge incentive to universities and the regulators to switch to online learning and boosted PEBL's impact. The long-term impact of that is likely to increase interest in online and blended learning for many years.

#### The general approach

- **PEBL's general approach (ie the ToC) worked well, although it could be improved.** The revision of the impact and outcome statements to focus on the performance of universities as opposed to economic growth was realistic for a programme of this scale and scope.
- **Simultaneous work on all five outputs was essential.** Additional work with the HECs and policymakers would have helped to establish a supportive national and regional policy environment for wider uptake. IT equipment, infrastructure and skills remain a constraint.

#### The policy and regulatory environment

- **A supportive national regulatory and policy framework is essential** to enable universities to change. If this is not already in place, programmes seeking to introduce blended and online learning will need to work with HECs to help change the regulatory environment to support wider uptake and sustainability.
- **Most universities also did not have extensive enough policies in place** to guide and inform the transition. But PEBL has facilitated practical changes, which have sometimes catalysed wider policy and procedural changes in partner and participant universities, and sometimes the other way round.

#### Incentives

- **Personal incentives encouraging university staff to switch to online and distance learning are key factors affecting uptake.** These go well beyond monetary to include personal interests, day-to-day work pressures, opportunity for professional development and practical factors including access to equipment and covering the costs of internet access.



- **PEBL had little direct engagement with students.** A better understanding of student incentives and more involvement of students in the design and quality assurance of modules would have been helpful.

### Capacity development

- **The ToT approach worked well,** but only if enough staff from each institution are trained to do the training and that the quality assurance elements are sufficient to ensure the quality of the training that they then do, and policies, processes and structures are in place to support it.
- **One-off training does not work.** The institutions that have most successfully built sustainable capacity established mechanisms to provide continuous support to help teachers to apply what they have learned.

### National and regional networking

- **Networking sometimes helped:** While regional networking to share skills, experience and modules worked for some PEBL participants in some institutions, it did not work for everybody. Most collaboration and skill sharing occurred within institutions and between national institutions. The individual context of each country and institution needs to be considered, and programme support tailored to encourage more networking if it is considered desirable.

### Quality Assurance

- **The Blended learning rubric and other PEBL tools for quality assurance worked well,** but needs to be embedded within institutional policies and procedures and across all training, and needs more user (ie student) involvement to be institutionalised.

### Technology and infrastructure

- **Internet and associated technology remains a constraint.** While difficult for a programme of PEBL's size to address, policies on the incorporation of technology for education at a national level are critical to supporting the development of online/blended learning.
- **IT skills and access remain weak:** Both staff and students still face constraints with accessing and using internet and related technology and accessing the internet – especially student in remote locations.

### Risks

- **The risk of increasing inequalities:** The universities that have been most successful at expanding capacity for online and blended learning are those that had the best resources and capacity to start with, and those with least resources and capacity have done less well. COVID-19 has exacerbated this. Online and blended learning does not in itself reduce inequalities and could increase the digital divide.
- **Online data and digital safeguarding risks:** Risks around data privacy, data security and digital safeguarding need more attention. PEBL could provide more guidance around data security digital safeguarding.

### Operational issues

- **A Theory of Change Approach:** Having a clear ToC and reviewing it mid-way through the project certainly seems to have helped PEBL to deliver the required outcome, though the specific outcome and output areas will need to be tailored for each context.
- **Context analysis:** A thorough analysis of the national policy and regulatory framework, capacity and interest of regulators and policymakers in reform, attitudes, interest, capacity and incentives of staff and teachers in universities, attitudes and interest of students, and availability and interest of technical support organisations is essential to designing an effective programme.



- **Quantitative indicators do not tell the whole story.** PEBL's quantitative MEL indicators tend to present a more positive picture than the opinions of PEBL staff and partners and the qualitative information collected during the evaluation.
- **Good communication and marketing is essential.** Qualitative evidence collected during the evaluation suggests that more communication and marketing to raise awareness of the programme outside the PEBL network – especially with the HECs – would have helped improve their engagement. However, this was partly a victim of international and national travel and meeting constraints due to the COVID-19 pandemic.

## Recommendations

Based on the lessons generated by the evaluation, participants at the summit workshop co-produced the following recommendations. They include specific recommendations for continuing work by the PEBL partnership as well as more general recommendations for other stakeholders in East Africa, and donors and operational agencies contemplating similar projects in Africa and elsewhere.

### For the PEBL Partnership

While there is not much time left before the end of FCDO funding for PEBL, there seems considerable enthusiasm among PEBL partners to continue to collaborate and extend and institutionalise progress so far. Recommendations for this included more work on:

1. Advocacy and communication: PEBL has been remarkably successful, the results should be used to raise awareness among government and parastatals on the merits of blended learning and the needs of institutions to implement it effectively.
2. The policy environment: Further work is needed to establish supportive policies and regulations in HECs across the region. Building on the experience of collaboration with CUE in Kenya, and the blended learning policy that CUE has developed, PEBL should continue to engage and have meetings with regulatory bodies until the end of the project.
3. Capacity development: More effort is needed to ensure the capacity for blended learning established within the PEBL partnership is sustainable and the extension to other institutions that is already happening can be expanded. This could be done through the establishment of expert learning teams across the network who could then support others.
4. Accreditation: The absence of national and regional standards for accreditation of blended learning remains a constraint to wider adoption. PEBL should organise a workshop with PEBL partners and national and regional bodies to share experiences and develop authentic ways to assess different kinds of courses.
5. Risks: Further work needs to be done to address the risks around online data and digital safeguarding.
6. Student involvement: There has been little active engagement of students in the project to date. While there is little time left gathering student views on the modules developed by PEBL partners would provide useful feedback.
7. Post COVID-19: COVID-19 certainly accelerated the adoption of online learning, and rapid increase in staff able to develop and use online learning approaches. Further thought needs to be given to the policy implications in a post pandemic context.

### For other stakeholders

Recommendations for other stakeholders considered necessary to promote blended learning more widely in the region were as follows:

#### ***For HECs and policymakers***

1. IT literacy: To be able to make the most of blended and online learning there needs to be more emphasis on digital literacy in secondary schools to equip future students and teachers with the skills they need and familiarise students with online learning.
2. Policy and regulations to support blended learning: Most higher education regulatory bodies in the East African region are yet to develop policy and regulations to encourage blended and online



- learning. This is essential for wider uptake and should include frameworks for the preparation of blended learning, and standards and mechanisms for accreditation of courses and examinations.
3. Internet access: Policymakers need to create an enabling policy environment to encourage private sector telecoms firms to provide effective and affordable internet services; they may need to consider subsidies to universities and students to make access more widespread and affordable.
  4. Technology: Policymakers and government departments should also set standards and provide support to enable universities to acquire and use the technology and IT infrastructure for their institutions, and to teachers and students for their individual use.
  5. Collaboration: HECs should establish policies and procedures that encourage collaboration between HEIs, and support the universal application of blended learning.

### ***For University Managers***

1. Understanding the context: Each HEI is unique and operates in a unique context. University managers need to ensure their approach to blended and online learning meets national standards (if they exist) but also addresses local learning needs, and local access constraints.
2. Attitudes and incentives for online and blended learning: While there are certainly big incentives for universities to move to online learning, HEIs also need to understand barriers and drivers of blended learning and then support incentives to encourage teachers and students to support online and blended learning - especially for teachers who prefer traditional face-to-face approaches.
3. Sustainable, and equitable access to online material: HEIs must ensure IT infrastructure and internet access on the campus provides sufficient bandwidth to support efficient LMS operation and teacher and student use with diverse gadgets. and ensure information is accessible on university systems even when there is no internet access.
4. Hardware and software: Teachers and students need access to and skills to use appropriate hardware and software, including for those with disabilities. New methods to fund this may be needed eg subsidies and sponsorship from private sector provider or loans with gradual payback mechanism.
5. Internet access: Teachers and students also need sufficient internet access when away from the campus. This may require negotiation with internet providers to provide discounted or free access in special situations,
6. Facilities, resources and budgets: Universities may need to reassess the physical facilities to support online and blended learning, for example less space for face-to-face interaction, but more to support blended learning eg dedicated multimedia rooms. Additional technology and software may be required. Teaching staff may need more time for module development and less time for teaching. While often considered to be cheaper, for some institutions, establishing good, high-quality online and blended learning may involve substantial investment.
7. Standards and examinations: In line with national regulations and policies if they exist and/or in collaboration with other HIEs, universities need to establish new standards for online and blended learning materials, online learning delivery, online learning by students and student satisfaction, and to develop new approaches for online learning assessments and examinations.
8. Collaboration: Over and above incentives established by HECs, the PEBL evaluation has demonstrated the value of collaboration between HEIs to improve the quality and availability of blended and online learning materials, reduce costs and increase sustainability.

### ***For teachers***

Many of the above recommendations also apply to teachers and students, and while the emphasis of PEBL has been at institutional level, a few recommendations were also made specifically for university teachers:

1. Online and blended learning material: While much existing learning material can be re-purposed for blended and online learning, the best results seem to come through applying the principles of effective adult online learning promoted by SEDI and embedded in the PEBL QA Rubric.
2. Tailoring: The blended learning approach needs to be tailored to the subject. For example, medicine, which requires more face-to-face elements with diverse stakeholders than many



courses, may be taught by doctors and other professionals rather than by trained teachers, and may therefore require a special approach.

3. Assignments: Assignments are an essential element of blended and online learning and pending the establishment of standardised assessment mechanisms for online and blended learning can provide a useful mechanism to assess a student's progress.

### For donors and operational agencies

Over and above the specific recommendations above, some additional recommendations were developed for donors and operational agencies thinking of implementing similar projects:

1. Context analysis: Different approaches will be needed in different contexts. A thorough analysis of the individual stakeholders (policymakers, universities, teachers, students and private sector actors), the organisations they work in and the institutional framework (policies, regulations, customs, norms and especially incentives) is essential before starting to design a programme.
2. The policy context: In some contexts, gaps in guidelines/policies/frameworks from national regulatory bodies may provide specific policy objectives that programmes can focus on. In others, a relatively undeveloped policy context may be an opportunity for universities to innovate, experiment and explore different options to generate evidence to support policy development.
3. Systemic approach: The PEBL ToC worked well. Given the complexity of the higher education context in most countries' systems, it is likely that a similar systemic approach will be needed – working with different stakeholders in parallel – but the components might be completely different.
4. The digital divide: While generally improving access to university education, blended and online learning can increase the digital divide and exacerbate existing inequalities with access to technology and the internet. Programmes should work with policy actors and/or technology companies to try to reduce this for both students and academics.
5. Partnerships and networking: Collaboration between the partners in PEBL seems to have been a major contributor to its success. But, while collaborations between institutions in the same country has certainly helped, it is less clear whether regional networking helped. Future programmes might take a more iterative and consultative approach to building the network. More substantial involvement of HECs (as with CUE in Kenya) could enhance work to strengthen the policy environment.
6. Training of trainers: The ToT approach worked well in PEBL, and is a model well worth replicating, but it is important that sufficient trainers are trained and that continuous support is provided to ensure the quality of training provided by 2<sup>nd</sup> and 3<sup>rd</sup> generation trainers.
7. Communication and engagement: More work on communication and engagement than has been possible in PEBL (not least because of travel and meeting restrictions as a result of the COVID-19 pandemic) would improve impact on policy and wider uptake.
8. Comparison with other approaches: PEBL is just one approach in one region. It would be interesting to compare the lessons emerging from PEBL with lessons from other programmes elsewhere.



# Annexes: Programme design and structure

## Annex 1: The PEBL Partnership<sup>7</sup>

**LEAD**



The Association of Commonwealth Universities

**TECHNICAL PARTNERS**



Commission for University Education (Kenya)



Commonwealth of Learning (Canada)



Staff and Educational Development Association (UK)



University of Edinburgh (UK)

**PARTNER AND PARTICIPANT UNIVERSITIES**

**KENYA**



Africa Nazarene University



Kenyatta University



Kenya Methodist University



Maseno University



Moi University



University of Nairobi



St. Paul's University



Strathmore University



University of Eastern Africa Baraton



United States International University



Riara University

**TANZANIA**



Mzumbe University



Open University of Tanzania



St. John's University of Tanzania



State University of Zanzibar

**RWANDA**



Kibogora Polytechnic



Kigali Independent University (ULK)



INES Ruhengeri



University of Rwanda



University of Technology and Arts of Byumba

**UGANDA**



Bugema University



Kampala International University

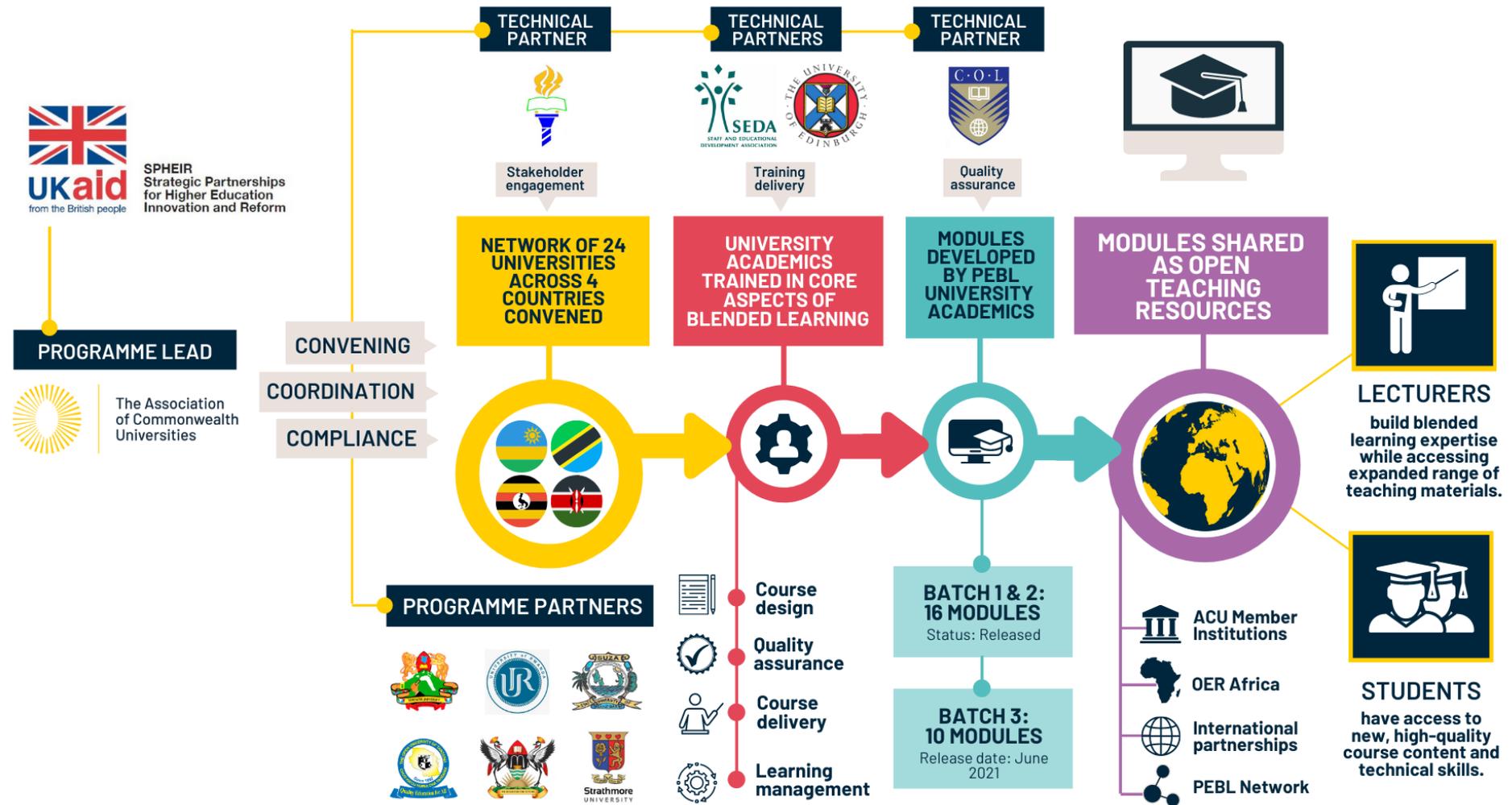


Makerere University

<sup>7</sup> Source: PEBL Programme Brochure

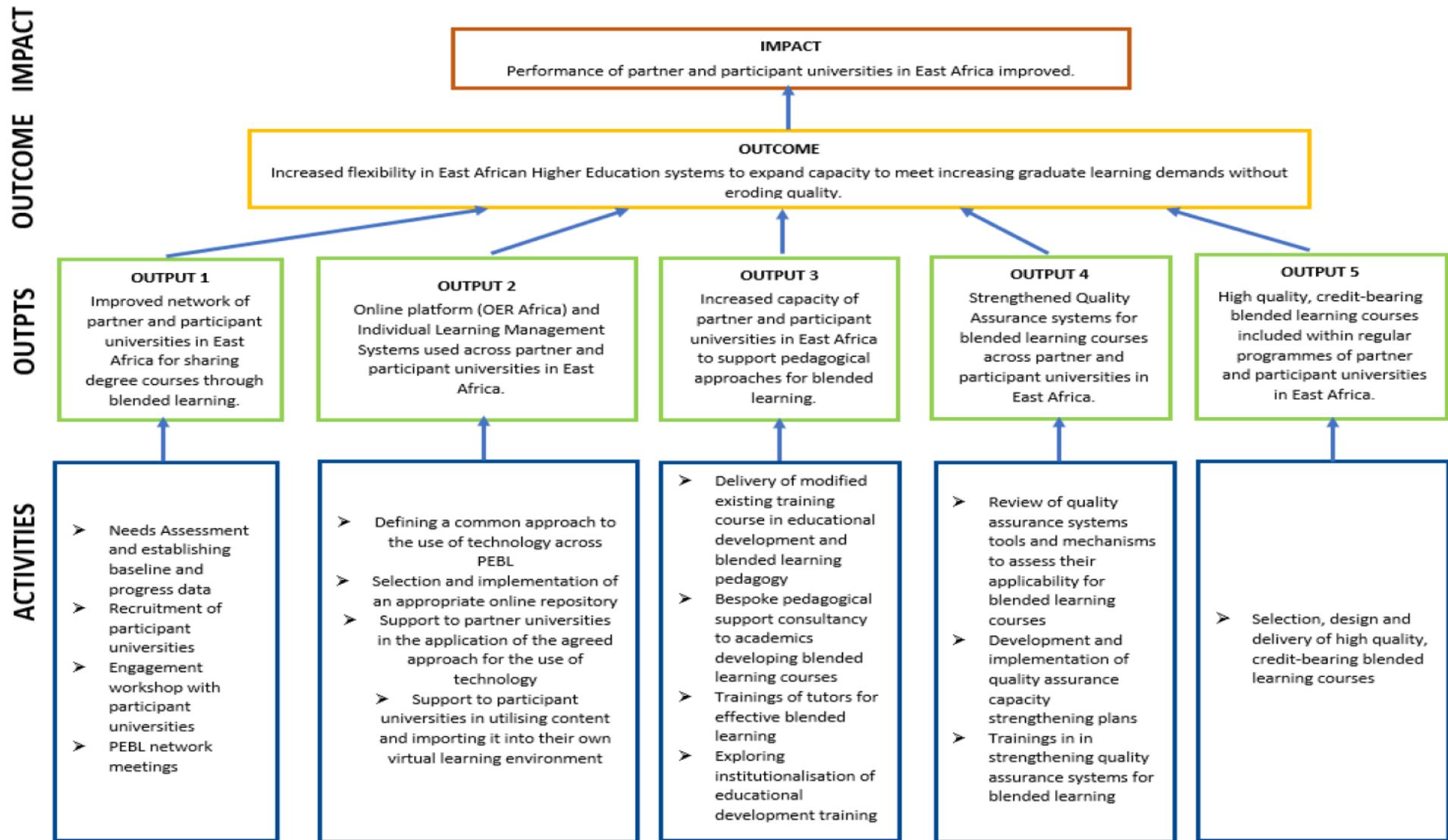


### Annex 2: PEBL Programme Design<sup>8</sup>



<sup>8</sup> Source: PEBL Programme Brochure

### Annex 3: The final Theory of Change<sup>9</sup>



<sup>9</sup> Source: IMC Worldwide External Review of PEBL's Theory of Change and Results Framework. April 2020

## Annexes: Results and evidence

### Annex 4: The Results Chart

Colour key of sources/evidence: Document review, **Stories of Change**, **QA review**, **Teachers**, **Students**, Senior managers, DATA VALIDATION WORKSOPS, **RESPONSES TO EMAIL QUESTIONS**, **CO-ANALYSIS WSS** **BLENDED LEARNING LITERATURE REVIEW (BLLR)**

#### EQ 1 - What evidence exists that the problem statements in the 2020 review of the ToC are the key constraints to expanding capacity to meet increasing student demand in East Africa?

