Dynamics of Peer-to-Peer (P2P) Quality Review: a case of National Institute of Open Schooling (NIOS) of India

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1. Introduction

The new education agenda, also known as 'Education 2030', is fully captured in Sustainable Development Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) (Statistical Yearbook for Asia and the Pacific, 2015) and its corresponding targets. Additionally, the World Education Forum 2015 (WEF 2015) adopted the Incheon Declaration 1 which calls for "meaningful education and training opportunities for the large population of out-of-school children and adolescents, who require immediate, targeted and sustained action ensuring that all children are in school and are learning". In line with the Commonwealth of Learning (COL) - intergovernmental organization - created by Commonwealth Heads of Government in 1987 to promote the development and sharing of open and distance learning (ODL) knowledge, resources and technologies. COL has a full-fledged department to develop open schooling and open basic education (OBE) amongst commonwealth countries. The peer-to-peer (P2P) quality review between regional open schools has been an essential part of the COL's mandate. Accordingly, COL initiated P2P activities in 2018 for development of common criteria for review of quality between NIOS and OS-BOU, and after that, it organized the visit to allow the review team to have a chance for the discussion of issues with a wide range of stakeholders thus providing the team with a variety of perspectives on regional and open schooling development policy in the South Asia region. After the visit, the review team prepared a Peer Review Report (PRR). The two institutions, National Institute of Open Schooling (NIOS), India and Open School, Bangladesh Open University (OS-BOU), Bangladesh, have agreed to conduct quality assurance audits based on an inter-institutional audit framework. In fact, this framework was developed in the Institutional Peer-to-Peer (p2p) Quality Assurance Workshop on May 2-4, 2017 at NIOS with the members from two organizations under the technology and financial support from the Commonwealth of Learning (COL), and subsequently, this was approved by the Academic Council of Bangladesh Open University. In addition, instrument for quality audit was also developed. This was qualitative rather quantitative. During the workshop two institutes agreed to continue their p2p activities. It was also agreed to conduct the self-assessment of the institutes before the external audit. The NIOS Team visited BOU from 1- 5 August 2018 and reviewed the quality assurance process of the BOU Open School using the common criteria developed jointly with the BOU team. The audit team had gone through the self-assessment report on BOU Open School and finally, validated the report after auditing some parameters. Reciprocally, BOU team visited NIOS from 28 Feb to 1 March 2019 and reviewed the quality of the NIOS's open schooling process and validated its self-assessment report prepared by the NIOS team through presenting the exit report.
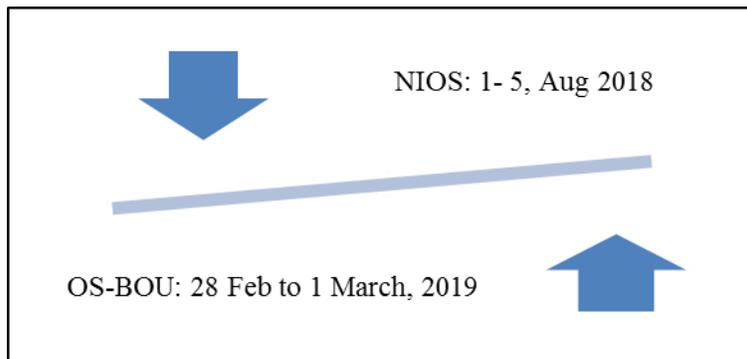

Figure 1.1: P2P between NIOS and OS-BOU

The purpose of this paper is to provide briefing on the purpose, structure and other practical information of the work of the review team members from the BOU Open School. Peer review refers to a process of evaluation of scientific, academic, or professional work of an individual or institution by others working in the same field (Raghunadharao, 2015). ACCJC (2018) reports that self-evaluation is the heart of peer review, and subsequently, the external team validates the self-evaluation report and finally, recommend for improvement. This paper discusses the quality audit process of NIOS and finally, recommends after validation of the self-evaluation report.