PEBL Problem statement	Observations from the evaluation	Evidence supporting observations	Source
1. Rising of number of students and acute shortages of academic staff in the higher education sector in East Africa.	There is much evidence in PEBL documentation and wider literature to support this statement. There has been an exponential growth in the number of young people eligible to attend university and universities in the region have been attracting more students and expanding facilities but they struggle to increase their teaching capacity to meet demand. The lecturer student ratio in the 4 project countries was around 1:30 in 2017.	<ul style="list-style-type: none"> <li>Over the past few years there has been an exponential growth in the number of young people eligible to attend university.</li> <li>According to the WB in 2017 the lecturer student ratios in the 4 project countries was around 1:27 compared with 1:16 in the UK and 1:12 in the USA.</li> </ul>	<ul style="list-style-type: none"> <li>Widely Acclaimed but Lowly Utilised (WALU), Muyinda, 2019</li> <li>World Bank 2017.</li> </ul>
2. University courses in East Africa are taught by staff who aren't always experienced and qualified and there is an over-reliance on visiting faculty and contract staff. Besides, there is a lack of collaboration among universities particularly on sharing resources, knowledge and expertise.	Evidence from PEBL literature and the SoC confirm that in addition to an absolute shortage of qualified teachers, they are often overwhelmed by other responsibilities and/or need to get other jobs. 50% of staff in Kenya's Universities have additional part-time teaching jobs, universities have limited finances to support content development and technology, and digital literacy among staff is often low.	<ul style="list-style-type: none"> <li>50% of staff in Kenya's Universities have additional part-time teaching jobs.</li> <li>Universities unable to pay competitive salaries, making retention of qualified staff difficult resulting in excessive workloads being placed on staff that remain and a reliance on junior and underqualified staff to teach programmes.</li> <li><b>[Further development of blended learning is constrained by] "faculty capacity on blended/online pedagogy and content development, limited finances to support content development and student support in terms of devices".</b></li> <li><b>[Initial efforts to] "move to online teaching very slow due to poor accessibility, low digital literacy and attitudes of staff".</b></li> <li><b>THERE IS A LACK OF EVIDENCE IN THE EXISTING LITERATURE SURROUNDING COLLABORATION BETWEEN UNIVERSITIES REGARDING BLENDED LEARNING – SUGGESTING THAT IT IS EITHER MINIMAL OR NON-EXISTENT.</b></li> <li><b>ONE OF THE ONLY EXAMPLES OF COLLABORATION IDENTIFIED WAS THROUGH THE AFRICAN REGIONAL CAPACITY DEVELOPMENT FOR HEALTH SYSTEMS AND SERVICES RESEARCH (ARCADE HSSR). THIS PROJECT RAN BETWEEN 2011 AND 2015 AND WAS COORDINATED BY THE KAROLINSKA INSTITUTE. THROUGH THE PROJECT 11 BLENDED LEARNING COURSES WERE DEVELOPED 5 OF WHICH INVOLVED COLLABORATION BETWEEN MORE THAN ONE UNIVERSITY IN THE REGION.</b></li> </ul>	<ul style="list-style-type: none"> <li>PEBL Plan of Work</li> <li>PEBL Plan of Work</li> <li><b>SoC 10 (Kenya)</b></li> <li><b>SoC 08 (Uganda)</b></li> <li>BLLR</li> <li>BLLR</li> </ul>
3. Lack of operational online platforms for sharing of course materials across universities in East Africa and blended learning delivery remains random.	Use of online platforms in the facilitation of higher education in the region appears limited. A study by the Universal Journal for Educational Research which showed that 48% of academic respondents were unaware as to whether their institution even had a LMS (Learning Management System), and in a SEDA capacity survey 20% of academics expressed concerns regarding the technological capacity of their institution.	<ul style="list-style-type: none"> <li>Whilst there is some evidence of online platforms being used these are often dysfunctional and do not work properly on all technological devices</li> <li>Study by the Universal Journal for Educational Research which showed that 48% of academic respondents were unaware as to whether their institution even had a LMS (Learning Management System)</li> <li>SEDA conducted a survey regarding this issue in which 20% of academics expressed concerns regarding the technological capacity of their institution</li> <li><b>LESSONS LEARNED FROM IMPLEMENTING E-LEARNING FOR THE EDUCATION OF HEALTH PROFESSIONALS IN RESOURCE-CONSTRAINED COUNTRIES (2017). THIS PAPER EXAMINES THE DELIVERY OF HEALTH EDUCATION COURSES IN TREE LMICs USING A CASE STUDY APPROACH. ONE OF THE CASE STUDIES ASSESSED THE DELIVERY OF BLENDED LEARNING AT MAKERERE UNIVERSITY WHICH HAS ONE OF THE MOST HIGHLY SUBSCRIBED ONLINE PLATFORMS USING MOODLE. THE CASE STUDY HIGHLIGHTED BOTH THE USEFULNESS OF THE PLATFORM BUT ALSO SOME OF THE EXISTING PROBLEMS PARTICULARLY THE FACT THAT IT WAS OFTEN MERELY BEING USED AS AN ONLINE REPOSITORY FOR LECTURE SLIDES RATHER THAN A PLATFORM WHERE INTERACTIVE BLENDED LEARNING TOOK PLACE.</b></li> <li><b>MUCH OF THE LITERATURE HIGHLIGHTS THE NEED FOR SOUND DIGITAL AND TECHNOLOGICAL INFRASTRUCTURE AS A CLEAR CHALLENGE ESPECIALLY IN RURAL AREAS.</b></li> <li><b>SINCE 2016, OUT IN TANZANIA HAS BEEN USING OERs FOR MOST OF THEIR COURSES RELEASED UNDER A CREATIVE COMMONS ATTRIBUTION (CC-BY) LICENCE.</b></li> <li><b>RIZVI ET AL'S STUDY HIGHLIGHTED THAT WHEN DEVELOPING BLENDED LEARNING MODULES THERE WAS A DISTINCT LACK OF HIGH QUALITY DIGITAL MATERIALS.</b></li> </ul>	<ul style="list-style-type: none"> <li>WALU, 2019</li> <li>WALU, 2019</li> <li>SEDA individual capacity survey</li> <li>BLLR</li> <li>BLLR</li> <li>BLLR</li> </ul>
4. Poor satisfaction of university students in terms of the learning experience in East Africa.	We have no evidence of this; we do have evidence that there is a largely positive view of the on-line learning.	<ul style="list-style-type: none"> <li>Interviews with academics suggests both that some students live far away from their institution which impacts upon their learning experiences and that the current system doesn't promote engagement with students. In addition, some institutions, for example, OUT prefer the historic paper-based learning model. There is some resistant to taking up new models of learning.</li> </ul>	<ul style="list-style-type: none"> <li>2018 interviews with academics</li> </ul>

PEBL Problem statement	Observations from the evaluation	Evidence supporting observations	Source
5. Weak quality assurance systems for blended learning.	Weak QA systems was a key factor in inhibiting the development of blended learning and reducing the number of blended modules/courses likely to be approved before PEBL. Nearly half the attendees at a CoL (Commonwealth of Learning) workshop indicated that their university did not have adequate QA processes in place for either online or blended learning. This was confirmed in the QA lead interviews.	<ul style="list-style-type: none"> <li>Nearly half the attendees at a CoL (Commonwealth of Learning) workshop indicated that their university did not have adequate QA processes in place for either online or blended learning.</li> <li>“Really thank PEBL [...] knowing our QA policy need to be reviewed to reflect BL issues [...] we are also happy to have that QA rubric because nowadays university lecturers in IC sector ensure that, whenever they are preparing, they are reviewing, even when they are broadening material in their learning management platform, they follow that QA rubric. For us, that’s a big achievement.”</li> <li>THE EXISTING LITERATURE ON QA FRAMEWORKS IN BLENDED LEARNING ON THE AFRICAN CONTINENT IS LIMITED. MUCH OF THE LITERATURE THAT DOES EXIST FOCUSES ON QA TOOLS AND FRAMEWORKS WHICH HAVE BEEN DEVELOPED BY THE COMMONWEALTH OF LEARNING (COL). HOWEVER, THERE DOESN’T APPEAR TO BE MANY IF ANY EXAMPLES OF BLENDED LEARNING PROGRAMS WORKING CLOSELY WITH ORGANISATIONS ON QA.</li> <li>RIZVI ET AL’S RESEARCH INTO BLENDED LEARNING IN PAKISTAN AND EAST AFRICA IDENTIFIED LACK OF MENTORSHIP IN THE FIELD OF BL AS A BARRIER, THE STUDY PLACES RESPONSIBILITY ON UNIVERSITIES AS QUALITY ASSURANCE ORGANISATIONS TO BE PROACTIVE IN FACULTY DEVELOPMENT AND MENTORING IN BL</li> <li>THERE WAS SOME LIMITED USE OF QA RUBRICS IN BLENDED LEARNING IN THE REGION PRIOR TO THE PEBL PROJECT. ONE SUCH INSTANCE WAS THE UNIVERSITY OF RWANDA WHICH USED A RUBRIC WHICH WAS AN ADAPTED VERSION OF THE OPEN STATE UNIVERSITY OF NEW YORK COURSE QUALITY REVIEW RUBRIC.</li> </ul>	<ul style="list-style-type: none"> <li>Student surveys 2019 Baseline</li> <li>Student survey 2021</li> <li>Student survey 2021</li> <li>BLLR</li> <li>CoL PEBL Pre Workshop Survey</li> <li>QA lead interviews</li> <li>BLLR</li> <li>BLLR</li> <li>BLLR</li> </ul>
Additional problems identified during the evaluation	Data collected during the evaluation identified a number of additional problems preceding the project including resistance from faculty, limited infrastructure for both students and staff, lack of clarity around blended learning, and the lack of consistency about academic credits from blended learning courses.	<ul style="list-style-type: none"> <li>Half of the (10) stories of change mentioned resistance from faculty “people thought blended learning was a joke” preferring face-to-face methods. “Some members of staff feel it as a threat to their jobs”.</li> <li>Two of the SoC mentioned lack of access to technology and internet connectivity as problems</li> <li>In one SoC despite a policy commitment to move to online teaching, this had been impeded by lack of guidance and inappropriate approaches: “most of these trainings were based on the specifications that are included on our Learning Management System, hence the learning materials developed were not interactive, they lack student’s activities or task that matches with the learning outcomes and matters of inclusivity were not considered”.</li> <li>In the student survey, the most significant challenges identified were insufficient IT infrastructure and the cost of data.</li> <li>The approach is new to students, new to decision makers, new to parents, new to many people apart from us, of course, who have been in this area for some time. But the approach is quite new to many people. And when something is new, to many people, or to anyone, they tend to have some scepticism about it.</li> <li>“Previously people were not believing in this kind of teaching [meaning blended learning] – students will not understand, will need to see their lecturers face-to-face [...] but receiving this kind of training we become competent”</li> <li>Everyone claimed to be either ‘somewhat’ or ‘very’ familiar with PEBL learning techniques, though when it came to defining ‘blended learning’ there was some uncertainty with 24% indicating that it was the same thing as e-learning.</li> <li>LACK OF CONSISTENCY ACROSS THE REGION WITH REGARDS TO ACADEMIC CREDITS. THIS IS ESSENTIAL IN ORDER TO ENABLE SHARING OF BLENDED LEARNING COURSES – QUALITY ASSURANCE MATTER. IMPORTANT ISSUE THE LACK OF UNIFORMED CONSISTENCY</li> <li>MACHUMI ET AL’S 2018 ARTICLE CONTEXT-BASED BLENDED LEARNING MODELS AND IMPLEMENTATION IN SUB-SAHARAN AFRICA: A LITERATURE REVIEW, ANALYSED THE BLENDED LEARNING LANDSCAPE IN SUB SAHARAN AFRICA AND UNCOVERED THAT IT IS STILL DOMINATED BY TRADITIONAL PEDAGOGICAL APPROACHES – SOME OF THE REASONS PROVIDED FOR THIS INCLUDED: PREFERENCE FOR PRINT MATERIALS AND LOW LEVELS OF DIGITAL LITERACY.</li> <li>MUCH OF THE LITERATURE HIGHLIGHTS THE NEED FOR SOUND DIGITAL AND TECHNOLOGICAL INFRASTRUCTURE AS A CLEAR CHALLENGE ESPECIALLY IN RURAL AREAS.</li> <li>PROTSIY’S STUDY HIGHLIGHTED THE IMPORTANCE OF AND NEED FOR INSTITUTIONAL BUY-IN TO ENSURE THE UPTAKE AND SUCCESS OF BLENDED LEARNING.</li> </ul>	<ul style="list-style-type: none"> <li>SoC 02 (Kenya),</li> <li>SoC Report</li> <li>Soc 08 Uganda).</li> <li>Student survey 2021</li> <li>Senior manager interviews</li> <li>QA leads interviews</li> <li>Student survey 2021</li> <li>DATA VALIDITY WS 4</li> <li>BLLR</li> <li>BLLR</li> <li>BLLR</li> </ul>

PEBL Problem statement

Observations from the evaluation

Evidence supporting observations

Source

- CHALLENGES OF IMPLEMENTING E-LEARNING IN KENYA: A CASE OF KENYAN PUBLIC UNIVERSITIES: THE MAIN CHALLENGES THAT THIS STUDY OUTLINES ARE: INADEQUATE ICT AND E-LEARNING INFRASTRUCTURE, FINANCIAL CONSTRAINTS, LACK OF AFFORDABLE AND ADEQUATE INTERNET BANDWIDTH, LACK OF OPERATIONAL E-LEARNING POLICIES, LACK OF TECHNICAL SKILLS ON E-LEARNING AND E-CONTENT DEVELOPMENT BY THE TEACHING STAFF, LACK OF INTEREST AND COMMITMENT AMONG THE TEACHING STAFF TO USE E-LEARNING, AND AMOUNT OF TIME REQUIRED TO DEVELOP E-LEARNING CONTENT. SIMILAR CHALLENGES ARE SEEN ACROSS THE REGION AND NOT JUST IN KENYA.

- BLLR

Assumption for impact

Assumption for Impact

Observations from evaluation

Evidence supporting the observations

Source

Assumption for impact: As the project progresses, Higher Education Commissions will draft guidelines to support institutions implementing blended learning courses in order to allow more universities to take up blended learning as a delivery mode and improve performance

There is much evidence from the stories of change and interviews with different stakeholder groups that some HECs are changing their policies and guidelines, especially CUE in Kenya because they have been involved in the project since the beginning. The project has made an effort to inform others, notably in Tanzania, where the latest release of standards and guidelines has an entire chapter on online and distance learning. But rather archaic guidelines, standards and frameworks in others have not yet been revamped. There is a great lack consistency in the approaches regarding the drafting of guidelines which take place in all four countries involved in the project. There remains a huge dependence on a 'final exam' as being the best way to assess the quality of learning and little interest in looking at less traditional modes of assessment which would be much better for many blended learning modules.

- Two SoC mentioned policy recommendations by the HECs contributing to widespread adoption – “Therefore a policy to support the same has been put in place and the commission for higher education is in full support of blended learning” the “mandate of the National Council for higher Education (NCHE) for all universities to study online during the COVID-19 period”.
- Quotes from QA interviewees in Kenya and Tanzania:
  - “In Kenya, we were a bit lucky, because the commission for university education in Kenya was part of the QA team when we were developing the rubric. [...] so to a large extent, the QA is based on the Kenyan way, the Kenyan thinking of quality assurance. [...] It is aligned to the expectations of the commission [...]”
  - “When you develop a programme, then you have to make sure that it has been approved by the regulator, we call it the university commission. [...] When they started, those commissions were not involved. I think it was when we had the QA meeting [...] we asked PEBL please make sure that these people are involved. [...] Because we had some chatting with those officers; they referred that they were not part”
  - “Previously the Tanzanian university commission was not much informed about blended learning or teaching online. [...] We are happy to be able to convince them [...] The latest release of standards and guidelines has an entire chapter of ODL [online and distance learning]”
- Quotes from senior manager showing regulator itself is not clear on direction and must be further engaged “I feel like the regulator, the commission for university education ... is fishing around for models. And they're almost looking to us to try and find out what's the best practice going on in ...right now that we could maybe adopt, that's probably too strong...But in some ways, I think they don't have all of the answers to give us and we're creating, we're building the ship while we're sailing. But we have tried to align intentionally what we're doing here with the regulator's expectations. That's why we were so pleased that in one of those first meetings that I attended myself as part of the PEBL players, stakeholders, the commission for university education was there. And so I think it's very important that we keep those regulators fully on board with this”.
- ‘HECs HAVE HAD STANDARDS, GUIDELINES, OR FRAMEWORKS, WHICH ARTICULATE THE STRUCTURE AND EXECUTION OF LEARNING CURRICULA IN HEIs. HOWEVER, IT HAS EMERGED THAT THOSE FRAMEWORKS ARE ARCHAIC AND REQUIRED TO BE REVAMPED.’
- ACROSS THE REGION THERE IS HUGE DEPENDENCE ON A ‘FINAL EXAM’ AS BEING THE BEST WAY TO ASSESS. LACK OF INTEREST IN LOOKING AT LESS TRADITIONAL MODES OF ASSESSMENT. ARE THEIR OPPORTUNITIES TO VARY THE RELIANCE ON A FINAL EXAMINATION? SOME SUBJECTS / MODULES ARE NOT BEST ASSESSED IN THIS WAY. ALTERNATIVE MODES OF ASSESSMENT CAN BE MORE BENEFICIAL THAN THE DOGMATIC APPROACH TAKEN OF THERE BEING A FINAL EXAMINATION.
- LACK OF CONSISTENCY IN THE APPROACHES REGARDING THE DRAFTING OF GUIDELINES WHICH TAKE PLACE IN ALL FOUR COUNTRIES INVOLVED IN THE PROJECT.

- SoC 04 (Kenya), SoC 07 (Uganda)
- QA leads interviews
- Senior management interviews
- CUE EMAIL
- DATA VALIDITY WS 4
- DATA VALIDITY WS 4

EQ2 - What evidence is there that the expected outcome and outputs have been delivered? Were there any unexpected impact/outcome/outputs? How much did the project contribute to these? and EQ 3 -Did the programme work in the way that was expected (ie were the assumptions valid)?

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
<p><u>Outcome:</u> Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality.</p>	<p>All quantitative targets in the results framework at outcome level have been exceeded. 3556 students have registered for blended learning (target = 3000), 17 HIEs have expanded capacity to incorporate blended learning in planning (target = 11), 16 courses had been developed by March 2021 that meet quality benchmarks, though this will increase to 26 by June 2021 (target = 18). There is also strong qualitative evidence from the stories of change, senior manager interviews and student survey that PEBL has contributed to increased flexibility through greater staff capacity, better technology, and better infrastructure and has facilitated the integration of technology into all aspects of teaching and learning. Teachers are better able to teach anywhere and anytime and to connect with and share resources with students – even in remote areas. Better ways of assessing learning outcomes are emerging and the adoption of PEBL’s industry-standard quality assurance tools within project universities should ensure high quality learning. But students still have limited access as end-users with a significant number accessing lessons on their mobile device.</p>	<ul style="list-style-type: none"> <li>Results framework indicators: 3556 students registered for blended learning (target = 3000), 17 HIEs have expanded capacity to incorporate blended learning in planning (target = 11), 16 courses have been developed that meet quality benchmarks. This will increase to 26 by June 2021 (target = 18)</li> <li>PEBL QA approaches meet most criteria of good practice, especially through the ‘Institutional Review Tool for Blended Learning’ and the QA Rubric.</li> <li>All of the stories of Change describe an increased ability of the institution to reach larger numbers of students through online learning - “blended learning has now been embraced by more staff and students and is now a requirement of curriculum delivery in teaching and learning”.</li> <li>“So the blended learning programme helped us to reach our students wherever they are within the country and beyond. So that is the greatest impact”.</li> <li>It has also linked us to the resources can be shared, for instance, labour [human] resources. We don't need a library at all the centers. Students can access our main library here and at home, and it has helped also the teachers to realise the abundant resources available online. So we have been able to enhance the use of the elearning resources online so that the teachers and the students can access them.</li> <li>I think the greatest, I would say there are others, but the greatest, I would say is actually adoption and integration of technology in teaching and learning by both staff and students.</li> <li>So it has helped us also to develop more knowledge and skills of both the teachers and the students to use blended learning, to use e-learning resources, to see how easy we can be able to use the services in remote locations.</li> <li>And then there is a very good connection between learning outcomes and the issues of assessment. Unlike perhaps the way sometimes traditionally it is done where assessment is not very closely related to learning outcomes</li> <li>Two thirds of student respondents used a personal computer most of the time to access their learning, the remaining third used telephone as the main mode of access.</li> <li>SO FAR, ANU HAS 6 PEBL TRAINED STAFF AND A FURTHER 54 IN-HOUSE TRAINED STAFF IN BLENDED LEARNING.</li> <li>KENYATTA UNIVERSITY HAS BEEN ABLE TO TRAIN 1150 LECTURERS IN BLENDED LEARNING OUT OF A TOTAL OF 1200 IN THE UNIVERSITY.</li> </ul>	<ul style="list-style-type: none"> <li>PEBL Mid-Year MEL Report March 2021</li> <li>QA report</li> <li>SoC Report, SoC 08 (Uganda)</li> <li>Senior manager interviews</li> <li>Student survey 2021</li> <li>ANU EMAIL</li> <li>KENYATTA UNIVERSITY EMAIL</li> </ul>
<p><i>Assumptions for outcome:</i></p> <p>1. Institutions developing blended learning courses will convert entire degree programmes into blended formats. Institutions will develop a blended learning policy.</p>	<p>All institutions have converted much of their teaching into blended or fully online formats 2020 and 2021 due to the COVID pandemic, and some have converted entire degree programmes. Many have or are in the process of developing blended learning policies incorporating PEBL QA tools.</p>	<ul style="list-style-type: none"> <li>Most of the QA lead interviewees said that at least some of the PEBL tools (Col Institutional Review Tool for Blended Learning &amp; Rubric) were used in their institutions. Some also mentioned that they could be adjusted to their institutional needs easily</li> <li>All respondents (teachers) said due to the pandemic degree programmes were being taught in either a blended format or fully online for the last year. ‘Yeah about 90% of them (courses) are using the blended approach’</li> <li>Evidence of institutions developing blended learning policies. In general, these are more effectively structured and developed in Partner universities compared to Participant universities.</li> <li>AS OF YET, ENTIRE DEGREE PROGRAMMES HAVE NOT BEEN CONVERTED INTO THE BLENDED FORMAT – ALTHOUGH THERE IS A HOPE THAT THIS MAY BE DONE IN THE FUTURE.</li> <li>THERE ARE SOME INSTITUTIONS (NOT ALL) WHICH HAVE DEVELOPED ENTIRE DEGREE PROGRAMS INTO BLENDED LEARNING</li> </ul>	<ul style="list-style-type: none"> <li>QA lead interviews</li> <li>Teacher Interviews.</li> <li>Teacher Interviews</li> <li>PEBL TEAM EMAIL.</li> <li>CO-ANALYSIS WS 1</li> </ul>
<p>2. Higher Education Commissions in the four countries will support the implementation of blended learning.</p>	<p>The support of national regulatory bodies (Higher Education commissions) is recognised as essential for wider uptake of blended learning, and that has happened to varying degrees in different countries. CUE in Kenya (a project partner) has been the most involved but there has been some reticence in other countries and differing views on what is blended learning, and what policies are needed to support it.</p>	<ul style="list-style-type: none"> <li>Quotes from QA interviewees in Kenya and Tanzania: “In Kenya, we were a bit lucky, because the commission for university education in Kenya was part of the QA team when we were developing the rubric. [...] so to a large extent, the QA is based on the Kenyan way, the Kenyan thinking of quality assurance. [...] It is aligned to the expectations of the commission [...]”;</li> <li>“When you develop a programme, then you have to make sure that it has been approved by the regulator, we call it the university commission. [...] When they started, those commissions were not involved. I think it was when we had the QA meeting [...] we asked PEBL please make sure that these people are involved. [...] Because we had some chatting with those officers; they referred that they were not part”</li> <li>THERE IS NO CLEAR POLICY, GUIDANCE, OR GUIDELINES ON BLENDED LEARNING FROM COMMISSIONS. WHAT WE HAVE IS GUIDELINES ON PURE ONLINE LEARNING BUT THERE ARE NOT ANY ON BLENDED LEARNING.</li> <li>WE DON’T HAVE POLICIES ON BLENDED LEARNING, BUT COMMISSION HAS APPROVED BLENDED LEARNING AS A MODE OF DELIVER. SOME OF THE STANDARDS ATTRIBUTED TO ONLINE LEARNING ARE ALSO APPLICABLE TO BLENDED LEARNING BUT THERE IS NO SEPARATE SET OF GUIDELINES.</li> <li>PROBLEMS IN THE DISTINCTION BETWEEN BLENDED AND ONLINE LEARNING. THEREFORE, IT IS DIFFICULT TO KNOW WHETHER THERE ARE DISTINCT POLICIES REGARDING BLENDED LEARNING.</li> </ul>	<ul style="list-style-type: none"> <li>QA lead interviews</li> <li>DATA VALIDITY WS 3</li> <li>DATA VALIDITY WS 3</li> <li>DATA VALIDITY WS 3</li> </ul>

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
		<ul style="list-style-type: none"> <li>• CUE IN KENYA HAS AN EXTREMELY NARROW VIEW ON HOW TO ASSESS BLENDED LEARNING. IT IS VERY REGIMENTED. IT APPEARS THAT THEY MAY NOT HAVE SPOKEN TO PEOPLE WITH KNOWLEDGE OF BLENDED LEARNING WHEN THEY DEVELOPED THEIR VIEWS.</li> <li>• CUE HAS SAID THAT ALTHOUGH SOME PROGRESS HAS BEEN MADE IN DRAFTING GUIDELINES. THERE HAS BEEN SOME RETICENCE FROM OTHER REGULATORY BODIES AT THEIR LEAD ROLE. OTHERS SUCH AS THE REGULATORY BODY IN RWANDA 'WOULD HAVE PREFERRED THE ENGAGEMENT TO EMANATE FROM THE INTER UNIVERSITY COUNCIL FOR EAST AFRICA (IUCEA).'</li> </ul>	<ul style="list-style-type: none"> <li>• DATA VALIDITY WS 4</li> <li>• CUE EMAIL</li> </ul>
<p>3. Improving blended learning will deliver increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality</p>	<p>Improving the quality and provision of blended learning has enabled institutions in the network to meet increasing student demand without eroding quality. However, while all institutions in the network have benefitted, some have done so to a greater extent compared to others. This divide can largely be seen along Partner / Participant university lines</p>	<ul style="list-style-type: none"> <li>• Evidence of institutions in the network increasing their capacity to reach more students. This has been especially evident for smaller universities in the network. One respondent said 'of course we have issues with the space, because our rooms accommodate about 50 students', but blended learning has helped 'us to increase the number of students' and get new students from outside of Nairobi.</li> <li>• Cascading of training throughout institutions has helped maintain quality while ensuring a transition to blended learning. This is done more effectively in Partner universities such as Kenyatta and Makerere who have well-structured processes to enable cascading of training throughout their institutions. In Participant universities the cascading of training is more variable and ad-hoc in nature.</li> <li>• Widespread implementation of the QA Rubric in the network has helped ensure blended learning modules are of a high quality.</li> <li>• QA training was very effective teaching those who attended (a significant proportion of those from Participant institutions claimed not to have received QA training), one responded commented on how the training helped them reflect on modules they had prepared for blended learning, 'How it will be when it is placed on the system? Is it navigatable? Can the students navigate through it with the ease? We had areas to do with the module content itself. When it is on the system or when it is not on the system as you look at it in the module, how is the content?...is there constructive alignment?'</li> <li>• The QA leads agreed broadly that the PEBL project has been helping with setting up or improving a QA system for blended learning that is integrated in their institutional programmes/curriculums.</li> <li>• BLENDED LEARNING ACROSS UNIVERSITIES IN A SOUTH-NORTH-SOUTH COLLABORATION: A CASE STUDY. A KEY CONCLUSION OF THE STUDY WAS THAT BL IS A BENEFICIAL APPROACH TO "SIMULTANEOUSLY DRAW GLOBALLY AVAILABLE SKILLS INTO CROSS-NATIONAL, HIGH-LEVEL SKILLS TRAINING IN MULTIPLE COUNTRIES"<sup>11</sup> CITING THAT THE BL METHOD CAN OVERCOME ACCESS BARRIERS, PROVIDE ENGAGING, FLEXIBLE, AND TAILORED LEARNING EXPERIENCES FOR STUDENTS. THUS THIS CAN BE SEEN AS AN EFFECTIVE WAY IN COMBATTING THE EXISTING PROBLEM OF RISING STUDENT NUMBERS AND ACADEMIC STAFF SHORTAGES IN THE HIGHER EDUCATION SECTOR IN EAST AFRICA.</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher Interviews</li> <li>• Teacher Interviews</li> <li>• Teacher Interviews</li> <li>• Teacher Interviews</li> <li>• QA lead interviews</li> <li>• BLLR</li> </ul>
<p>Output 1: Improved network of partner and participant universities in East Africa for sharing degree courses through blended learning.</p>	<p>PEBL has achieved or exceeded its targets for this output. By April 2021 17 of the 23 PEBL universities in the region are developing or delivering PEBL blended learning modules of which 7 are in Kenya, 4 in Rwanda, 3 in Uganda, and 3 in Tanzania. The target was 11. Within these universities there are at least 223 departments involved in either developing or delivering modules far exceeding the target of 33. Learning from other universities in the network and informal networking was highlighted as extremely useful in the stories of change and teacher interviews, but it is unclear whether this will continue beyond the end of the project. MEL reports indicate that sharing of learning between institutions is more or less on target, but the SoC and interviews suggest that while there has been much sharing of materials within universities, not all institutions feel able to share the content they have developed via the network because of the quality of content, and others are reluctant to use content they have not developed themselves because it has not been accredited by national regulatory bodies.</p>	<ul style="list-style-type: none"> <li>• Results framework indicators: No. HEIs developing blended learning for other institutions 11 (target = 11), No. HEIs delivering blended learning from other institutions 9 (target = 9)</li> <li>• In the first year of the project 12 participant universities were recruited to share blended learning modules developed by partners</li> <li>• This was further supplemented by an extra 6 institutions which joined the network between October 2019 and March 2020, though one subsequently dropped out, leaving a total of 17 – still greatly exceeding the target of 12.</li> <li>• By the start of 2020 according to the ACU the first batch of developed (six) modules had been used by over 10,000 students in the network. That had increased to 13,000 by March 2021.</li> <li>• By March 2021 223 departments were producing blended learning materials Kenya: 103, Uganda: 21, Rwanda:89, Tanzania: 10 ANU – 8, Bugema – 9, KMU – 2, Kenyatta 72 (all departments), Makerere – 10 (all colleges), OUT – 5, Riara – 4, University of East Africa Baraton – 13, University of Rwanda – 86 (all colleges), INES-1, Kibogora-1, ULK-1, Mzumbe-3, SUZA-2, KIU-2, Strathmore-3, Maseno-1</li> <li>• Three SoC mentioned the benefit of being part of a wider network - "The SEDA DBL DPEP and STEL courses trainers strengthen the PEBL Network by collaborating / training different participating Universities in SEDA courses and how to access cartridge and other files on OER Africa" and "during the COVID-19 lockdown, emergency remote teaching technologies like Zoom and other e-platforms and social media such as WhatsApp were used with remarkable successes".</li> <li>• Strong evidence that the network has been utilised to share blended learning courses designed as part of the PEBL project. All teacher respondents were part of institutions that either shared courses through the network (predominantly Partners) or used courses that were shared by other institutions through the network.</li> <li>• Little to no evidence indicating the widespread sharing of blended learning courses/modules which had not been specifically designed through the PEBL programme. Many respondents suggested it was against university policy to share content, some also raised the issue of a lack of institutional cooperation regarding issues such as payment, staff time, institutional status etc. One respondent commented 'The question which probably the project had not looked at, the politics of the universities, the politics of payment, for example, if such a lecturer comes from that university and teaches this university, who will</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Mid-Year MEL Report March 2021</li> <li>• PEBL Annual MEL Report 2018</li> <li>• PEBL Mid-Year Report March 2020</li> <li>• PEBL Learnings 2018-2020</li> <li>• PEBL Brochure V2</li> <li>• PEBL MEL Mid-Year Report March 2021</li> <li>• SoC Report, SoC 06 (Uganda), SoC 08 (Uganda)</li> <li>• Teacher Interviews</li> <li>• Teacher Interviews.</li> </ul>

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
		<p>pay them? those issues are still there.'</p> <ul style="list-style-type: none"> <li>• More informal cooperation between individual members of staff appears to have taken place as a result of workshops and networking opportunities provided by PEBL. This opportunity the network with colleagues outside their own institution and country was highlighted as a major benefit of the project by respondents. One respondent stated 'what I liked about the PEDAL (PEBL) training, in fact most of my colleagues who were in the training, in my group were from other countries... From that, when you were interacting, you are able to share ideas and exchange.'</li> <li>• But on the positive side, PEBL has actually enhanced teaching, because we are able now to share programmes, we can share programmes, or we can share resources that may not have been shared with others. So you can be able to share those resources, resources in terms of courses, resources in terms of human resource. It has also been able to, to help us transform our teaching and learning processes."</li> <li>• "For example, as Makerere University we developed research methodology and design for business, which we shared with the members in the network, but also members in the network also developed resources. And we also share those resources. For instance, the University of Rwanda developed a biochemistry I think biochemistry but yes devote biochemistry and this resource was shared by students in the College of Natural Sciences. Strathmore University in Kenya developed as a critical thinking as a course and we shared this with professors in the School of Psychology. Open University of Tanzania developed in numerical methods thinking medical methods, yes, and the students of mathematics have been also sharing this resource. Then, SUZA State University of Zanzibar developed IT, teaching methods, which we have also shared with our students in education. And then in addition to sharing those resources, of course, we share expertise, we share with others the expertise as in kind of networking within the partnership. So we have shared the courses but also we have shared our ideas as participants in this in this Project beyond Of course, beyond the project."</li> <li>• While the network for sharing resources has improved for some, not all institutions feel able to share the content they have developed via the network because of the quality of content. In other words, for the network to work effectively it needs content, but not every institution has the content to share and not every institution has the capacity to create their content and contribute to the network.</li> <li>• "And, of course, it has emerged, people are using different ways of blended learning; a number are resisting actual content development because it is demanding, so they would rather just say we are doing blended learning, but I'll do zoom, and then I'll send texts on WhatsApp or email to students. So that is still a challenge, because nobody wants to really commit to quality content development."</li> <li>• "We have our own courses that we have developed. We don't use any [from other universities]. Because the national council of Higher Education, when you develop your courses, you have to send it to the national council of HE of Uganda, and then they will accredit your programmes."</li> <li>• <b>THERE ARE 17 INSTITUTIONS IN THE REGION DEVELOPING OR DELIVERING PEBL BLENDED LEARNING MODULES OF WHICH 7 ARE IN KENYA, 4 IN RWANDA, 3 IN UGANDA, AND 3 IN TANZANIA. WITHIN THESE UNIVERSITIES THERE ARE AT LEAST 33 DEPARTMENTS INVOLVED IN EITHER DEVELOPING OR DELIVERING MODULES.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Teacher Interviews.</i></li> <li>• Senior manager interviews</li> <li>• Senior manager interviews</li> <li>• Senior manager interviews</li> <li>• Senior manager interviews</li> <li>• QA lead interviews</li> <li>• PEBL TEAM EMAIL</li> </ul>
<p>Assumption for Output 1: Institutional and personal incentives for further learning help to establish and maintain a network of universities sharing blended learning modules. Partner and participant universities support the project at leadership and operational levels</p>	<p>There is clearly widespread support for the project from academic staff across the network in both Partner and Participant institutions. Senior management support is very clearly demonstrated across the network. They have: funded the development / procurement of the necessary infrastructure and other resources; travel costs for meetings, trainings, capacity development and network events; time off in lieu; been the main drivers of the development of the BL policy, teaching and other related policies at the most senior levels of university management. But there are currently no mechanisms for recognising and rewarding the intellectual property rights of the lecturers who curate courses. There is little evidence that the motivation of the stakeholders around the implementation and use of blended learning was part of the QA process in PEBL. COVID-19 lockdown seems to have been a major driver of learning about and taking up online/blended learning what obviously could not have foreseen when the project was set up.</p>	<ul style="list-style-type: none"> <li>• SEDA survey prior to PEBL found 80% of respondents in universities felt their institution was committed to support blended learning.</li> <li>• 94% of respondents felt that senior management had a positive attitude towards blended learning in PEBL baseline survey.</li> <li>• Senior management enthusiastic to be involved at PEBL commencement but little evidence of engagement since then.</li> <li>• Senior management tend to be motivated by guidelines and frameworks set out by HECs and without these have been reluctant to move forward especially in public institutions.</li> <li>• Incentives provided within the project (eg IPIE workshops and follow-up grants) seem to have encouraged networking. But no incentives outside the project have been identified.</li> <li>• <b>Several SoC mentioned changes in incentives and behaviour of faculty "The ODeL Technical team organized trainings for both students and lecturers to embrace the "New Normal" of going virtual", "Blended learning has now been embraced by more staff and students and is now a requirement of curriculum delivery in teaching and learning", "The National Council for higher Education (NCHE) mandate for all universities to study online during the COVID-19 period".</b></li> <li>• Throughout the network respondents have been involved in cascading knowledge (either formally or informally) gained from training sessions such as SEDA STEL and DPEP, OER Africa, IPIE, and QA courses to other members of staff in their institutions. One respondent who was the only member of staff at her institution trained commented 'I was the only person trained. Yes, it became my responsibility to train the staff and when to introduce what we refer to as blended learning to them because that's why they teach you.'</li> <li>• Some of the staff from Partner universities have also been requested by PEBL to help cascade knowledge to other institutions and have in effect become lead trainers across the region themselves. 'Me and a colleague, were requested to facilitate in the leading a live second iteration of the course... That</li> </ul>	<ul style="list-style-type: none"> <li>• SEDA Capacity Survey 2017</li> <li>• PEBL MEL Mid-Year Report March 2020</li> <li>• Q6 Quarterly Report</li> <li>• SPHEIR MEL Annual Report PEBL 2020</li> <li>• Q12 Quarterly Report</li> <li>• SoC report, SoC 07 (Uganda), SoC 08 (Uganda), SoC 07 (Uganda)</li> <li>• <i>Teacher Interviews.</i></li> <li>• <i>Teacher Interviews.</i></li> </ul>