2. National Institute of Open Schooling

National Institute Open Schooling (NIOS), India – a state-owned institute – imparts education for the disadvantaged people who do not attend the conventional educational institutes for various socio-economic reasons using the open and distance learning (ODL) mode to cater to the needs of a heterogeneous group of learners up to pre-University level. In July 2002, the Ministry of Human Resource Development (HRD) amended the nomenclature of the organization from the National Open School (NOS) to the National Institute of Open Schooling (NIOS) with a mission to provide relevant continuing education at school stage, up to pre-tertiary level through ODL to prioritized clienteles as an alternative to formal system, in pursuance of the normative national policy documents and in response to the need assessments of the people, and through it to make its share of contribution:

- to universalization of education,
- to greater equity and justice in society, and
- to the evolution of a learning society.

The NIOS provides opportunity for interested learners through diversified Courses/Programmes of studies under ODL mode. The programmes are:

- Secondary Education Course;
- Senior Secondary Education Course;
- Teacher Education Programme;
- Vocational Education Courses/Programmes;
- Life Enrichment Programmes;
- The Open Basic Education (OBE) programme.

NIOS has five (5) Departments, Regional Centres and Accredited Institutions (Study Centres) in India and abroad. Currently, it has the enrolment of 3 million plus students at Secondary, Senior Secondary, Vocational and Teacher Education levels which made it the largest open schooling system in the world (NIOS website, 2019). By this time, NIOS has created a solid base for education for the disadvantaged and disable children through partnering with government and non-government orgnisations. In this way, it has been an exceptional institute in India for its some uniqueness. To make quality education accessible to all, NIOS already developed huge number of relevant learning materials leveraging ICT. Some of the unique features of NIOS are as follows-

- Unlike conventional schools, where about a thousand plus homogenous group of students are enrolled in Secondary and Senior Secondary progammes every academic session.

- The heterogeneous clientele from all States and Union Territories of India, NIOS reaches out to its prioritized learner groups which include school drop-outs and marginalized groups such as rural youth, urban poor, girls and women, scheduled castes, scheduled tribes, backward classes, differently abled and ex-service personnel at substantial fee concessions under oenness and flexibility are interwoven in NIOS policies.

- NIOS conducts On Demand Examinations round the year at Secondary and Sr. Secondary level

- These are significant components of the multi-media packages offered by NIOS for its various courses of study. The audio/video programmes supplement and complement the other modes of learning such as printed self-learning materials and personal contact programmes.

- Under the Digital India Initiative of Government of India, NIOS has been identified as one of the partners in the National MOOC imitative for "Study Webs of Active Learning for Young Aspiring Minds (SWAYAM)". SWAYAM is a MOOC platform designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. The courses through SWAYAM are being delivered at secondary and senior secondary levels on the principle of 4 quadrants of learning (Tutorial Audio/Video, e-Content (text, pdf), e-Resource (Web support, Chat, Blog, Discussion forum) and Self-Assessment) through an indigenous IT platform that facilitates hosting of all the courses.

- It was launched to serve the nearby community of NIOS. The programmes are broadcast on various topics related to community at large in order to enhance learning.

- In order to promote the Open Schooling in the country, NIOS has been persuading the states to set up State Open Schools (SOSs). Twenty states have already set up State Open Schools (SOS)s. NIOS organizes advocacy and consultancy programmes and national and regional level meetings for setting up new SOSs and for up scaling of the open schooling programme of existing new SOSs.

- Under the NIOS Online initiatives, the Learner Support Centre (LSC) has been established in order to address the grievances of the learners pertaining to admission, examination, result, TMA and other related services.

3. The Review Team

Open School is one of the six schools of Bangladesh Open University which runs 2 pre-university programmes, namely, SSC (Secondary School Certificate): Grade 9-10 and HSC (Higher Secondary Certificate): Grade 11-12. The School is headed by a Dean and it has 30 plus faculties to look after each subject. It uses BOU's country-wide network through Regional Centre (RCs) and Sub-RCs for providing tutorial support services and proctoring the terminal examination. It uses the curriculum at par to the national curriculum and recognized by the ministry of education. The School has textbook for each course and it also broadcast programmes through BOUTube and National Radio-TV channel. The BOU Open School is controlled by the University. On the other hand, NIOS is ministerial control. In spite of that, two organization have been the ideal partners to be P2P review. The Commonwealth of Learning scheduled a visit for BOU team to NIOS from 24 Feb to 1 March 2019.