Outcome/Output/Assumption Statement

Observed Outcome/Output/Assumptions

Evidence supporting observed results

Source

		<p><i>moment was a learning moment you are not just talking about people in your university you are talking about colleagues across the whole of Africa.'</i></p> <ul style="list-style-type: none"> <li>• Without the support of SM we would not have achieved the goals of PEBL, the use of Technology is one of the strategic goals in the strategic plan. The coming of PEBL enhanced the capacity of the university to deliver programmes and therefore without a doubt they have given their support</li> <li>• We have been] able to vote for money to do it because we have really invested a lot so that we have physical facilities that can enable us to do that. And also to pay for software, to pay for trainings, to bring in technical people to be able to help and beef up our workers here to adapt to the system. So it has been increasingly positive as we go on. They have now seen realised that this is the way to go.</li> <li>• There has been a problem with lecturers because they feel they need to be paid to put that content online because they will surrender it to the University and the University of course may not be having the money to pay for all that massive development. So it's a challenge that I guess, we don't know how it will be surmounted.</li> <li>• We haven't found evidence that the motivation of the stakeholders around the implementation and use of BL had been explored in advance in order to put in place incentives and promote sustainability.</li> <li>• Several QA leads mentioned that COVID-19 helped with changing some negative attitude towards online learning what obviously could not have foreseen when the project was set up.</li> </ul>	<ul style="list-style-type: none"> <li>• Senior manager interviews</li> <li>• Senior manager interviews</li> <li>• Senior manager interviews</li> <li>• QA report</li> <li>• QA lead interviews</li> </ul>
<p><u>Output 2:</u> Online platform (OER Africa) and Individual Learning Management Systems used across partner and participant universities in East Africa</p>	<p>PEBL MEL data indicates that most quantitative targets for this Output have been achieved or exceeded. 64 academics have been trained on technological platforms (target = 64); student satisfaction with the LMS is 73% (slightly less than the target of 75%); but academics' satisfaction with the platforms is 96% (target = 90%). Teacher interviews and the SoC indicate that universities in the network have invested in improving, and training staff and students to use their own LSM, especially during the COVID pandemic. But technical issues and internet connectivity remain big problems especially for students. Modules posted on OER Africa have been downloaded more than 1000 times by students from other institutions.</p>	<ul style="list-style-type: none"> <li>• Results framework indicators: No. academics trained on technological platforms 64 (target = 64), Students' satisfaction with LMS 73% (target = 75%), Academics' satisfaction with platforms is 96% (target = 90%).</li> <li>• VLEs are not accessible to those who were not on fully only programmes (Africa Nazarene University); lecturers do not have their own devices to conduct online classes (St Johns University); and/or universities not having a properly functioning VLE (INES Ruhengeri).</li> <li>• 47% of students surveyed indicated that they had significant internet issues which would impact upon their ability to take advantage of blended learning.</li> <li>• 49% of academics surveyed reported that their institutions had inadequate IT systems and support.</li> <li>• As of January 2021 all Batch 1 and 2 modules are on OER Africa. Number of downloads from outside the PEBL network (on OER Africa) for the following selected modules are: Introduction to Entrepreneurship (423); Numerical Analysis (213); Research Methodology and Design for Business (257); Introduction to IT (134); Principles of Management (94).</li> <li>• All responding teachers and academics in the network attested to their institutions having their own LMS. There was, however, variability in the development of LMS across institutions. Some respondents (GT) said they had only fully implemented the use of their LMS over the last year due to the COVID -19 pandemic.</li> <li>• Some respondents suggested that there are significant issues surrounding particularly student accessibility. These usually pertain to connectivity, having compatible devices and data costs. One respondent commented that 'we come from a developing country where some students don't own laptops, some students don't own smartphones, or they have the very basic ones. So, I think it's a bit challenging. That I think is the biggest problem, connectivity was not very good. There are certain places where the connectivity is not good at all, so they are struggling'.</li> <li>• Seven of the SoC improvements in the use of universities' own LMS, but only one mentioned improved use of OER Africa – "The two-module courses have already been shared as OER under Creative Commons licensing".</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Mid-Year MEL Report March 2021</li> <li>• PEBL MEL Mid-Year Report March 2020</li> <li>• PEBL MEL Mid-Year Report March 2020</li> <li>• SPHEIR MEL Annual Report PEBL 2020</li> <li>• SPHEIR MEL Mid-year report March 2021</li> <li>• Teacher Interviews.</li> <li>• Teacher Interviews.</li> <li>• SoC Report, SoC 09 (Tanzania)</li> </ul>
<p><i>Assumption for Output 2: A minimum level of connectivity is in place across the partner and participant universities to ensure project viability and successful online collaboration.</i></p>	<p><i>While most of the universities have the basic connectivity for online learning cost is a constraint as well as staff skills to use it. Challenges with the normal institutional and national internet access and power supply continue to impact the success of the project. Similarly, while most students have basic access to the internet, cost, speed and reliability are constraints. Especially for students in remote areas who face power cuts and internet restrictions regularly in addition to cost barriers.</i></p>	<ul style="list-style-type: none"> <li>• 12 institutions within the network had a VLE or an LMS at project launch mostly using Moodle but staff lacked skills to use them.</li> <li>• Following training by UoE all 16 blended modules from OER Africa have been imported into universities own VLEs but they remain under-utilised due to a lack of proper infrastructure and the costs of hardware.</li> <li>• 82% of respondents to an ACU survey have access to mobile data but cited cost (77%) internet speed (71%) and internet reliability (65%) as impediments to working online.</li> <li>• 36% of respondents cited IT issues and 47% internet connectivity as impediments to online learning in a PEBL student survey.</li> <li>• All the teachers stated that connectivity in their universities was to a good standard with WIFI available across campuses. In addition, some respondents commented that their institution had added extra computer labs for students. One respondent commented that senior management had ensured that 'we have adequate internet connectivity in the whole university, both wifi and also having enough computers in the computer labs for our learners'.</li> <li>• Whilst some institutions in the network provide staff with data bundles to cover the costs of working from home, others have not done this meaning that it is academic staff who must cover the costs of working from home. 'The challenge we have currently is who meets the cost? It's the challenge who meets the cost of</li> </ul>	<ul style="list-style-type: none"> <li>• Africa Deep Dive</li> <li>• Africa Deep Dive</li> <li>• Africa Deep Dive</li> <li>• PEBL MEL Mid-Year Report March 2020</li> <li>• Teacher Interviews.</li> <li>• Teacher Interviews.</li> </ul>

Outcome/Output/Assumption Statement

Observed Outcome/Output/Assumptions

Evidence supporting observed results

Source

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
<p><u>Output 3:</u> Increased capacity of partner and participant universities in East Africa to support pedagogical approaches for blended learning.</p>	<p>PEBL has clearly contributed to a substantial increase in capacity to support blended learning in universities in the network. PEBL MEL data indicates that 76 academics have enhanced capacity to support online learning (cf a target of 44), though the number of HEIs that give greater priority to staff capacity development in pedagogical approaches is slightly below target – 16 (cf a target of 17). Overall, 3,217 individuals have enhanced capacity to deliver blended learning (target = 800). Interviews with teachers and senior staff support this. The initial SEDA training of 24 staff across the network has been multiplied dramatically. Email reports from partner universities show that ANU’s 6 PEBL-trained staff have trained a further 54, KEMU has trained 180, Bugema 293, Makerere 1,540, and Kenyatta University has trained 1150 out of a total of 1200 lecturers – hugely in excess of the achievements reported in the results framework. There is also evidence of PEBL-trained staff training staff in universities outside the network. And large numbers of students have enrolled on blended learning courses – 8,551 in Kenya, 607 in Uganda, 502 in Rwanda and 432 in Tanzania. But a PEBL survey in 2020 highlighted a number of challenges to further capacity development including lack of skills in students/lecturers to adopt blended learning (67%); lack of national frameworks (56%); inadequate IT systems/support; perception that blended learning results in increased workloads (42%); lack of institutional support and skills (18%); and a general reluctance from staff and students to adopt blended learning (18%).</p>	<p><i>the virtual classroom when it comes to data. Okay, so that is where that is where the challenge is, because as things are apparently, it is the academic staff who meets the cost’.</i></p> <ul style="list-style-type: none"> <li>• <i>As mentioned above both connectivity and data costs present significant hurdles in terms of all students being able to take advantage of the provisions of blended learning in an equitable way.</i></li> <li>• <i>Two SoC mentioned improvements in connectivity - “KIU has committed to investing in online resources through providing infrastructure, increasing the internet bandwidth, benchmarking and partnerships like PEBL to enhance staff capacity for blended Learning”</i></li> <li>• <i>So we have students who are from very remote areas and that has definitely been a challenge for us. If they are in very remote areas, they would have to, like move to a town once a week, that’s only when they would actually be able to download their learning resources. And so if our lecturer would have put up an assessment activity that was in between the week, they would most probably have missed it out.</i></li> <li>• <i>And of course, here we have a challenge, of internet, Internet access. There are some places where there is no internet access that the students have to move to different location to get the internet. And it costs. The cost of the internet is very enormous for some of our students, so that was one of the challenges.</i></li> <li>• <i>Of course, the power outage. Electricity is not stable in some of the places even some remote places may not have the connection, the power.</i></li> <li>• <i>The most significant challenges identified were insufficient infrastructure and the cost of data.</i></li> <li>• <i>KEMU ADOPTED THE USE OF LMS IN APRIL 2016 AND HAS BEEN USING IT SINCE.</i></li> </ul> <ul style="list-style-type: none"> <li>• Results framework indicators: No academics with enhanced capacity to support educational development 76 (target = 44), No. HEIs that give greater priority to staff capacity development in pedagogical approaches 16 (target = 17), No individuals with enhanced capacity to deliver blended learning 3,217 (target = 800).</li> <li>• The first iteration of the SEDA (Staff and Education Development Association) Developing Blended Learning course was delivered to 24 academic staff from institutions within the network greatly exceeding the stated target of six.</li> <li>• Some of the participants have initiated their own in-house trainings to cascade the knowledge gained to their colleagues, Kenyatta University was the first to do this.</li> <li>• Many other trainings and workshops have been organised including the PEBL and PEDAL IPIE trainings and training on OER Africa. The IPIE trainings were especially well received with 95% of those surveyed saying that they would recommend the training to their colleagues.</li> <li>• A survey of academic and university staff highlighted a number of challenges to further capacity development in this area including lack of skills in students/lecturers to adopt blended learning (67%); lack of national frameworks (56%); inadequate IT systems/support; perception that blended learning results in increased workloads (42%); lack of institutional support and skills (18%); and a general reluctance from staff and students to adopt blended learning (18%).</li> <li>• <i>Eight of the SoC mentioned improves staff capacity to produce and use blended learning - "I am offering support to staff and students as they navigate through e-learning platforms and design courses", "Over 500 business major students used modules developed by Makerere, ANU and Kenyatta", "2 staff training in QA by CoL now sharing with others", "The Makerere PEBL team led the entire university to adopt online teaching and learning".</i></li> <li>• <i>According to the teachers across the network hundreds of staff have been trained in different aspects of blended learning either directly by PEBL or indirectly through the cascading of training. One respondent from Kenyatta University commented that ‘we have managed to cascade to 1200 lecturers in the University.’</i></li> <li>• <i>Most staff have been involved in providing training to colleagues in their institutions with some PEBL participants being selected to run future iterations of training sessions across the network. Some respondents have also been involved in training colleagues from across the region, one said, ‘I participated in training Barera University, I participated in training Kampala University, I participated in training Uganda Management Institute that’s another institution here in Uganda, I participated in training University of Rwanda’. The same respondent also mentioned the key facilitating role played by PEBL leads in connecting them to other institutions requiring training.</i></li> <li>• <i>In some of the Participant institutions cascading of training has been slower. This is because of the limited number of staff initially trained by PEBL and a lack of structures to enable the efficient delegation and cascading of training. One respondent commented ‘I was the only person trained. Yes, it became my responsibility to train the staff...imparting it has been slow.’</i></li> <li>• Capacity differs across the network: <ul style="list-style-type: none"> <li>○ <i>“But when blended learning came, everyone found the need to go for training or to come for training. And with training, inherently within that training, there is the pedagogy of teaching, it is there. So, it has helped to, it has helped people to actually take up this professional training”</i></li> <li>○ <i>“But that that has also been a challenge for us the paradigm shift or the mindset change, the attitude</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <i>Teacher Interviews.</i></li> <li>• <i>SoC 08 (Uganda)</i></li> <li>• <i>Senior manager interviews</i></li> <li>• <i>Senior manager interviews</i></li> <li>• <i>Senior manager interviews</i></li> <li>• <i>Senior manager interviews</i></li> <li>• <i>Student survey 2021</i></li> <li>• <i>KEMU EMAIL</i></li> <li>• <i>PEBL Mid-Year MEL Report March 2021</i></li> <li>• <i>PEBL Annual MEL Report October 2018</i></li> <li>• <i>Q11 Quarterly Report</i></li> <li>• <i>IPIE Report Revised</i></li> <li>• <i>SPHEIR MEL Annual Report PEBL 2020</i></li> <li>• <i>SoC Report, SoC 01 (Uganda), SoC 03 (Kenya), SoC 06 (Uganda)</i></li> <li>• <i>Teacher Interviews.</i></li> <li>• <i>Teacher Interviews.</i></li> <li>• <i>Teacher Interviews.</i></li> <li>• <i>Senior manager interviews</i></li> </ul>

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
		<p>also for our lecturers to be able to fully adopt this open model of pedagogy for them.”</p> <ul style="list-style-type: none"> <li>• KENYA-9164, UGANDA-2,911, RWANDA-502, TANZANIA-512, - NUMBER OF STUDENTS ENROLLED ON COURSES.</li> <li>• THERE ARE 17 INSTITUTIONS IN THE REGION DEVELOPING OR DELIVERING PEBL BLENDED LEARNING MODULES OF WHICH 7 ARE IN KENYA, 4 IN RWANDA, 3 IN UGANDA, AND 3 IN TANZANIA. WITHIN THESE UNIVERSITIES THERE ARE AT LEAST 33 DEPARTMENTS INVOLVED IN DEVELOPING OR DELIVERING MODULES.</li> <li>• SO FAR, ANU HAS 6 PEBL TRAINED STAFF AND A FURTHER 54 IN-HOUSE TRAINED STAFF IN BLENDED LEARNING.</li> <li>• KENYATTA UNIVERSITY HAS BEEN ABLE TO TRAIN 1150 LECTURERS IN BLENDED LEARNING OUT OF A TOTAL OF 1200 IN THE UNIVERSITY.</li> <li>• KEMU HAS TRAINED 180 MEMBERS OF STAFF IN BLENDED LEARNING.</li> <li>• BUGEMA UNIVERSITY HAS TRAINED 293 MEMBERS OF STAFF IN BLENDED LEARNING.</li> <li>• MAKERE HAS TRAINED 1,540</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL TEAM EMAIL</li> <li>• PEBL TEAM EMAIL</li> <li>• ANU EMAIL</li> <li>• KENYATTA UNIVERSITY EMAIL</li> <li>• KEMU EMAIL</li> <li>• BUGEMA EMAIL</li> <li>• MAKERE EMAIL</li> </ul>
<p>Assumption for Output 3: There is sufficient staff, expertise and time available to support blended learning</p>	<p>Skills, interest and especially the time to attend training has been a constraint, but the PEBL training seems to have been effective and the train the trainers proved an effective way to scale up. While all teachers have been training in some institutions uptake in others is lower due to resources and commitment. The differences are most distinct between partner and participating universities. Not all are confident that there is sufficient expertise/resource available, or that training will continue after the end of the project.</p>	<ul style="list-style-type: none"> <li>• Training within PEBL has been effective, and the ‘train the trainer’ model has increased the number of people trained.</li> <li>• But staff find it difficult to combining their professional duties and attending trainings/workshops.</li> <li>• Overall, through the responses gathered from teachers there has been sufficient staff and expertise available to support blended learning. As mentioned above progress in cascading knowledge in some Participant institutions has been slower owing to the limited number of staff initially trained by PEBL.</li> <li>• One of the main problems faced by those who attended the PEBL training programmes was combining the study time required with their work commitments. One respondent commented ‘the deadlines sometimes because of different work, that deadline of submitting it is a challenge.’</li> <li>• Expertise exists but is not sufficient and varies across the network: <ul style="list-style-type: none"> <li>○ We have 70% of our teachers trained</li> <li>○ What I would have liked to see is our faculty fully trained. You see the courses were developed at the partner institutions. And then for us, we had to just sort of implement. What I would have liked to see is my own faculty, working with our courses, that they are teaching on a day to day basis, and converting them into blended learning courses. And being equipped with skills for blended learning pedagogy, to a level where the competence is so ingrained in them...</li> </ul> </li> <li>• There is a training system in place, also for new staff. However, there was also concern raised that running the training could become a problem after the end of the project due to lack of funding.</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Annual MEL Report Sept. 2019</li> <li>• PEBL SEDA Course Evaluation</li> <li>• Teacher Interviews.</li> <li>• Teacher Interviews.</li> <li>• Senior manager interviews</li> <li>• QA lead interviews</li> </ul>
<p>Output 4: Strengthened Quality Assurance systems for blended learning courses across partner and participant universities in East Africa.</p>	<p>PEBL offered QA training to all institutions in the network, but take-up has varied due to capacity and interest in different institutions. So while PEBL MEL data shows that the target for HEIs ability to quality assure courses has been reached (11), the number of action plans produced has not (14 of a target of 23), though this will increase to 20 by June 2021. But there is strong qualitative evidence that PEBL has contributed to strengthened QA systems for blended learning across the network. CoL’s trainings, workshops and QA tools have enhanced the capacity of staff and institutions in the PEBL network on QA of blended learning. PEBL-designed QA approaches meet most recognised standards of good practice (though little evidence that users ie students have been involved in the design). PEBL-designed QA approaches have been institutionalised in some universities. There is no doubt that the COVID-19 pandemic accelerated the adoption of blended learning and the development of related QA systems within the institutions, but the absence of support, standards and guidance from HECs has impeded the development of action plans.</p>	<ul style="list-style-type: none"> <li>• Results framework indicators: No. action plans being developed 14 (target = 23), though this will increase to 20 by June 2021, No. HEIs equipped to Quality Assure blended learning courses 11 (target = 11).</li> <li>• The CoL training courses and workshops for staff from partner and participant universities has received positive feedback. For example, all the surveyed attendees at the Quality Assurance in Higher Education in East Africa course in 2019 suggested the course had improved their knowledge on key aspects of QA including the ability to quality assure cross border in the region and to apply these skills in a practical context.</li> <li>• The QA Rubric and QA Review Tool has been designed not only to act as a review tool at the end of PEBL-supported module development but also to provide the basis for adaptations and improvements to the modules being developed by the universities themselves.</li> <li>• One issue which has been highlighted by a review of the Rubric is the need for more collaboration between QA staff and module development teams.</li> <li>• Four SoC describe improved quality - “the difference in the quality of our blended learning between 2 years ago and now is like the difference between night and day”, and three describe the adoption of PEBL QA methods – “PEBL model for courses and rubric for QA adopted across whole university”, “Senate approved model for ensuring quality of online &amp; blended learning heavily depended on PEDAL”, “The QA Rubric was approved by the 101st OUT Senate on 16th /09/2020. Currently, the University is reviewing its QA policy by featuring blended learning, as per the QA rubric. The reviewed issues will also be featured in policy statements and strategies”</li> <li>• PEBL QA approaches meet most criteria of good practice, especially through the Institutional Review of Blended Learning and QA Rubric tools.</li> <li>• Most of the QA lead interviewees said that at least some of the PEBL tools were used in their institutions. Some also mentioned that they could be adjusted to their institutional needs easily. “We were able to have a rubric which is very good and exhaustive, meaning that it has touched several parts, checking the quality of contents, checking the quality of instructions on material, students’ support. And that’s why the university decided to use the PEBL tool because it was very informative.”</li> <li>• Adoption of blended learning and awareness of importance of quality enhanced by COVID-19 crisis. “When we started developing these courses for blended learning, we were meant to offer ‘Introduction to critical thinking’ to our students but [...] not able to offer it at the time when we wanted to do so. But with</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Mid-Year MEL Report March 2021</li> <li>• QA in HE in Africa Report – E.Mhlanga</li> <li>• PEBL MEL Mid-Year Report April 2019</li> <li>• PEBL Annual Report 2019</li> <li>• SoC Report, SoC 3 (Kenya), SoC 05 (Kenya), SoC 09 (Tanzania)</li> <li>• QA report</li> <li>• QA lead interviews</li> <li>• QA lead interviews</li> </ul>

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
		<p>COVID it has become apparent that blended learning will eventually the way to go. ... And QA starts from the time you develop the module [...]"</p> <ul style="list-style-type: none"> <li>Some aspects of good practice that a QA system for blended learning should ensure haven't been identified: The digital principle 'Design with the user' is good practice but evidence from QA interviews indicates that students have not been involved in developing the modules. Another digital principle is 'Address data privacy and security', but we found no evidence how far attention was paid to this aspect. Furthermore, evidence from QA interviews indicates that QA has insufficiently addressed the aspect of accessibility: little effort was made to ensure <u>all students</u> can access the materials including disabled students, students who can't afford internet access or experience poor technology and/or understanding of how to use it.</li> <li>All the teachers from across the network who were interviewed have familiarised themselves with the QA rubric. In many institutions this appears to have become a foundational tool in the formulation of blended learning courses. One respondent commented that they now have 'an instrument to use for looking at our modules in every department.'</li> <li>Respondents from Partner institutions tended to have a strong understanding of QA processes and had received training either from CoL or in-house. In addition, some said that they were working closely with the team from CoL in developing QA processes at their institution. One respondent from Makerere claimed that they are currently working with 'Kirk' from CoL on a tool for 'the quality assurance mechanism for blended learning for the entire university'.</li> <li>The level of knowledge regarding QA in Participant institutions was far more varied. While some respondents had received training and did possess a good level of knowledge regarding QA, there were other who claimed to have had no sensitisation regarding the QA mechanisms in their university or any training on the topic, 'No, no, no. I've not attended anything on Quality Assurance.'</li> <li><b>HECs HAVE HAD STANDARDS, GUIDELINES OR FRAMEWORKS, WHICH ARTICULATE THE STRUCTURE AND EXECUTION OF LEARNING CURRICULA IN HEIS. HOWEVER, IT HAS EMERGED THAT THOSE FRAMEWORKS ARE ARCHAIC AND REQUIRED TO BE REVAMPED.</b></li> <li><b>CUE HAS BEEN INVOLVED IN THE DEVELOPMENT OF PEBL'S QA PROTOCOL FROM ITS INCEPTION ATTENDING WORKSHOPS, MEETINGS, AND CALLS.</b></li> <li><b>INSTITUTIONS IN THE NETWORK ARE ABLE TO EFFECTIVELY USE THE QA RUBRIC TO QUALITY ASSURE COURSES FOR BLENDED LEARNING.</b></li> </ul>	<ul style="list-style-type: none"> <li>• QA report</li> <li>• <i>Teacher Interviews.</i></li> <li>• <i>Teacher Interviews.</i></li> <li>• <i>Teacher Interviews.</i></li> <li>• <b>CUE EMAIL</b></li> <li>• <b>CUE EMAIL</b></li> <li>• <b>PEBL TEAM EMAIL</b></li> </ul>
<p><i>Assumption for Output 4: There are appropriate and effective quality assurance and accreditation mechanisms in partner and participant universities. There is demand from students for blended learning courses and universities successfully recruit students for these courses</i></p>	<p><i>There were few quality assurance mechanisms for blended learning in universities in East Africa before PEBL, but strong demand for blended and online learning from students. Early PEBL work on QA tools accelerated by the COVID-19 pandemic contributed to the establishment of QA policies and processes in universities across the network. QA leads are very aware of the importance of national QA accreditation mechanisms and promoted the involvement of the regulatory bodies in the project. However, the perceived HE commissions' ownership of this regulatory process varies in the countries. Student perception of blended learning is positive, and increasing numbers are opting for fully online courses.</i></p>	<ul style="list-style-type: none"> <li>40% of attendees at CoL workshop at the start of the project said there were no QA processes specifically for blended learning in their university.</li> <li>CoL QA Review Tool and training courses for staff to use it will improve knowledge of QA in blended learning.</li> <li>In a CoL survey of university staff, 67% respondents said national and regional frameworks/guidelines related to blended learning is essential, and 80% would consult national guidelines and 65% regional guidelines in the drafting of their own institutional QA policies.</li> <li>In PEBL baseline survey of students, 83% felt blended learning would improve access for women, 91% said it would have a positive impact on their ability to learn, and 92% said it would help facilitate interaction with other students.</li> <li>Interviews with academics also revealed that they felt the introduction of blended learning would have a positive impact on students facilitating increased student engagement.</li> <li>However, students have also reported being concerned that taking blended learning courses would limit their student experience and result in a reduction in face-to-face learning</li> <li><b>Three SoC mentioned increased registration of students – "ANU admissions increased.... The country as a whole has come to embrace blended learning as a viable mode of delivery"</b></li> <li><b>Several SoC stated that The QA Rubric has been institutionalised – "from May 2020.... the university has already developed a policy on Blended learning based on DBL1, DBL2 and DBL3 trainings [which is] awaiting approval from the Senate... University management is committed to support University wide implementation of BL for all students in all modes of study".</b></li> <li>Some of the stories indicated student satisfaction in the quality of the courses - <b>"The feedback from students' survey on online offerings is above 6 in a scale of 1 to 10, where 10 is excellent" and Currently about 75% of students opt for the fully online mode, implying that more students are preferring online learning"</b></li> <li><b>Most of the QA lead interviewees said that at least some of the PEBL tools were used in their institutions. Some also mentioned that they could be adjusted to their institutional needs easily.</b></li> <li><b>Involvement of regulatory bodies has been different in different countries. One interviewee mentioned that it would have been better to involve the regulatory body from the beginning. "For the future projects, it's important that we involve them [the commission of education in Tanzania] from the beginning so that they just can own that particular thing [...] now that ownership is missing"</b></li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Pre-Workshop Survey</li> <li>• Dr Kirk Perris QA Presentation</li> <li>• PEBL MEL Mid-Year Report March 2020 / CoL PEBL Workshop Survey April 2018</li> <li>• PEBL MEL Mid-Year Report March 2020</li> <li>• 2018 Interviews with Academics</li> <li>• PEBL MEL Annual Report 2020</li> <li>• SoC Report, SoC 04 (Kenya),</li> <li>• SoC Report, SoC 10 (Kenya)</li> <li>• SoC Report, SoC 03 (Kenya)</li> <li>• QA lead interviews</li> <li>• QA lead interviews</li> </ul>