4. Aim and objectives

The aim of this case study is to provide insights into the p2p quality assessment, from the experiences of the National Institute of Open Schooling (NIOS). As such the focus has been on a range of quality assessment initiatives and systems primarily initiated and administered from outside the School i.e. by the BOU-OS and the quality audit under the initiative of the COL. Therefore, although the lessons from this case may be atypical, they may nonetheless provide valuable insights about how quality assessment may help in decision-making for development of open schooling. This Peer Review (PR) aims to provide, from an international perspective, reflections on specific issues and policies concerning the quality of open schooling in India reviewed in connection with a regional ODL development issue. The PR draws together the review team's observations and analyses of background materials on India-specific issues. The PR identifies the major issues arising from the visit, and advance recommendations to improve policy and practice of open schooling in India visited. The report may also highlight examples of innovative approaches with the goal of promoting good practice in open schooling. The PR basically serves as an input into the final COL report from the overall activity. But, it will also contribute to discussions within a region under review and in other interested regions across different countries.

The aim of this review is to measure the quality of the NIOS-run educational programmes. Specific objectives are:
   i)   to identify the strengths and weaknesses of NIOS's existing programmes;
   ii)   to ascertain the challenges faced while running the programmes;
   iii)   to evaluate the infrastructural facilities available for running programmes;
   iv)   to suggest guidelines for uplifting the quality of programmes.

5. Methodology

This paper compiled primarily from documentary evidence, much of which relates to meetings and other activities in which the author was a participant and may therefore be regarded as primary data. Secondary material such as formal reports and web-based publications were also drawn upon. The compilation has involved considerable selection from a large volume of material, and in order to reduce the risk of author bias, comments have been obtained from colleagues about the interpretation of events described here. The P2P Team deployed qualitative approach to conduct the review work which included discussion sessions with the staff (academic and administrative) of the programmes and other stakeholders (students, tutors, coordinators, and community). The Team also did physical verifications of specific infrastructures – classrooms, library and other facilities of the NIOS's study centres. They observed effectiveness of the ODL approach as part of review activities at the school level in general and vocational in particular. The team also had a focus on the ODL for learners with disability i.e. the inclusiveness nature of the programmes. In addition, the team reviewed the existing documents such as the program regulations, curriculum, prospectus, teaching-learning materials and the charter of the NIOS. Content analysis and document analysis were also deployed. The detailed reading of the self-evaluation report and to identify key substantive issues that should be addressed by the review team are the critical task to perform before getting to the NIOS which was sent to review team and other relevant reading materials at least one month before the review visit. The team coordinator provided other team members with a short note summarizing the results of the self-evaluation report including a planned programme of the review visit, the major issues to be addressed for the regional centres and other practical arrangements. In the evening of each day, team members used to have informal meeting at the hotel where the coordination of team's work was made unless otherwise agreed beforehand. Issues such as the division of work, potential assignments of specific domains to the different team members, strategy for the site visits and coordination of the different contributions to the PR are discussed in the meeting. The Open University Validation Service (OUVS) (undated, p. 4) discusses peer review in the context of validating submissions and it provides a panel that can offer a range of perspectives, take a critical but sensitive approach and make suitable comparisons with standards and practice elsewhere in higher education in the UK. Finally, the evaluator had a particular say in the design of these strategies as the final goal is the writing of the PR.