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
<p>Output 5: High quality, credit-bearing blended learning courses included within regular programmes of partner and participant universities in East Africa.</p>	<p>PEBL MEL data indicates that the number of HEI departments producing blended learning by March 2021 (223) has greatly exceeded the target (33). As of September 2020, 16 modules had been successfully developed and uploaded on OER Africa to be made available for use by universities in the network. A further 10 will be added by June 2021 – again greatly exceeding the target (15). Student satisfaction is high. PEBL trained staff have led the expansion of online learning, though it is unclear how much of the drive for this was caused by the pandemic or by PEBL. Some partner universities are embedding blended learning in policy, structures and processes. There is evidence for some countries only that higher education regulators have been incorporating blended learning into national policies.</p>	<ul style="list-style-type: none"> <li>• None of the teachers interviewed commented about national QA guidelines regarding blended learning.</li> <li>• Even in Partner universities where training had occurred the process of developing institutional guidelines appears to be ongoing and not yet complete. As mentioned above some of the respondents spoke of being involved in the developing of guidelines at their institution with the assistance of CoL.</li> <li>• ANU IS YET TO DEVELOP A BLENDED LEARNING POLICY (THEY HAVE DRAFTED ON BUT IT IS YET TO BE IMPLEMENTED), ALTHOUGH IT DOES HAVE AN ONLINE LEARNING POLICY.</li> <li>• KENYATTA UNIVERSITY HAS DEVELOPED A BLENDED LEARNING POLICY WHICH HAS BEEN SUBMITTED TO THE COMMISSION FOR EDUCATION.</li> <li>• MAKERERE UNIVERSITY HAS AN OPEN, DISTANCE AND E-LEARNING POLICY WHICH WAS APPROVED IN OCTOBER 2015.</li> <li>• THE DIRECTORATE FOR VIRTUAL AND BLENDED LEARNING HAS DEVELOPED A BLENDED LEARNING POLICY WHICH WAS APPROVED BY THE UNIVERSITY SENATE IN DECEMBER 2020.</li> <li>• BUGEMA UNIVERSITY HAS DEVELOPED AND IMPLEMENTED A BLENDED LEARNING POLICY.</li> </ul> <ul style="list-style-type: none"> <li>• Results framework indicators: No. HEI departments adopting blended learning model 223 (target = 33), No. quality-assured, credit-bearing blended learning courses 16 – but will be 26 by June 2021 (target = 15), No students taking quality-assured, credit-bearing blended learning courses 13,089 (target = 12,000).</li> <li>• As of September 2020, a total of 16 modules from batches 1 and 2 had been successfully developed and uploaded on OER Africa to be made available for use by universities in the network (One university developed 2 modules for price of 1 (SUZA) why its 16 instead of 15).</li> <li>• A survey of students who took batch 1 modules revealed that 80% of respondents were satisfied with the modules they took.</li> <li>• There has also been a high uptake of modules with over 13,000 students taking batch 1 modules alone.</li> <li>• Data collected on batch 1 modules both prior to development and following development show the positive impact the process has had on gender equity.</li> <li>• All SoC described increased number of online courses. In one university the number of online courses had increased from 49 in 2017 to 1417 in 2020 and in another “for the last three semesters (since COVID 19 crisis) all the courses in the university except practical based, have been taught through blended learning and examined through online exams”. “Now every university has adopted that model using internet, TV, radio and social media. Even field attachment has blended model”, “And so we are diving deeper with blended learning, making it the official mode of delivery for all on-campus learning”</li> <li>• Four SoC describe increased student satisfaction with online learning through student feedback surveys and increasing enrolments in blended learning courses.</li> <li>• There is little evidence of broad usage of courses developed by other institutions, although courses are shared through Creative Commons licence. “We have our own courses that we have developed. We don’t use any [from other universities]. Because the national council of Higher Education, when you develop your courses, you have to send it to the national council of HE of Uganda, and then they will accredit your programmes.”</li> <li>• There has been patchy uptake of blended learning across the universities, some have only developed a couple of courses, others have converted all their courses.</li> <li>• There is little evidence that the motivation of the stakeholders around the implementation and use of blended learning had been explored within the QA process in order to put in place incentives and promote sustainability</li> <li>• “Previously the Tanzanian university commission was not much informed about blended learning or teaching online. [...] We are happy to be able to convince them [...] The latest release of standards and guidelines has an entire chapter of ODL [online and distance learning]”</li> <li>• Evidence of high quality blended learning courses produced through the PEBL project being included in degree programmes across the network. These seem to have been adopted by both Partner and Participant institutions. The overwhelming majority of respondents attested to their universities using modules developed through the PEBL project.</li> <li>• Those who were involved in designing blended learning courses for PEBL stated that the training they received from the project took place alongside them developing blended learning modules. One commented that, ‘Research Methods and Design for Business, that one, I’m the one who developed with my team. So we were the first people to attend the first iteration of PEBL, and STEL and DPEP, that time we were required that as you are on DPEP and STEL you should be developing a course. So I was there. I did STEL and DPEP concurrently plus designing that course.’</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher Interviews.</li> <li>• Teacher Interviews</li> <li>• ANU EMAIL</li> <li>• KENYATTA UNIVERSITY EMAIL</li> <li>• MAKERERE UNIVERSITY EMAIL</li> <li>• KEMU EMAIL</li> <li>• BUGEMA UNIVERSITY EMAIL</li> <li>• PEBL Mid-Year MEL Report March 2021</li> <li>• PEBL Brochure V2</li> <li>• PEBL Mid-Year Report March 2020</li> <li>• PEBL Learnings 2018-2020</li> <li>• PEBL MEL Mid-Year Report March 2021</li> <li>• PEBL University Leaders</li> <li>• SoC Report, SoC 02 (Kenya), SoC 01 (Uganda), SoC 05 (Kenya), SoC 09 (Tanzania)</li> <li>• SoC Report</li> <li>• QA lead interviews</li> <li>• QA report</li> <li>• QA report</li> <li>• QA lead interviews</li> <li>• Teacher Interviews.</li> <li>• Teacher Interviews.</li> </ul>
<p>Assumption for Output 5: The PEBL project design facilitates and enable a robust selection of blended learning courses and an effective design</p>	<p>The PEBL project design does provide a mechanism for the selection of modules, and the QA process helped assure the quality. But the cascading of training down from the few who received SEDA training, and varied</p>	<ul style="list-style-type: none"> <li>• The basic design of PEBL facilitates robust selection of courses and has been adapted to make further improvements including a simplified proposal form and the introduction of budget guidelines and requirements.</li> <li>• Proposals have been anonymised to remove issues surrounding conflicts of interest and selection bias.</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Annual MEL Report September 2019</li> <li>• PEBL Annual MEL Report Oct 2019</li> </ul>

Outcome/Output/Assumption Statement	Observed Outcome/Output/Assumptions	Evidence supporting observed results	Source
	<p>capacity across institutions meant that some applied a rather more rigid one- one-directional approach to the module design process than intended which has hampered a truly robust and fully participatory design that promotes mutuality of learning.</p>	<ul style="list-style-type: none"> <li>The alignment of the SEDA DBL course with selections for module development and peer and expert reviews built into the module development process ensure quality before modules are uploaded on to OER Africa.</li> <li>79% of surveyed students are 'satisfied' or 'very satisfied' with the modules taken and 89% indicating the blended format had improved their technological skills.</li> <li>There was some understanding of how the PEBL project selects blended learning courses for development among respondents from Partner institutions.</li> <li>Most respondents from Participant institutions (with the exception of one who unsuccessfully tried to get their module selected) did not have any knowledge of the selection process for blended learning modules.</li> <li>As the first batch was developed for a specific faculty and attracted students, even from other universities, one university decided to select a module with even broader uptake for the second batch. "For the second batch, we decided to propose [...] a module which is cross-cutting to the whole university, followed by all 1st year students; also delivered in partner universities."</li> <li>What I would have liked to see is our faculty fully trained. You see the courses were developed at the partner institutions. And then for us, we had to just sort of implement. What I would have liked to see is my own faculty, working with our courses, that they are teaching on a day to day basis, and converting them into blended learning courses. And being equipped with skills for blended learning pedagogy, to a level where the competence is so ingrained in them...</li> </ul>	<ul style="list-style-type: none"> <li>Q13 Quarterly Report</li> <li>PEBL Brochure V2</li> <li>Teacher Interviews</li> <li>Teacher Interviews.</li> <li>QA lead interviews</li> <li>Senior manager interviews</li> </ul>

#### EQ4. Were there any unexpected changes, positive or negative, caused by the project, or by other factors?

Observed change by project or other factors	Evidence to support that observed change	Source
<p>The project broadly unfolded according to the plan, though there were some unexpected changes. For example the original PEBL plan was for partner universities to develop modules for use by participant universities, but after the first training participants universities also started producing modules leading to a conflation in the roles of partner and participant universities in the project. But by the end of the project 19 of the 26 modules were developed by Partner and 7 by Participating universities. Another internal change was the decision not to set up a brand new LMS for the programme but to use the OER Africa platform. That was partly due to the prohibitive cost of developing a new platform, but also because of a policy change in OER early in PEBL to allow storage and sharing of materials that had not been developed by the OER project itself. There were several external factors which had an influence on project progress and impact. By far the most significant was the COVID-19 pandemic, which while the lockdown delayed the number of new modules being produced, it hugely accelerated the demand for online learning, the conversion of existing courses to online or blended courses, the improvement of technology and access, and the development of policies, processes and structures to support online learning. Other factors which affected progress included staff turnover in ACU and some of the universities, the level of pre-existing policy commitment in the university, and inter-university politics has acted as an inhibiting factor in the sharing of both knowledge and content between institutions across the network outside the direction of the PEBL project.</p>	<ul style="list-style-type: none"> <li>After batch 1 participant universities expressed a desire to develop modules. In both batch 2 and batch 3 some of the modules developed have been developed by participating universities.</li> <li>Since March 2020, all institutions in the PEBL network have been shut which caused significant delays to the completion of batch 2 modules.</li> <li>Due to the impact of COVID PEBL trained staff have been charged with facilitating their institutions move towards emergency online learning.</li> <li>COVID has also enabled less technologically developed institutions to scale up their facilities and infrastructure for blended learning.</li> <li>Eight out of ten SoC mentioned COVID-19 as a major factor in accelerating the uptake of approaches introduced by PEBL - "The process was slow until the breakout of COVID-19 pandemic where people started seeing the need for online learning", "As a result of the pandemic, everyone was motivated to change, because it was essentially "Change or die!" and "the advent of COVID-19 and the subsequent lockdown made it difficult for continuity of learning through the traditional face-to-face model. It was now inevitable for both staff and students to adopt some form of e-learning with limited face-to-face sessions".</li> <li>One SoC described the negative impact of "the departure of the Project Lead, who left the University for another Opportunity".</li> <li>One story also implied that pre-PEBL commitment to "improving online learning for many years and the vision of becoming a leading open online university in knowledge creation and application worldwide" was an important positive factor</li> <li>The COVID-19 pandemic has had a major effect on all the institutions in the PEBL network. Respondents have stated that due to the pandemic their institutions have fast-tracked the adoption of blended learning converting a large proportion, if not all their modules into a blended format rather than just modules conceptualised under PEBL auspices. The training received from the project has enabled respondents to be able to do this. One respondent commented 'The training I received in 2018 has been very helpful because I have been able to transform my courses into blended learning and despite the COVID presence now I can easily teach my learners from home, I don't have to go to class.'</li> <li>COVID-19 has also played an important role in institutions accelerating the training of their staff. This has been done across the network although there is evidence that the structures at Partner institutions have been more effective in enabling the acceleration of in-house training university wide. One respondent from a Partner institution claimed that 'between March last year and September, last of the same year, we had managed to train 1200 lecturers.'</li> <li>QA lead in the context of COVID-19: "We are receiving some requests from our colleagues from other institutions [...] to learn on how we are using our Moodle platform in teaching &amp; learning process"</li> <li>Some respondents intimated that rivalry and inter university politics has impacted upon the sharing of knowledge and content among institutions outside the reach of the PEBL project. One respondent commented 'the question which probably the project had not looked at, the politics of the universities, the politics of payment, for example, if such a lecturer comes from that university and teaches this university, who will pay them? those issues are still there. Probably if there was a wider thinking of how we will share facilitators across East Africa, then it would be also something to benefit all East African institutions'. This may also have implications on the long-term sustainability of the benefits and learnings from the project.</li> <li>ACROSS THE REGION THERE IS HUGE DEPENDENCE ON A 'FINAL EXAM' AS BEING THE BEST WAY TO ASSESS. LACK OF INTEREST IN LOOKING AT LESS TRADITIONAL MODES OF ASSESSMENT. ARE THEIR OPPORTUNITIES TO VARY THE RELIANCE ON A FINAL EXAMINATION? SOME SUBJECTS / MODULES ARE NOT BEST ASSESSED IN THIS WAY. ALTERNATIVE MODES OF ASSESSMENT CAN BE ORE BENEFICIAL THAN THE DOGMATIC APPROACH TAKEN OF THERE</li> </ul>	<ul style="list-style-type: none"> <li>Academic Staff Shortage Workshop</li> <li>Q13 Quarterly Report,</li> <li>SPHEIR MEL Annual Report PEBL 2020</li> <li>SoC Report, SoC 02 (Kenya), SoC 05 (Kenya), SoC 08 (Uganda)</li> <li>SoC 08 (Uganda)</li> <li>SoC 09 (Tanzania)</li> <li>Teacher Interview</li> <li>Teacher Interview.</li> <li>QA lead interviews</li> <li>Teacher Interview.</li> <li>DATA VALIDITY WS 4</li> </ul>

- BEING A FINAL EXAMINATION
- THE UNIVERSITY OF EDINBURGH (UoE) DECIDED NOT TO DEVELOP A NEW PLATFORM FOR TWO REASONS: THE BUDGET WAS NOT ADEQUATE FOR A BRAND-NEW PLATFORM, AND CONCERNS ABOUT SUSTAINABILITY AFTER THE END OF THE PROJECT. INSTEAD, IT WAS DECIDED THAT OER AFRICA WOULD BE USED FOR SHARING MODULES FROM WHICH UNIVERSITIES COULD DOWNLOAD THE COURSE MATERIAL INTO THEIR OWN VLEs WITH RELATIVELY LITTLE TROUBLE.
- NUMBER OF MODULES DEVELOPED BY PARTNER = 19 (MAK =3 KENYATTA = 3 SUZA = 4 OUT = 3 RWANDA = 3 STRATHMORE = 3). NUMBER OF MODULES DEVELOPED BY PARTICIPANTS = 7 (AFRICA NAZARENE 2; KAMPALA INTERNATIONAL 2; MASENO 1; KENYA METHODIST 1; MZUMBE 1)

- DATA VALIDITY WS 4 / Partnership WS on Academic Staff Shortage
- ACU EMAIL

## EQ5. Could there have been an easier or a better way to achieve the positive changes, or avoiding any negative ones?

### Alternative approach emerging from the evaluation

### Evidence to support the alternative approach

Overall, the results of the evaluation suggest that the approach taken was appropriate and didn't reveal any alternatives, but there is evidence that it could have been improved by:

- More work with regulatory and coordinating bodies: Involving the HECs s partners from the beginning, getting greater clarity of what was needed from them from the universities, partner/participant universities, taking them with developing guidelines for blended learning. Involving the Inter University Council because one of their core mandates is to promote university education.
- More work with policymakers: Making them aware of the work and aims of PEBL, and providing capacity-building in blended learning policies to help ensure long-term buy-in
- Wider capacity development: Extending capacity development initiatives to a wider group of academics across the partnership; more tailored capacity development based on individual institution needs; training for students.
- More work to build the network and embed it across the region.
- More resources for credit-bearing module development including collaboration between universities across East Africa on module developments.
- More equitable support to all partners from the beginning: Tailored, needs-led support especially to universities lagging behind to ensure 'equitable collaboration' across the network.
- More communication and marketing to raise awareness of the programme outside the PEBL network.
- More on technology and technology access
- More emphasis on equity aspects (accessibility, inclusivity, diversity) in the quality assurance process.