6. Findings and Discussion

Professor CB Sharma, NIOS Chairman, described the genesis of P2P in the inaugural speech. "I'm so happy to have been part of such an incredible event' ... I think I'd had to say my biggest achievement was to propose peer to peer review activities in PCF8 in Malaysia and now inaugurating the event is such an incredible feeling", he said. "BOU Team shall visit various departments and regional centres for investigation so that they can come out with some critical analysis and constructive suggestions, and to tell how it should be improved, if any loophole exists", he added. In this way, the review work got the support from the policy level and the team did the work with sincerity.

6.1 The Infrastructure

The team had a discussion on physical facilities and paid a visit to the departments, staff rooms, faculty rooms, library and exam rooms. There are offices equipped with ICT facilities (wifi connectivity, smart board, projectors etc.) to conduct the courses of studies of the NIOS programs. In addition, NIOS uses, as required, the exam rooms of the Regional Centre which are also equipped the necessary ICT facilities for execution of on-demand examinations. The Institute embraces potential for expansion and will go ahead in future through vertical expansion. All departments are all most under paperless environment. NIOS has full infrastructure for developing the video programmes with auto cue system provides extempu and zero error which uplifts the quality of programmes. In this way, online broadcast as well as TV broadcast is in place which indicates that ICT materials are available to students. NIOS has huge tutor base and it is difficult to train all through f2f. That's why, they developed the virtual training facility has been very cost-effective. Another interesting ICT facility is very impressive i.e. the call centre is full-operational and gaining popularity day by day which provide toll free telephonic serves are in place and effective to learners. NIOS has no in-house VET facilities but it has tremendous partnership with existing VET centre. NIOS already developed the infrastructure for SWYAM, MOOCs and that are already in place. OER repository is in place but at a limited range, say, 2/3 courses.

NIOS has a full-fledged computer division which develops software and that are functioning and created partially the paperless environment through all functionaries are linked to computer department and one-stop service for the learners.

NIOS has the partnership to share infrastructure for caring the disable children and same applied for open basic education for the highly disadvantaged children. Demand for on-demand examination is increasing day by day and it is going vertical extension of RC building for on demand examination

6.2 Human Resources Development and Financial Management

NIOS recruits staff (academic and support) as per the Government's central policy. The academic/official staff has to go through several stages of assessment procedure including demonstration. NIOS maintains government's guidelines while recruiting staff. NIOS has tremendous opportunity for staff development as most of them are linked to different research projects. Faculties can develop their research skills, academic writings, and presentation skills. Thus they get exposures to international seminar/conference/workshops. NIOS's research projects are on contemporary issues in education in general and ODL in particular which help them to remain updated. NIOS recruits PCPs from the respective study centres and train them through virtually and in-house training are in place for the permanent employees. Bruce (1997) defines peer review as a collegial self-improvement process and fines that when an individual chooses to formalise this p2p process, strategies must be implemented so that maximum benefit is gained. The usual framework is for the two individuals concerned to sit down together and discuss what the reviewee is interested in receiving collegial feedback about. Bruce also defines the p2p members as 'critical friend' to look for. This has been a tool for staff development between two institutes.

Financial management is also similar to the government's financial management where there is a centralized system is applied. But, depending on the necessity, NIOS has deregulated and decenetrized some disbursements through the RCs such as payments for PCP facilitators etc. Financial management is totally automated and both inflow and outflow of cash are mostly centralized. Learners are already used to in leaning with the digital system of NIOS financial systems for their financial matters and managed through well-defined SOP for financial system. There is improved efficiency and accuracy in reporting as accounting system is centralized which strengthened internal controls for adoption of computerized accounting system and provides the ease of streamlining information and processes across locations through enhanced roles and responsibilities and process standardization yielding more accountability in the cost centres.