- COMMISSION INVOLVEMENT AND MORE CLARITY OF EXPECTATIONS FOR PARTNER/PARTICIPANT UNIVERSITIES.
- EXTEND CAPACITY DEVELOPMENT INITIATIVES TO A WIDER GROUP OF ACADEMICS (THE SEDA COURSE, FOR EXAMPLE WAS MAINLY OFFERED TO THOSE DEVELOPING BLENDED MODULES, ALSO IT WAS RESTRICTED TO A MAXIMUM OF 3 ACADEMICS FROM EACH UNIVERSITY).
- ENGAGE ALL REGULATORY BODIES (IN ADDITION TO THE CUE) AS PROJECT PARTNERS. REGULATORY BODIES COULD BE TASKED WITH DEVELOPING GUIDELINES FOR BLENDED LEARNING.
- MORE WORK COULD HAVE BEEN FOCUSED ON BUILDING THE NETWORK AND EMBED IT IN THE REGION.
- MORE ENGAGEMENT WITH REGULATORY BODIES WOULD HAVE BETTER ENSURED THE SUSTAINABLE SUCCESS OF THE PROJECT.
- MORE EMPHASIS ON WORKING WITH POLICY MAKERS TO MAKE THEM AWARE OF THE WORK AND AIMS OF PEBL TO HELP ENSURE LONG-TERM BUY-IN.
- SOME FOCUS ON DEVELOPING THE CAPACITY OF STUDENTS THROUGH TRAINING MAY HAVE BEEN BENEFICIAL.
- ADDITIONAL SUPPORT COULD HAVE BEEN PROVIDED TO PARTICIPANT UNIVERSITIES LAGGING BEHIND TO ENSURE 'EQUAL' SUCCESS ACROSS THE NETWORK.
- A STRONGER COMMUNICATION AND MARKETING PLAN TO RAISE AWARENESS OF THE PROGRAMME OUTSIDE THE PEBL NETWORK.
- MORE WORK EARLIER ON TO ENGAGE WITH POLICY MAKERS AND HEC EARLIER ON.
- MORE ON TECHNOLOGY AND TECHNOLOGY ACCESS
- COLLABORATION ACROSS UNIVERSITIES IN MODULE DEVELOPMENTS; MORE SUPPORT TO A STRUCTURED CAPACITY BUILDING AT INSTITUTIONAL LEVEL; CAPACITY BUILDING IN BL POLICIES
- INCLUDING NATIONAL REGULATORY BODIES FROM THE BEGINNING IN ALL COUNTRIES.
- THE PROJECT MAY HAVE BENEFITTED FROM NOT HAVING A TWO-TIERED STRUCTURE WITH PARTNERS AND PARTICIPANTS AS THIS HAS LED TO A UNEQUAL ADOPTION OF BLENDED LEARNING ACROSS THE NETWORK AS WELL AS THERE BEING A SIGNIFICANT CAPACITY GAP BETWEEN INSTITUTIONS.
- ACTIVE INVOLVEMENT OF THE UNIVERSITY REGULATORY BODIES THE EAST AFRICAN REGION IN ALL ACTIVITIES OF THE PROJECT. IN ADDITION, THE INTER UNIVERSITY COUNCIL SHOULD HAVE BEEN ROPED IN BECAUSE ONE OF THEIR CORE MANDATES IS TO PROMOTE UNIVERSITY EDUCATION
- GIVING EQUITY ASPECTS (ACCESSIBILITY, INCLUSIVITY, DIVERSITY) MORE EMPHASIS IN THE QUALITY ASSURANCE PROCESS.
- GREATER ENGAGEMENT WITH REGULATORS.
- EXPLORE THE NEEDS AND CONTEXT OF THE INSTITUTIONS EVEN BETTER - BOTH PARTNER AND PARTICIPATING UNIVERSITIES
- DEVELOPING MORE CREDIT BEARING MODULES TO BE SHARED BY UNIVERSITIES IN THE EA REGION.
- TO PROVIDE MORE CAPACITY BUILDING TO UNIVERSITIES' S STAFF AND TO FUND THE DEVELOPMENT OF NEW BLENDED MODULES.
- ONE OF THE ONLY EXAMPLES OF COLLABORATION IDENTIFIED WAS THROUGH THE AFRICAN REGIONAL CAPACITY DEVELOPMENT FOR HEALTH SYSTEMS AND SERVICES RESEARCH (ARCADE HSSR). THIS PROJECT RAN BETWEEN 2011 AND 2015 AND WAS COORDINATED BY THE KAROLINSKA INSTITUTE. THROUGH THE PROJECT 11 BLENDED LEARNING COURSES WERE DEVELOPED 5 OF WHICH INVOLVED COLLABORATION BETWEEN MORE THAN ONE UNIVERSITY IN THE REGION. UNLIKE PEBL THIS PROJECT DID NOT USE A PARTNER/PARTICIPANT MODEL AND ALL UNIVERSITIES INVOLVED WERE CONSIDERED PARTNERS.
- ANOTHER INITIATIVE IDENTIFIED WHICH CoL TOOK A LEADING ROLE IN DEVELOPING QA. THE GESCI INITIATIVE DEVELOPED THE ALICT MONITORING AND EVALUATION FRAMEWORK, WHICH ADOPTS "APPROACHES AND TOOLS TO PROMOTE QUALITY LEARNING AND ADJUSTMENT THROUGHOUT THE PROGRAMME LIFECYCLE". [1] GESCI HAD A GOVERNANCE STRUCTURE IN PLACE TO MONITOR QUALITY AND AN ACCREDITATION PROCESS THAT IS STRENGTHENED THROUGH A PARTNERSHIP WITH DUBLIN CITY UNIVERSITY. THE COMMONWEALTH OF LEARNING DEVELOPED A REVIEW AND IMPROVEMENT MODEL (COL RIM), WHICH PROVIDES A GUIDE, AND DIY APPROACH TO QA. THIS COL APPROACH IS BASED ON 5 STEPS: INITIATION, STAFF SURVEY, SELF-REVIEW, VERIFICATION AND FOLLOW UP.

- CONTRIBUTIONS IN CoA WS 2

- BLLR

- BLLR

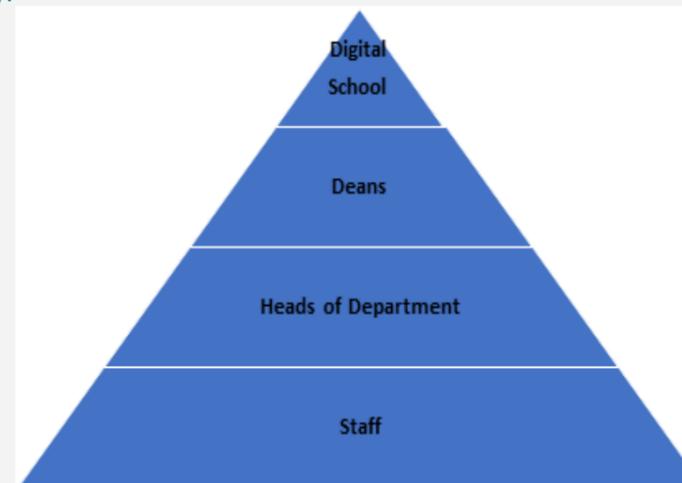
EQ6. How sustainable are the observed changes.

Conclusion from evaluation

There is much evidence to suggest that the changes PEBL has contributed to will be sustained. This includes the close alignment with SEDA, the training of trainers approach in PEBL, which has been expanded to include other staff, and many of the Universities have set up their own training programmes. PEBL also contributed to system-level changes which will also contribute to sustainability including supporting the Open University of Kenya and contributing to the development of the Uganda National Digital Agenda. There is also much evidence that the COVID-19 crisis has also contributed to this momentum towards sustainability. Most senior managers and QA leads were quite optimistic, on the whole, about the sustainability of this blended learning approach, although the level did differ from one institution to another. The role of the regulators, however, remains a crucial one in ensuring a level of sustainability that has institutional depth, quality and scope. Their lack of engagement or limited engagement at best, does create a risk to this vision – as more than institutional capacity or expertise is needed. Issues of standardisation have to be addressed if the full benefit of shared resources is to be realised. So while institutions may express optimism for the future, the scope to operate and spread the benefits of this learning approach remains limited, unless regulators can be actively engaged. Some QA leads also raised concerns about having sufficient funding and resources for continuous capacity building.

Evidence to support the conclusion

- Following on from the first iteration of the SEDA Developing Blended Learning course the best performing students became the instructors for the second cohort on the course and this has continued throughout the project.
- Many universities have conducted their own in-house training of staff using staff who had attended the SEDA courses and IPIE workshops including Kenyatta University, and SUZA.
- PEBL has encouraged this by offering a grant of £250 for each university that conducted its own post IPIE in-house training.
- While COVID-19 has accelerated a rapid move to emergency online learning due to the pandemic, interviews conducted by ACU revealed that it is the PEBL leads in each institution that have been assuming responsibility for moving course materials online and University leaders recognise that the PEBL project has made this easier.
- CUE believes the establishment of NOUK (Open University of Kenya) will be facilitated because PEBL has already sensitised university staff in the region to blended learning and PEBL trained staff are also being actively consulted in the process.
- The Ugandan government is using learnings from the PEBL project in the process of creating a National Digital Agenda.
- *Four of the SoC describe the adoption of approaches introduced by PEBL into university policy – The Quality Assurance directorate together with ODeL Ad-hoc Committee have developed a new E- Learning Policy that has been a key requirement by NCHE for accrediting Universities to begin online teaching and learning (virtual); the “policy on open, distance and eLearning (ODeL) approved and this has been operational since June 2020”; “The QA Rubric was approved by the 101<sup>st</sup> OUT Senate on 16<sup>th</sup> /09/2020”. Three described strategies or processes - “we are diving deeper with blended learning, making it the official mode of delivery for all on-campus learning ....had made online and blended learning one of the key result areas of our strategic planning”; “The University adopted the Quality Assurance Assessment Tool for Blended Learning courses development, which was developed by this project.*
- *Several SoC specific mechanisms for sustainability – “Expansion of the Virtual Learning Directorate: To cater for the needs of every student and lecturer using ODeL”, “A Directorate of Virtual and blended learning headed by a director has been established”, “the establishment of a new unit of Teaching and Learning Services under the office of Deputy Vice-Chancellor (Academic) for which I was appointed the first coordinator”.*
- *Two SoC described the commitment of funds – “KIU won several grants such as the NUFFIC project which will compliment the PEBL outcome and impact” and “The university has set a budget for training on content development (though it's not adequate) and training sessions for faculty on content development is scheduled in March 2021”.*
- The learnings gained from the project in terms of developing blended learning modules, accessing OERs and knowledge of quality assurance in blended learning have very good potential to be sustainable in the long term. This is in large down to the TOT (Training of Trainers) model developed by PEBL. As a result of this model the structures are now largely in place across the network (to a greater extent in Partner institutions) to continue training in institutions beyond the project life-cycle. Institutions such as Kenyatta university have especially well-developed structures to promote such learning in the future. They have put in place a pyramid like structure to ensure the constant filtering down of training through the university:



- The successful implementation of the QA Rubric across the network will provide an effective basis for blended learning modules to be quality assured in the future. In many of the institutions the QA rubric now plays a key role in ensuring that baseline standards are met for all blended learning modules. One respondent remarked, ‘QA rubric, and it has been captured by every dean of school and by every chairman of the department. They have a copy of that QA rubric in such a way that before they submit the module, they subject it to the QA rubric, and they send the results of the subjected module versus the QA completed rubric to the digital school.’ This has proved especially useful during the COVID-19 pandemic when a large number of modules have been adapted for blended learning.
- A key issue which has the potential to inhibit the long-term sustainability of the benefits from the project and blended learning is the lack of resources for some students and staff. This includes: having no connectivity at home; the cost of internet; and not having access to the required devices. One respondent commented that her institution ‘draws students from various communities across the region, some of them are having some issues to do with finances, or some of them, are coming from low socioeconomic status. So, you’ll find that it is actually very difficult for those kinds of students to really know how to navigate their way through online learning’.

Source

- Q10 Quarterly Report
- PEBL MEL Mid-Year Report March 2020 & Q11 Report
- In-House-LMS-Training
- Q12 Quarterly Report & Q14 Quarterly Report
- SPHEIR MEL Annual Report PEBL 2020
- SPHEIR MEL Annual Report PEBL 2020
- SoC Report, SoC 07 (Uganda), SoC 08 (Uganda), SoC 05 (Kenya), SoC 09 (Tanzania)
- SoC Report, SoC 07 (Uganda), SoC 10 (Kenya),
- SoC Report, SoC 08 (Uganda), SoC 10 (Kenya)
- Teacher Interview.

• Teacher Interview.

• Teacher Interviews.



- **Respondents** in the senior manager interviews were most positive about:
  - **Infrastructure** – all institutions have a dedicated directorate (the open distance and E-learning directorate, ODEL) – previously existing or newly created – to lead on embedding the approach to BL within their institutions. Also, other institutions within the university are involved such as the Quality Assurance directorate and the Centre for Academic Excellence.
  - **Training** – while not all staff have been trained there is a mechanism for addressing training needs including use of other partners outside PEBL and consultants.
  - **Policy** – the guidance from PEBL in developing the BL policy and quality assurance framework were mentioned repeatedly for the very real value added to all the institutions – including those already familiar with the approach.
  - **Institutional strategic plan** – the BL policy has become incorporated into the institutions’ strategic plans and larger corporate vision, ensuring the allocation of a budget for implementation
  - **Addressing inequalities in student access to learning resources** – the institutions recognise this as an issue that must be addressed. There is a divide based on the basis of income that the institutions recognise they need to mitigate for continuity of the approach
  - **Building BL into the staff assessment/promotion by the Senate** – in the words of one respondent, “senior management has given Human Resource guidelines that blended learning courses is going to be one the things that is looked at when they are looking when they’re evaluating or appraising academic staff”.
  - “Because it is enshrined within the university strategic plan ...in which we have a way in which the university has indicated that it is mainstream, this teaching and learning approach in almost all the colleges.... So it is an important aspect that the university prioritises as it has actually been included it in its strategic plan for the next 10 years.”
- Many QA leads were quite optimistic in terms of sustainability since structures have been set up in their institutions during the project. However, some QA leads raised concerns about further capacity building still required and not having sufficient funding and resources for continuous capacity building. Depending on the country, the national structures and policies of supporting blended learning are more or less in place.
- HECs HAVE HAD STANDARDS, GUIDELINES OR FRAMEWORKS, WHICH ARTICULATE THE STRUCTURE AND EXECUTION OF LEARNING CURRICULA IN HEIS. HOWEVER, IT HAS EMERGED THAT THOSE FRAMEWORKS ARE ARCHAIC AND REQUIRED TO BE REVAMPED.
- ANU IS YET TO DEVELOP A DEDICATED BLENDED LEARNING POLICY (THEY HAVE DRAFTED ONE ALTHOUGH IT IS YET TO BE IMPLEMENTED), ALTHOUGH IT DOES HAVE AN ONLINE LEARNING POLICY.
- KENYATTA UNIVERSITY HAS BEEN ABLE TO TRAIN THE OVERWHELMING MAJORITY OF ITS LECTURERS IN BLENDED LEARNING (1150 OUT OF 1200) – SUCH A HIGH PROPORTION INCREASES THE CHANCES OF LONG-TERM SUSTAINABILITY.
- KENYATTA UNIVERSITY HAS DEVELOPED A BLENDED LEARNING POLICY WHICH HAS BEEN SUBMITTED TO THE COMMISSION FOR UNIVERSITY EDUCATION.
- KEMU, MAK, BUGEMA, KENYATTA AND ANU (WHICH ARE THE ONLY INSTITUTIONS FOR WHICH DATA HAS BEEN PROVIDED) HAVE ALL PROVIDED IN-HOUSE TRAINING TO AT LEAST SOME OF THEIR STAFF, ALTHOUGH THE PROPORTIONS VARY.
- MAKERERE UNIVERSITY HAS BEEN ABLE TO TRAIN ALL OF ITS STAFF (1540) IN BLENDED LEARNING THROUGH ZOOM SESSIONS.
- MAKERERE UNIVERSITY HAS A POLICY FOR OPEN, DISTANCE AND E-LEARNING WHICH WAS APPROVED IN OCTOBER 2015.
- KEMU APPROVED ITS BLENDED LEARNING POLICY IN DECEMBER 2020.
- BUGEMA UNIVERSITY HAS AN ACTIVE BLENDED LEARNING POLICY IN PLACE.

• Senior manager interviews

• QA lead interviews

• CUE EMAIL

• ANU EMAIL

• KENYATTA UNIVERSITY EMAIL

• KENYATTA UNIVERSITY EMAIL

• PEBL CASCADING TRAINING TABLE

• MAKERERE UNIVERSITY EMAIL

• MAKERERE UNIVERSITY EMAIL

• KEMU EMAIL

• BUGEMA UNIVERSITY EMAIL

## EQ7. Has the project delivered value for money?

Conclusion from evaluation	Evidence to support the conclusion	Source
<p>The project has made clear efforts to implement all three areas of its VFM framework: efficiency; economy; and effectiveness, sustainability, and leverage. It has reduced the cost of module development from £11k to £7.25k over the 3 batches. It has combined separate activities eg engagement, pedagogy and QA workshops and training sessions into a single week-long event. After reviewing options it decided not to develop its own learning system but to adopt the OER platform for sharing modules which universities could access through their own VLEs. The cascading ToT approach enabled the project to train far more staff in developing blended learning modules (76 cf target of 44) and more new courses were produced than planned (25 cf target of 15). While the early impact of COVID-19 slowed the development of new courses, there is no doubt that the incentive to switch to online and blended learning due to the lockdown preventing normal teaching contributed to increased investment in infrastructure, training, quality assurance and online module development leading to much wider take-up of PEBL blended learning approaches in departments across the universities (223 cf target of 33).</p>	<ul style="list-style-type: none"> <li>• In batch 1, six modules were developed at a cost of £11,000 per module. In batch 2 this reduced to £7,500 and to £7,250 in batch 3. This allowed for 8 additional modules to be developed.</li> <li>• Engagement, pedagogy and QA workshops, training sessions and a PEBL Network meeting were all combined in one week-long event in Kigali in 2019. This approach has been applied consistently throughout the project allowing for efficiency gains as well as saving project funds.</li> <li>• The University of Edinburgh (UoE) decided not to develop a new platform for two reasons: the budget was not adequate for a brand-new platform, and concerns about sustainability after the end of the project. Instead, it was decided that OER Africa would be used for sharing modules from which universities could download the course material into their own VLEs with relatively little trouble.</li> <li>• In baseline surveys 83% of students and 65% of academics believed blended learning would improve access to education for women. Before the project began 64% of students in the selected subject areas were male compared to just 36% female. By the end of the project 51.28% of students accessing the modules were female.</li> <li>• Issues with administration and increased deadlines from the SPHEIR team reduced the PEBL teams’ ability to devote sufficient time to project work and contributed to a high turnover of staff.</li> <li>• 26 courses developed by June 2021 (cf target = 15), No. HEI departments adopting blended learning model 223 (target = 33), No academics with enhanced capacity to support educational development 76 (target = 44)</li> <li>• Few of the stories provided clear information on value for money though several described how effective the ToT approach has been in scaling up capacity nothing, and in one case the “Makerere University PEBL Team, were identified as experts in developing ODeL Capacity. We led the entire University to adopt online teaching and Learning in response to COVID 19 Pandemic outbreak “I and other staff who attended the STEL training for batch 2 modules have passed on this knowledge and skills during our weekly workshops for the May- August 2020 trimester”</li> </ul>	<ul style="list-style-type: none"> <li>• PEBL Annual MEL Report October 2018 &amp; Q13 Quarterly Report</li> <li>• PEBL MEL Mid-Year Report April 2019</li> <li>• Partnership Workshop on Tackling Academic Staff Shortage</li> <li>• Partnership Workshop on Tackling Academic Staff Shortage</li> <li>• PEBL MEL Mid-Year Report March 2020 &amp; PEBL University Leader Survey 2020</li> <li>• PEBL Mid-Year MEL Report March 2021</li> </ul>

- The ToT model pursued by PEBL has provided a platform to both promote and facilitate the wider training of academic staff in institutions across the network at no extra cost. Most of the institutions in the network have been involved in skilling their staff using trainers who have been equipped by the project. One respondent remarked ‘after the training, we had internal trainings with our staff, we had to build the capacity.....so I had to engage my colleagues that did not have the opportunity to undergo the training’ from PEBL.
- Some respondents also claimed that being trained in blended learning had allowed their institutions to build capacity, welcoming more students when previously they had been constrained by issues such as class size. One respondent commented that previously she was limited because classrooms at her university could only ‘accommodate about 50 students’, but moving to a blended mode of teaching had allowed them ‘to increase the number of students’.
- The impact of COVID-19 has also had a positive impact on the VFM of the project. Due to the pandemic institutions within the network are adapting modules into a blended format at a far greater rate than initially expected with all the institutions in the network having to at least some extent adopted blended learning in the teaching of their own courses.
- There is evidence of improved quality of teaching & learning: “It was a big departure from the way we had our modules which were more of print modules. ... Those modules did not have opportunities of interactive learning between students and lecturers. ... So it was a departure from what we did in the past to ... now the new way of doing interactive modules.”; “When we got the [QA] tool ..., it helped us to enhance what we already had. ... We did a survey in February last year ... the gaps that were glaring at that time ... most of them have been bridged as we talk.”
- THERE IS A GENDER IMBALANCE OF TRAINED STAFF IN ANU. OF SIX PEBL TRAINED STAFF FIVE WERE MALE AND OF 54 STAFF TO HAVE BENEFITTED FROM IN-HOUSE TRAININGS 37 WERE MALE. THIS A NEGATIVE IMPACT ON THE EQUITY ASPECT OF VFM.
- 7 PEBL TRAINED STAFF AT KENYATTA UNIVERSITY – 3 MALE AND 4 FEMALE, REFLECTS A GOOD GENDER BALANCE. IN ADDITION, ALMOST ALL STAFF AT THE UNIVERSITY HAVE BENEFITTED FROM IN-HOUSE TRAININGS ON BLENDED LEARNING – GOOD EQUITY EVIDENCE.
- ONLY THREE INSTITUTIONS HAVE PROVIDED GENDER DISAGGREGATED FIGURES FOR THE NUMBER OF STAFF WHO HAVE BENEFITTED FROM IN-HOUSE TRAINING IN BLENDED LEARNING – THESE ARE KEMU, BUGEMA AND ANU. IN ALL THESE INSTITUTIONS THERE IS A GENDER IMBALANCE IN THE NUMBER OF STAFF BENEFITTING FROM IN-HOUSE TRAINING WITH MORE MALES THAN FEMALES BEING TRAINED. THE EXTENT TO WHICH THIS MAY REFLECT THE GENERAL GENDER IMBALANCES IN THE NAMED INSTITUTIONS IS NOT KNOWN.
- AT MAKERERE UNIVERSITY ALL STAFF (1540) HAVE BEEN TRAINED IN-HOUSE IN BLENDED LEARNING THROUGH ZOOM. IN ADDITION, 6 STAFF WERE TRAINED DIRECTLY BY PEBL 4 OF WHICH WERE MEN AND 2 WOMEN.
- KEMU HAS TRAINED 180 MEMBERS OF STAFF IN BLENDED LEARNING, OF WHICH 101 ARE MALE AND 79 ARE FEMALE.
- BUGEMA UNIVERSITY HAS TRAINED 293 MEMBERS OF STAFF IN BLENDED LEARNING OF WHICH 198 ARE MALE AND 95 ARE FEMALE. GENDER IMBALANCE.

- SoC Report, SoC 06 (Uganda).
- Teacher Interview.
- Teacher Interview.
- Teacher Interview.
- QA leads interviews
- ANU – EMAIL
- KENYATTA UNIVERSITY EMAIL
- PEBL CASCADING TRAINING TABLE
- MAKERERE UNIVERSITY EMAIL
- KEMU EMAIL
- BUGEMA EMAIL

EQ8. What are the lessons from the project:

Lessons based on the evaluation	Evidence to support the conclusion	Source
<ul style="list-style-type: none"> <li>• The general approach (ie the ToC) worked</li> <li>• The importance of incentives – in this case especially the need to switch to online learning due to COVID-19</li> <li>• The importance of supportive policies</li> <li>• The ToT approach worked well – but only if enough staff from each institution are trained</li> <li>• The value of regional networking</li> <li>• The need for continuous training and development (one-off training doesn't work)</li> <li>• Risk of inequalities emerging and/or being exacerbated particularly among students but also among teaching staff</li> <li>• Risks around the usage of technologies such as the breach of data privacy and the lack of data security, digital safeguarding &amp; accessibility need more attention in QA, in particular when scaling up.</li> <li>• Equity aspects (such as ability, gender, family background) need to be more emphasized within the QA process.</li> <li>• No evidence that students have the information to assess the quality of their learning – they appreciate the convenience and that appears to be the most important issue.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>One of the clearest lessons emerging from the stories of change, which will be difficult to replicate elsewhere is the impact of COVID-19. It seems to be a classic case of a serendipitous external event (catastrophic in many other ways) actually arrived at just the right time to maximise the impact of the PEBL project. Just enough work had been done before then to train people and demonstrate the value of the PEBL approach to blended learning that university faculty and managers were able to respond to the crisis and continue to provide high quality teaching and learning. Any earlier and there simply wouldn't have been the capacity to respond.</i></li> <li>• <i>Other factors that seem to have been critical include the existence of supportive policies and support from management.</i></li> <li>• <i>What also emerges from the stories is that the ToT and regional networking approaches seem to have been very effective.</i></li> <li>• Some of those who were trained from Participant institutions only received one type of training in comparison to colleagues (predominantly from Partner institutions) who received multiple training sessions. One respondent commented that training should be ‘should be continuous, after doing the online training, I should be able to do another thing, a refresher course. Since I finished this one I've not been able to attend another training.’ This can have a negative impact in their ability to benefit long term from what they have learned and to be able to efficiently cascade knowledge gained to their colleagues.</li> <li>• Respondents almost unanimously appreciated the ability to network with colleagues from other institutions and other countries through the PEBL project and trainings. Many felt that more face-to-face sessions that would facilitate such networking opportunities would be beneficial in the future. One commented ‘I felt, maybe could have made a very big difference is if maybe, the trainees may be met once or twice, because that interactivity, you know, actually fostered a lot in terms of building our networks with people, seeing what other people have been able to do with their universities, just sharing ideas and building that community of people exchanging ideas’. Such networking opportunities give staff the chance to build informal links and pathways between institutions to support training, learning and the general adoption of blended learning.</li> <li>• Training enough staff from each institution to facilitate the effective cascading of knowledge was also raised as an area of improvement. Some respondents mentioned that they felt that PEBL had not trained enough staff from their university to do this. One said, ‘I was the only person trained. It became my responsibility to train the staff....I think I'll prefer that, probably, PEBL can train more, even if it another two colleagues so that we are not alone.’</li> <li>• QA lead interviews revealed that there is only limited support for students who may struggle with online learning. Understanding about equity aspects to be considered - such as disability, gender, family background, access to equipment and internet – is yet low.</li> <li>• The marked difference in access to new laptops and other devices mainly by students and not infrequently by lecturers also was cited by all</li> </ul>	<ul style="list-style-type: none"> <li>• SoC Report</li> <li>• SoC Report</li> <li>• SoC Report</li> <li>• Teacher Interviews.</li> <li>• Teacher Interviews.</li> <li>• Teacher Interviews.</li> <li>• QA lead interviews</li> <li>• Senior manager</li> </ul>



respondents. The fact that this situation risks exacerbating inequities within the student body especially, limiting their access to learning materials was recognised by all. The situation is equally urgent, albeit less common for staff of most institutions, where there is a risk to the quality and variety of teaching resources they are able to deploy for their students.

- “The required infrastructure is very expensive to put in place. We have about 70,000 students, to put down the infrastructure for all these students has been a challenge. Digital devices are very expensive, some of our students are from very poor backgrounds and don’t have the money to pay for resources, and they struggle to keep up. The Internet has been a challenge, we have very low bandwidth.”
- The data also suggests that there are discrepancies between the technology being used in the institutions (ie. usually more modern equipment) and the ones that students are buying?
- “So when those people [students] are using smartphones, they have challenges, there are some functions smartphones can perform and those which they cannot perform; and the capacity of the phones they can be able to afford is also limited.”
- There was no evidence from the QA interviews that the breach of data privacy and the lack of data security, digital safeguarding & accessibility, or equity aspects (such as ability, gender, family background) have been considered.
- All students claimed to be either ‘somewhat’ or ‘very’ familiar with PEBL learning techniques, though when it came to defining ‘blended learning’ there was some uncertainty with 24% indicating that it was the same thing as e-learning.

*interviews*

- *Senior manager interviews*
- *Senior manager interviews*
- *Senior manager interviews*
- *QA report*
- *Student survey 2021*



## Annex 5: Stories of change

### Overview

The call for preliminary stories of change resulted in 10 stories of change from nine universities – two from partner institutions and seven from participating universities. Authors include lecturers, senior staff (Deputy VCs) and administrators. The stories ranged from less than 200 to nearly 500 words. Most were descriptive rather than analytical, and tended to focus on what PEBL has done, and especially over the last year since COVID-19 arrived, rather taking a longer term or wide perspective. Six of the stories are primarily about changes at organisational level, one is primarily about personal changes and three are about both.

### Initial analysis

A rapid analysis of the initial stories revealed that COVID-19 has clearly been an important factor. For three of the stories, COVID-19 is presented as the main driver for change, although two of them explicitly mention how PEBL helped them to cope. Another three imply that trends in the universities and/or PEBL were already driving change, but that COVID-19 accelerated change. Interestingly, four stories don't mention COVID-19 at all!

The stories describe a wide range of changes:

- Increased skills of faculty and staff (8)
- Institutionalisation in policy and/or structures / systems (6)
- Increased personal satisfaction or skills (3)
- Changing attitudes (3)
- Increased registration of students (3)
- Strengthened networking or sharing of information between universities (3)
- Adoption of the QA rubric (2)
- Adoption of the PEBL model (2)
- Increased number of online courses (2)
- Increased skills of students (2)
- Improved facilities (internet, LMS etc) (2)
- Positive feedback on the quality of courses from students (1)
- Improved quality of blended courses (1)

A summary of the content of the stories is provided in Table X below.

### Additional stories and request for more detail

Based on this, and the “data gaps” identified in the review of PEBL documentation a decision was taken to try to collect some additional stories from under-represented stakeholders (other partner universities, Students or student representative bodies and policy and regulatory organisations), and to invite the authors to flesh out their stories to provide more context, more evidence of the changes described, and importantly to provide evidence to fill some of the gaps identified in the analysis of existing data:

- The constraints to improving university education (and especially blended learning) in East Africa.
- The programme outcome and outputs – especially Output 3 (increased capacity), 4 (strengthened quality assurance) and 5 (incorporation of blended learning in university programmes).
- Unexpected changes caused by the project.
- Sustainability.

While the request for additional stories was unsuccessful, further detail was received on six of the original 10 stories.

### Final analysis

The stories were reviewed to identify evidence relating to each of the eight evaluation questions. This is summarised below.



### **EQ 1: What are the key constraints to expanding capacity to meet increasing student demand in East Africa?**

While only about half of the stories mentioned constraints, those that did supported most of the problem statements underpinning the project. All mentioned resistance from faculty *“people thought blended learning was a joke”* preferring face-to-face methods. *“Some members of staff feel it as a threat to their jobs”*. Two mentioned lack of capacity among staff in pedagogical knowledge and technical skills, and poor access to technology, software, unstable and expensive access to the internet - [Further development of blended learning is constrained by] *“faculty capacity on blended/online pedagogy and content development, limited finances to support content development and student support in terms of devices”* and [Initial efforts to] *“move to online teaching very slow due to poor accessibility, low digital literacy and attitudes of staff*. The high cost of the internet and limited access to technology was also reported as a problem for students. In one case, despite a policy commitment to move to online teaching, this had been impeded by lack of guidance and inappropriate approaches: *“most of these trainings were based on the specifications that are included on our Learning Management System, hence the learning materials developed were not interactive, they lack student’s activities or task that matches with the learning outcomes and matters of inclusivity were not considered”*.

### **EQ 2: Have the expected outcome and outputs have been delivered?**

All of the stories describe an increased ability of the institution to reach larger numbers of students through online learning - *“blended learning has now been embraced by more staff and students and is now a requirement of curriculum delivery in teaching and learning”*. Eight of the SoC describe improved capacity of staff to produce and use blended learning - *“I am offering support to staff and students as they navigate through e-learning platforms and design courses”*, *“Over 500 business major students used modules developed by Makerere, ANU and Kenyatta”*, *“2 staff training in QA by CoL now sharing with others”*, and *“The Makerere PEBL team led the entire university to adopt online teaching and learning*. Seven of the SoC improvements in the use of universities’ own LMS, but only one mentioned use of OER Africa – *“The two-module courses have already been shared as OER under Creative Commons licensing.”* In one university the number of online courses had increased from 49 in 2017 to 1417 in 2020 and in another *“for the last three semesters (since COVID 19 crisis) all the courses in the university except practical based, have been taught through blended learning and examined through online exams”*. All also mention increased capacity of staff to produce and use blended learning materials, and many describe the increased capacity of students to access and use online materials - *“Technology adoption and proficiency among faculty and students have increased drastically. The younger students appreciated blended learning almost immediately when introduced”*. Three describe improvements in the universities own LMS, but only one mentioned improved use of OER Africa. Four describe improved quality - *“the difference in the quality of our blended learning between 2 years ago and now is like the difference between night and day”*, and three describe the adoption of PEBL QA methods. Four describe increased student satisfaction with online learning through student feedback surveys and increasing enrolments in blended learning courses. Three mentioned the benefit of being part of a wider network - *“The SEDA DBL DPEP and STEL courses trainers strengthen the PEBL Network by collaborating / training different participating Universities in SEDA courses and how to access cartridge and other files on OER Africa”* and *“during the COVID-19 lockdown, emergency remote teaching technologies like Zoom and other e-platforms and social media such as WhatsApp were used with remarkable successes”*.

### **EQ 3: Did the programme work in the way that was expected (ie were the assumptions valid)?**

At impact level only one story mentioned policy recommendations by the HECs leading to widespread adoption that were clearly linked with PEBL work – *“Therefore a policy to support the same has been put in place and the commission for higher education is in full support of blended learning”*. One mentioned the *“mandate of the National Council for higher Education (NCHE) for all universities to study online during the COVID-19 period”*. Though at outcome level many mentioned commitments within their own institution indicating a shift to widespread adoption – *“Our institute for Open and Distance Learning and our Centre for Academic Excellence have led the way in training our faculty in the use of the PEBL-adopted/adapted model and in monitoring and evaluating our progress in adopting it”*. At output level several mentioned changes in incentives and behaviour of faculty *“The ODeL Technical team organized trainings for both students and lecturers to embrace the “New Normal” of going virtual”* and *“Blended learning has now been embraced by more staff and students and is now a requirement of curriculum delivery in teaching and learning”*. Also there is increasing



demand from students “our admissions before introduction of blended learning was stagnating but now we have 50% increase”, though as described below this may have been at least as much to do with the impact of COVID-19 as evidence of preference for online courses. As mentioned above several saw the value of and benefitted from regional networking. Some of the stories indicated student satisfaction in the quality of the courses - “The feedback from students’ survey on online offerings is above 6 in a scale of 1 to 10, where 10 is excellent” and “Currently about 75% of students opt for the fully online mode, implying that more students are preferring online learning”

**EQ 4: Were there any unexpected changes, positive or negative, caused by the project, or by other factors?**

Eight out of the ten stories mentioned COVID-19 as a major factor in accelerating the uptake of approaches introduced by PEBL - “The process was slow until the breakout of COVID-19 pandemic where people started seeing the need for online learning”, “As a result of the pandemic, everyone was motivated to change, because it was essentially “Change or die!” and “the advent of COVID-19 and the subsequent lockdown made it difficult for continuity of learning through the traditional face-to-face model. It was now inevitable for both staff and students to adopt some form of e-learning with limited face-to-face sessions”. One story described the negative impact of “the departure of the Project Lead, who left the University for another Opportunity”. One story also implied that pre-PEBL commitment to “improving online learning for many years and the vision of becoming a leading open online university in knowledge creation and application worldwide” was an important positive factor.

**EQ 5: Could there have been an easier or a better way to achieve the positive changes, or avoiding any negative ones?**

Not surprisingly all of the stories were uncritical narratives of the project, so didn’t provide any evidence that there might have been better ways of achieving the same outcomes.

**EQ 6: How sustainable are the observed changes?**

There was good evidence that the changes described will continue beyond the end of the project. Four of the stories described the adoption of approaches introduced by PEBL into university policy – “The Quality Assurance directorate together with ODeL Ad-hoc Committee have developed a new E-Learning Policy that has been a key requirement by NCHE for accrediting Universities to begin online teaching and learning (virtual)”; the “policy on open, distance and eLearning (ODeL) approved and this has been operational since June 2020”; “The QA Rubric was approved by the 101<sup>st</sup> OUT Senate on 16<sup>th</sup> /09/2020”. Three described strategies or processes - “we are diving deeper with blended learning, making it the official mode of delivery for all on-campus learning” and “had made online and blended learning one of the key result areas of our strategic planning”; “The University adopted the Quality Assurance Assessment Tool for Blended Learning courses development, which was developed by this project. Several described specific mechanisms – “Expansion of the Virtual learning Directorate: To cater for the needs of every student and lecturer using ODeL”, “A Directorate of Virtual and blended learning headed by a director has been established”, “the establishment of a new unit of Teaching and Learning Services under the office of Deputy Vice-Chancellor (Academic) for which I was appointed the first coordinator”. Two described the commitment of funds – “KIU won several grants such as the NUFFIC project which will complement the PEBL outcome and impact” and “The university has set a budget for training on content development (though it’s not adequate) and training sessions for faculty on content development is scheduled in March 2021”.

**EQ 7: Has the project delivered value for money?**

Few of the stories provided clear information on value for money though several described how effective the ToT approach has been in scaling up capacity nothing, and in one case the “Makerere University PEBL Team, were identified as experts in developing ODeL Capacity. We led the entire University to adopt online teaching and Learning in response to COVID 19 Pandemic outbreak”.

**EQ 8: What are the lessons from the project?**

One of the clearest lessons emerging from the stories of change, which will be difficult to replicate elsewhere is the impact of COVID-19. It seems to be a classic case of a serendipitous external event (catastrophic in many other ways) actually arrived at just the right time to maximise the impact of the PEBL project. Just enough work had been done before then to train people and demonstrate the value of the PEBL approach to blended learning that university faculty and managers were able to



respond to the crisis and continue to provide high quality teaching and learning. Any earlier and there simply wouldn't have been the capacity to respond. Other factors that seem to have been critical include the existence of supportive policies and support from management. What also emerges from the stories is that the ToT and regional networking approaches seem to have been very effective.

**Table X: Summary of Stories Received**

No	Story Title	Institution	Outline
1	My experience in blended learning	Makerere University	"When schools and universities were forced to close [by COVID-19] there was an urgent need to find a safe way for students to continue learning, Wham!! In came blended learning". Previously distance learning not common. "Now every university has adopted that model using internet, TV, radio and social media. Even field attachment has blended model". [As a result of support from PEBL?] "I am offering support to staff and students as they navigate through e-learning platforms and design courses". Now better at online tools, but worse at time management. "I have found myself swamped in a multitude of assignments". Good support from PEBL "they have mentored and supervised me in ways I cannot explain".
2	The most significant change in the use of blended learning in University of Eastern Africa, Baraton over the last 4 years	University of Eastern Africa	University started online learning 4 years ago, but much resistance, esp. from older faculty. "People thought that blended learning is a joke". "Quality education not possible through online teaching". Only 49 online courses in 2017, now 1,417! PEBL PEBL training changed attitudes and capacity of faculty". Actually, our university thinks of COVID19 as a blessing which enabled us to break through".
3	Africa Nazarene University the PEBL story	Africa Nazarene University	5 faculty trained by PEBL now training others through virtual courses. Good feedback from students about staff who did STEL. Benefitted through interaction with other PEBL partners. Exposed to local and global good practice. 2 staff training in QA by CoL now sharing with others. Over 500 business major students used modules developed by Makerere, ANU and Kenyatta. PEBL model for courses and rubric for QA adopted across whole university.
4	Gladys Thuita Story of change	Riara University	"Why lie? I have enjoyed teaching more using blended learning as opposed to face-to-face". Students become better researchers and more self-disciplined. ANU admissions increased. "The country as a whole has come to embrace blended learning as a viable mode of delivery".
5	MY PEBL STORY	Africa Nazarene University	"From my seat as the Deputy Vice Chancellor of Academic and Student Affairs, the difference in the quality of our blended learning between 2 years ago and now is like the difference between night and day." COVID-19 galvanised the university - "It was essentially change or die". Senate approved model for ensuring quality of online & blended learning heavily depended on PEDAL. "Now, as we approach the January 2021 Semester, we hope to resume some form of on-campus learning despite of the on-going pandemic. And so we are diving deeper with blended learning, making it the official mode of delivery for all on-campus learning"
6	PEBL PROJECT How is blended learning changing in Universities in East Africa	Makerere University	PEBL Team led development of blended learning in Makerere. SEDA, DBL, DPEP & STEL courses strengthened the network. "The Makerere PEBL team led the entire university to adopt online teaching and

learning." Modules have been shared among universities. He has benefitted through new skills & opportunity to use them. "As a result of the project I am an up-to-date administrator".

7	Development Open Distance e-learning (ODEL) System for Bugema university during the COVID-19 Period	Bugema University	"The COVID-19 pandemic led to the lockdown which has brought the need for the development of ODEL System for Bugema University. This was a mandate of the National Council for higher Education (NCHE) for all universities to study online during the COVID-19 period". Description of what was done included training for staff & students to use new approaches, new systems (LMS and "Virtual rooms for live classes"), Expanded virtual learning directorate, New e-learning policy; Increased enrolment for online studies to 800 students. Not clear how PEBL contributed
8	KIUs engagement with Blended learning	Kampala International University	"Move to online teaching very slow due to poor accessibility, low digital literacy and attitudes of staff". Efforts to mainstream from 2019 - established School for online & distance learning + LMS and eLearning centre with 5 staff. Developed policy in May 2020. Accelerated by COVID19. Great support from ACU/PEBL & other network members. "KIU has committed to investing in online resources through providing infrastructure, increasing the internet bandwidth, benchmarking and partnerships like PEBL to enhance staff capacity for blended Learning"
9	PEBL success story from OUT	Open University of Tanzania	"The project aims to transform higher education systems mostly in Sub-Saharan Africa countries; objective which conforms to OUT's vision of becoming a leading open online university in knowledge creation and application worldwide". Much description of PEBL support. Good evidence of institutionalisation eg "The QA Rubric was approved by the 101st OUT Senate on 16th /09/2020. Currently, the University is reviewing its QA policy by featuring blended learning, as per the QA rubric. The reviewed issues will also be featured in policy statements and strategies" and ""PEBL activities somewhat influenced the establishment of a new unit of Teaching and Learning Services under the office of Deputy Vice-Chancellor (Academic) for which I was appointed the first coordinator".
10	This is my story with PEBL project_ Kenya Methodist University	Kenya Methodist University	Nice history of blended/online learning in KMU since 2016, PEBL activities & impact at university and individual level. Some useful statements of impact eg "Technology adoption and proficiency among faculty and students have increased drastically" and institutionalisation eg "The QA Rubric has been institutionalised from May 2020.... the university has already developed a policy on Blended learning based on DBL1, DBL2 and DBL3 trainings [which is] awaiting approval from the Senate... University management is committed to support University wide implementation of BL for all students in all modes of study". Also personal benefit eg ""As a teacher, training on BL has influenced my pedagogy. I embrace more student-centred approaches by incorporating student activities", and constraints eg "faculty capacity on blended/online pedagogy and content development, limited finances to support content development and student support in terms of devices". Interestingly COVID-19 isn't mentioned at all!



## Annexes: Evaluation approach

---

### Annex 6: The ACU ToR for A Summative Evaluation of the PEBL Programme

#### Introduction and purpose of the evaluation

The Partnership for Enhanced and Blended Learning (PEBL) project started in September 2017 with funding from the UK Department for International Development (DFID)'s Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR) programme and led by the Association of Commonwealth Universities (ACU).

PEBL supports the educational development capacity of academics by providing training on pedagogy, quality assurance and technological platforms. PEBL also enhances regional collaboration and teaching quality by enabling the sharing of quality-assured, credit-bearing blended modules between universities across the region. By participating in PEBL, East African universities expand the range of courses offered to students enrolled in taught undergraduate and postgraduate degree programmes.

In order to deliver the intended project outcome, PEBL works toward delivering five outputs, each of which are supported by a set of activities. Following are the outputs and their definitions:

**Output 1:** Improved network of partner and participant universities in East Africa for sharing degree courses through blended learning.

**Output 2:** Online platform (OER Africa) and Individual Learning Management Systems used across partner and participant universities in East Africa.

**Output 3:** Increased capacity of partner and participant universities in East Africa to support pedagogical approaches for blended learning.

**Output 4:** Strengthened Quality Assurance systems for blended learning courses across partner and participant universities in East Africa.

**Output 5:** High-quality, credit-bearing blended learning courses included within.

The central purpose of the PEBL summative evaluation is to find out to what extent the intended outcome *“Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality”* has been achieved. It is important to note that PEBL is a pilot project and as such lessons coming out from this evaluation will be relevant for similar projects and/or scaling-up in future. The PEBL project will end in July 2021, this evaluation will cover the period comprising September 2017 to April 2021. The primary recipient of the evaluation report will be the PEBL Partnership. Users of the evaluation findings will be ACU, PEBL partner and participant universities, SPHEIR Fund Management Team, DFID and other external stakeholders.

There will be seven main dimensions that the evaluation will look at, these are project effectiveness, changes on institutionalisation of policies and practices, changes to capacity building, quality of blended learning, sustainability, value-for-money and overall lessons learned as a result of the project. Evidence from these dimensions will be the basis for the analysis and the main findings.

#### Scope

The evaluation will focus on four countries-Kenya, Rwanda, Tanzania and Uganda. There are two target groups in the PEBL project, these are partner universities (6 universities) and participant universities (18 universities). When the project was designed there was a clear difference between the two groups on the basis of their roles (development and users of courses' content, respectively), however, after the first year of implementation, partners universities became developers and users, and a group of 3-4 participant universities started designing courses, in addition to using them. This is a significant feature in the life of PEBL and evidence of the evolving nature of the project.



## Key stakeholders

The key stakeholders and sources of primary data in this evaluation are:

- PEBL Management team
- Partner Universities
- Participant Universities
- Technical Partners
- Higher Education Commissions (HEC)
- Students in partner and participant universities
- Teachers, Lecturers and Course Developers in partner and participant universities

## Specific objectives of the summative evaluation

1. To assess achievement of the project toward meeting expected results, based on TOC.
2. To identify extent to which the project contributed to enhancing capacity of the network of universities to use blended learning courses.
3. To validate the relevance, appropriateness and sustainability of the project interventions
4. To assess the effectiveness, strength and weakness of the implementation process in the 4 target countries and whether this project has been implemented in accordance with the expectations and met targeted outcomes fully.
5. To evaluate the impact/change in partner and participant universities and how the project has contributed to these changes (development of policies, institutionalization of capacity building activities, etc.)
6. To validate achievement of intended results as described in the log frame.
7. To draw lessons that inform to future programming and assess accountability status for further learning.

## Schedule, budget, logistics and deliverables

The evaluation process will be undertaken in line with the local context and will encourage active participation of people in selected universities. The inception phase is expected to start in October 2020 and end by December 2020. Feedback on the inception report will be provided by January 2021. Final evaluation is expected to start on February 2021 and end by May 2021.

The total budget available for the evaluation is £80,000 (bids exceeding this amount will not be considered). Following the selection process, details of the work plan are to be submitted by the consultant and approved in consultation with PEBL staff.

## Evaluation deliverables

1. An inception report following project set-up.
2. A comprehensive final evaluation report that puts forward the evaluator's findings, recommendations and lessons learned that inform.

## How to apply

If you are interested in carrying out this final evaluation, please send company profile indicating your previous experience in relation to evaluation work done for reputable entities and a tender including the following elements:

- Organisational profile (including detail of evaluations completed in the past) and CV's (max 2 pages) of proposed project team.
- Technical proposal (5 pages maximum) including proposed evaluation questions, methodology and delivery plan including COVID-19 contingency.
- Full budget presenting the costs for consultant allowance and any other direct costs (travel, etc.)
- A sample report from a previous project evaluation (DFID-funded projects preferred)



## Evaluation criteria for applications

1. Experience evaluating DFID-funded projects.
2. Strength of Evaluation Methodology
3. Value for Money
4. Experience evaluating education projects.
5. Clear identification of evaluation questions
6. Adequate planning for risks associated with COVID-19.

We will only accept applications from registered organisations. The closing date for applications is on September 15<sup>th</sup> 2020.

Applications should be sent to [fiona.khandoker@acu.ac.uk](mailto:fiona.khandoker@acu.ac.uk)



## Annex 7: Full Detailed List of Evaluation Questions

The full detailed list of evaluation questions is as follows.

### Relevance

1. What evidence exists that the problem statements in the 2020 review of the ToC are the key constraints to expanding capacity to meet increasing student demand in East Africa?

1. Rising of number of students and acute shortages of academic staff in the higher education sector in East Africa.
2. University courses in East Africa are taught by staff who aren't always experienced and qualified and there is an over-reliance on visiting faculty and contract staff. Besides, there is a lack of collaboration among universities particularly on sharing resources, knowledge and expertise.
3. Lack of operational online platforms for sharing of course materials across universities in East Africa and blended learning delivery remains random.
4. Poor satisfaction of university students in terms of the learning experience in East Africa.
5. Weak quality assurance systems for blended learning.

### Achievement of outcome and outputs (Impact):

2. What evidence is there that the expected outcome and outputs have been delivered? Were there any unexpected impact/outcome/outputs? How much did the project contribute to these?

- Outcome: Increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality.
- Output 1: Improved network of partner and participant universities in East Africa for sharing degree courses through blended learning.
- Output 2: Online platform (OER Africa) and Individual Learning Management Systems used across partner and participant universities in East Africa.
- Output 3: Increased capacity of partner and participant universities in East Africa to support pedagogical approaches for blended learning.
- Output 4: Strengthened Quality Assurance systems for blended learning courses across partner and participant universities in East Africa.
- Output 5: High quality, credit-bearing blended learning courses included within regular programmes of partner and participant universities in East Africa.

### Appropriateness of the approach (Effectiveness)

3. Did the programme work in the way that was expected (ie were the assumptions valid)?

- *Assumption for impact*: As the project progresses, Higher Education Commissions will draft guidelines to support institutions implementing blended learning courses in order to allow more universities to take up blended learning as a delivery mode and improve performance.
- *Assumptions for outcome*:
  - Institutions developing blended learning courses will convert entire degree programmes into blended formats. Institutions will develop a blended learning policy.
  - Higher Education Commissions in the four countries will support the implementation of blended learning.
  - Improving blended learning will deliver increased flexibility in East African Higher Education systems to expand capacity to meet increasing graduate learning demands without eroding quality.
- *Assumptions for outputs*
  - Output 1: Institutional and personal incentives for further learning help to establish and maintain a network of universities sharing blended learning modules. Partner and participant universities support the project at leadership and operational levels.
  - Output 2: A minimum level of connectivity is in place across the partner and participant universities to ensure project viability and successful online collaboration.
  - Output 3: There is sufficient staff, expertise and time available to support blended learning.



- Output 4: There are appropriate and effective quality assurance and accreditation mechanisms in partner and participant universities. There is demand from students for blended learning courses and universities successfully recruit students for these courses
- Output 5: The PEBL project design facilitates and enable a robust selection of blended learning courses and an effective design.

4. Were there any unexpected changes, positive or negative, caused by the project, or by other factors?

5. Could there have been an easier or a better way to achieve the positive changes, or avoiding any negative ones?

### Sustainability (Sustainability)

6. How sustainable are the observed changes.

### Efficiency

7. Has the project delivered value for money?

Has the VfM strategy been implemented? Who's perspective of value is included? Has the project delivered VfM?

### Wider lessons

8. What are the lessons from the project

For the ACU, PEBL partner and participant universities, SPHEIR Fund Management Team, DFID and other external stakeholders?



## Annex 8: Detailed Evaluation Approach

### Introduction

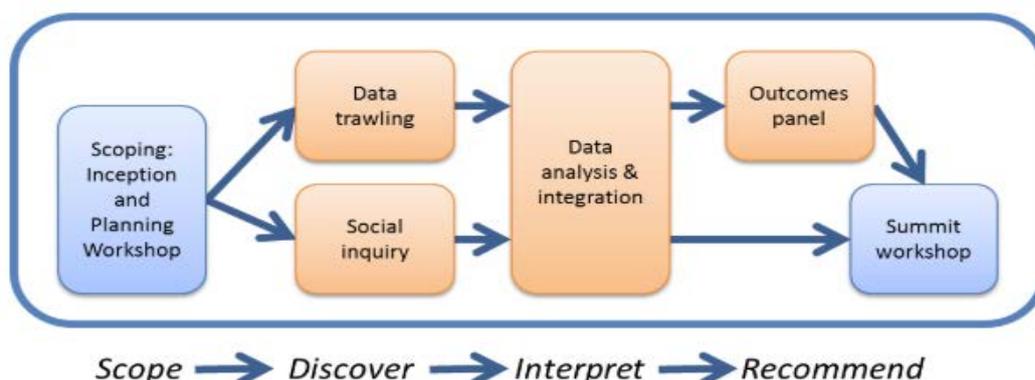
The evaluation used collaborative outcomes reporting (COR)<sup>10</sup> to develop a performance story<sup>11</sup>. This is a theory-based (i.e. starts from a Theory of Change (ToC)), realist (i.e. takes account of the context) approach to assess whether the intervention achieved the intended outcomes. It is also highly participatory involving a wide range of project stakeholders to co-analyse the evidence and co-produce the final conclusions and recommendations. It is both summative – i.e. identifying the results, and utilisation-focused – i.e. identifying what worked well and should be scaled up, what didn't work well and should be avoided, and how projects like this can be implemented most effectively. And involving all stakeholders makes it much more likely that the results will be used.

### Collaborative Outcomes Reporting

The key principles of Collaborative Outcomes Reporting (COR) are that:

- It is based on a Theory of Change.
- It is highly collaborative, involving project staff and other stakeholders throughout.
- It makes as much use of existing data as possible, only collecting additional data if necessary.
- It examines the assumptions underpinning the ToC and external factors which have contributed.
- It is utilisation focused.

Performance story reports describe the intervention's programme context and aims, relate to a plausible results chain, and are backed by empirical evidence. The aim is to tell the 'story' of the intervention's performance using multiple lines of evidence. The general process is shown below:



The normal process entails six main steps:

1. Scoping: in this stage the programme logic is clarified, existing data are identified, and the final set of evaluation questions developed.
2. Data trawl: analysis of existing evidence, through review of programme documentation.
3. Social inquiry: this can include any form of additional data collection that is necessary.
4. Data analysis and integration: data collected from different sources are aggregated and integrated into a "results chart" based on the programme logic and research questions.
5. Outcomes panel: these are usually workshops with project stakeholders to co-analyse the evidence compiled in step 4 and assess the project's contribution to the observed outcomes.
6. Summit workshop: this is usually a larger workshop/event that involves a wider group of stakeholders to discuss and agree on the key findings and recommendations.

The specific methods that we used in each of these stages are described below.

<sup>10</sup> <http://www.managingforimpact.org/tool/collaborative-outcomes-reporting>

<sup>11</sup> Dart, J., & Mayne, J. Performance Story. In S. Mathison (Ed.), Encyclopedia of Evaluation. (pp. 307-309). Sage Publications, Inc. (2005) doi: 10.4135/9781412950558.n410.



## Scoping and inception

The key tasks in this stage are to confirm the Theory of Change which will form the basis for the whole evaluation; refine the evaluation questions; identify what data already exists and any gaps; and then to finalise the scope, methods, process, timeline, the final report outline and any other outputs. We did this through:

- Discussions with ACU staff to identify and acquire the key internal documentation and agree a core evaluation team among ACU and partner staff.
- A review of the documentation to identify what data is already available and to develop a more comprehensive set of evaluation questions and identify further data requirements.
- An online inception workshop with the core evaluation team to review and agree the ToC, agree further data collection approaches and the degree of involvement of core team and wider partnership stakeholders, and the overall evaluation timetable.
- The results of this were documented in an inception report which included: an analysis of existing information; the evaluation questions; a detailed evaluation matrix, a list of specific data collection methods, an interview list, an outline for the consultative workshops, and an indicative outline of the final report content and design.

## Data trawl

The purpose of the data trawl is to extract as much information as possible from the existing programme documentation to assess progress towards the outcomes. We did this through:

- A review of PEBL documentation.
- Further analysis of primary M&E data in collaboration with the PEBL M&E team.
- A review of the content and approach of the blended learning material developed by the project using INASPs scoping tool for online and blended learning.

## Social inquiry

Additional information was collected using a variety of methods:

- Stories of change: PEBL stakeholders were invited to submit stories of change illustrating how the provision of blended and online learning has changed during the life of the project. 10 stories were received from 9 universities – 2 from partner institutions and 7 from participating institutions. A brief summary of the results and an example story is provided in Annex 6.
- Interviews with 16 university teachers to explore the knowledge they have acquired from the programme, the value and application of that knowledge and the sustainability of the new approaches in their universities.
- Interviews with 9 senior university managers to explore their commitment to promoting quality blended learning and how they intend to do this.
- Interviews with 8 quality assurance leads from the universities and CoL to explore the approach to quality assurance, how it is being implemented and its sustainability within the network institutions.
- An interview with one representatives from a regulatory body to explore efforts to date to enable blended learning become a standard feature of higher education in East Africa and how they will help to advance this.
- Email questions to the PEBL project team in ACU and partner and participating universities and other organisations.
- Context analysis – a limited literature-based context analysis of blended learning in East Africa to help determine PEBL's contribution to any changes in teaching and learning approaches experienced in partner and participant universities.
- Survey of students – a survey (via Survey Monkey) to students to gather their views of the programme (29 responses were received).
- Focus group discussion – the evaluation team also capitalised on existing PEBL Monitoring and Learning focus group discussions to explore additional questions emerging through the data collection phase.



## Data analysis and integration:

All of the data collected through the document review and additional data collection was summarised in a results chart. This is essentially a table based on the ToC which aggregates different elements of evidence to support a statement about what has been achieved vs what was planned at each level of the ToC. This allowed us to triangulate different sources of evidence, and to provide a high-level summary of the conclusions for checking in the outcomes panels and summit workshop stages described below. The full results chart is provided in Annex 4.

## Outcomes panel and summit workshops:

In the classic approach to collaborative outcomes reporting the outcomes panel is an expert workshop to “sense check” the emerging results prior to finalising the preliminary findings of an evaluation. The summit workshop is a larger workshop involving a wider range of stakeholders to validate the findings and then co-produce the key conclusions and recommendations.

For this evaluation we modified this to include:

- A series of four online data validation workshops to review the emerging results chart, validate the key findings and identify any evidence gaps. These workshops included different sets of project stakeholders to explore different dimensions of the project:
  - With students and teachers focusing especially on EQ 2 (Outcome & Outputs - all parts) & 4 (unexpected changes).
  - With senior managers focusing on EQs 1 (constraints), 2.0 (Outcome) & 6 (Sustainability).
  - With QA team members focusing on EQ 2.0 (Outcome), 2.4 (QA systems), 2.5 (High quality courses – esp. evidence that they are high quality).
  - With ACU + PEEL team and regulators focusing on EQ 2.0 (Outcome) 5 (other ways of doing it) & 7 (VfM).
- Two co-analysis and co-production workshops for the core evaluation team to review the evidence in the final results chart, and:
  - in the first, which included just the core evaluation team, to review and refine the “results” statements in the results chart, and
  - in the second, which involved a wider group from across the partnership, to examine the contribution the project had made to the final outcome and identify any other factors which might have influenced the outcome, and the lessons and “big stories” emerging from the evidence.
- A final online summit workshop involving c.25 representatives of all project stakeholder groups to discuss and validate the key lessons and big stories and co-produce the recommendations.

An overall evaluation timetable is provided on the next page.

Evaluation timeline

Task	Oct. 2020				November				December				Jan. 2021				February				March				April				May	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Initial discussions with ACU staff		■	■																											
Preliminary document review			■	■																										
1st meeting of core evaluation team				■																										
Preparation for inception workshop					■																									
Inception workshop						■																								
Further document analysis					■	■																								
Finalisation of evaluation methods						■																								
Draft inception report							■																							
2 <sup>nd</sup> core evaluation team meeting								■																						
Final inception report								■																						
Data trawl									■	■	■	■	■	■	■															
3 <sup>rd</sup> core evaluation team meeting													■																	
Social inquiry										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4 <sup>th</sup> core evaluation team meeting																	■													
Data integration (production of the results chart)																	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Data validation workshops																								■	■					
5 <sup>th</sup> core evaluation team meeting																									■					
Co-analysis and co-production workshops																									■	■				
Compilation of preliminary report																												■		
6 <sup>th</sup> core evaluation team meeting																												■		
Summit workshop																													■	
Final report																														■

Key: ■ = core evaluation team meeting ■ = evaluation team work task ■ = written deliverable ■ = data collection/analysis ■ = workshops



## Annex 9: PEBL documents reviewed for the evaluation

Document Title	Date
PEBL Plan of Work	2017
SEDA Capacity Survey October 2017	10/17
PEBL mid-year MEL report_March 2018	03/18
PEBL Q5 Quarterly report – 2	03/18
CoL PEBL PreWorkshop Survey	03/18
PEBL Senior Engagement Meeting 16 April 2018 Double Tree by Hilton	04/18
CoL Survey Results _ PEBL Workshop _ April 2018	04/18
QA Day 4_Presentation, Kirk Peris	05/18
SPHEIR Partnership Q6PR – 2 template – V4.0	06/18
Q7 Quarterly Report v5.0	09/18
PEBL annual MEL report_Oct 2018_FINAL	10/18
Interviews with Academics	10/18
PEBL SEDA course evaluation	10/18
Q8 Narrative Report	12/18
PEBL Learnings 2018-2020	2020
ACU Q9 report	03/19
PEBL_MEL mid-year report_April 2019 – updated for impact review sept 2019	04/19
ACU Q10 Narrative report 6.1	06/19
Inter – Partnership Impact Assessment Workshop Report	08/19
Q11 Quarterly narrative report	09/19
PEBL annual MEL report_Sep 2019	09/19
QA in HE in Africa course report E.Mhlanga Dec 2019	12/19
In-house-lms-training	12/19
Q12 Quarterly narrative report_FINAL	12/19
PEBL Annual Network Report 2019-v3	2019
Partnership Workshop on Tackling Academic Staff Shortage_Final	
Q13 Quarterly narrative report_Final	03/20
PEBL_MEL mid-year report_March 2020	03/20
Review of PEBL ToC and RF – Final report 02.04.2020	04/20
Africa Deep Dive_FINAL FOR ACU	05/20
Q14 Quarterly narrative report V2	06/20
Evaluability assessment of PEBL project report 06.08.2020	08/20
Adjustments and Feedback on Blended Research Methodology-Makerere	
PEBL Indicator Profiles_2020_v2	2020
PEBL Universities Leader Questionnaire 2020_Data	2020
Q15 Quarterly narrative report v3	09/20
SEDA Course Blended Learning Review Participant Interviews	
PEBL Brochure V2 Latest	2020
SPHEIR MEL Annual Report_PEBL 2020_V5	2020