6.3 Programmes, Materials, and Evaluation

The review team investigated the progamme administration, learning materials used and learners' evaluation:
- NIOS programmes are selected based on the needs assessment, and some are imposed by the concerned ministries;
- NIOS materials are well-structured and have an in-house style which has compliance with the international standard;
- Material development process is of at par to the other reputed ODL settings such as IGNOU, OU, UK and of course, COL guidelines where selection of quality authors, editors and validators as per the in-house policy and guidelines.
- School evaluation of the programmes are proctored through public examinations and government rules are followed;
- Evaluation of the vocational courses are proctored through school-based assessment (SBA) and public examination;
- Courses at disability centre are also evaluated through the SBA;
- OBE evaluation is also school-based
- During the visit to classrooms, the audit team found a good level of compliance with the standards at the on-demand examination centre at the RC. Self-assessment also reported the same. The audit team considers that the accomplishment of the 100% of the standards can be achieved after vertical extension of the RC Building and/or rented building.

- The Examination Department is able to apply all sorts of legal powers of conducting public examination rules of India and has redesigned its own standard as per the autonomy given by the Indian government and NIOS has well-established exam system.
- The Examination Department is able to apply all sorts of legal powers of conducting public examination rules of India and has redesigned its own standard as per the autonomy given by the Indian government and NIOS has well-established exam system; R & D in examination process are in place and innovation already found as On-Demand examination is already functioning;
- The Team paid a visit to the NIOS Library housed in the HO, RCs office and verified the availability of the required textbooks and other reference materials for the courses are offered by the programs. The Library's goal is to support the NIOS's mission of teaching and research work and finally, issues the texts to the learners. The Library has good collection of textbooks, research reports (mainly generated by the Institute), journals, and variety of multimedia resources including DVDs, videotapes, audio books and digital collections representing a variety of courses of the NIOS programs. The faculties and students have virtual access to reputed international journals. In addition, they have access to the NIOS central library.

6.4 Learners Support

The team discussed the teaching-learning activities and assessment procedures of the NIOS programs with the PCPs and they reported that the Institute uses the blended approach for creating a conducive learning environment which seems to be effective for vocational courses. F2F contacts are conducted at the study centres. This was, subsequently, evidenced at the classroom observation by the team and supported by the students. The PCP staff has necessary skills to effectively use technology in the classroom. RC has good network with retired person and they have been the wonderful resources for exam on contractual basis.

6.5 Review on Research and Extension

It was revealed from the meeting that the Institute has ample opportunities to get involved in various in-house and collaborative research projects on open schooling and academic aspects. The team found that faculties are engaged in local and international research projects along with the teaching to learners with disability. Most of the projects are funded by donor agencies and NIOS commissioned research. R & D in examination process are in place and innovation already found as On-Demand examination is already functioning;

6.6 Review on Curriculum

The institute designs curriculum through a process which contains need assessment through collecting data on stakeholders' perception and experts' feedback. They also invite curriculum specialists from reputed universities to assist them in developing curriculum. The Team also reviewed the curriculum document. Curricula for the NIOS programs are in place where only general objectives are cited and at par to the National curriculum. Institute reviews the curriculum to incorporate recent ideas and innovations in education. Course profile contains overall goal, teaching learning strategy and assessment criteria and list of reading materials.

6.7 Review on Governance

The team met the honorable Chairman and discussed the governance issues of the program. The Chairman has positive attitudes towards the NIOS programs and expressed his full support to develop the quality of the programs. He appreciates the NIOS activities and invites proposal from the institute for further development. The review team found that counseling and guidance services are available for the students through call centre. NIOS provides tuition waive for high achievers. Sometimes, the Institute supports students' placement in job market.

7. Recommendations, conclusion and impacts

Based on the above evaluation, Peer Review Team from BOU recommends following suggestions for further improvement of the programs:
- NIOS should create more opportunity for capacity enhancement of the faculties/officials in pursuing higher studies in ODL aspects;

- The Institute can restructure the job responsibility considering the workload so that the faculty/officials can spend more time in writing journal articles;
- Faculties/officials should redesign the system of assessment to make it uniform for all courses;
- Faculties should upgrade the curriculum with unit-wise learning outcomes using the government guidelines;
- NIOS should introduce ICT-lab, micro-teaching, play-lab, canteen, common room, spacious library, on its premises for the teacher education programme;
- Put emphasis on co-curricular activities involving the communities at the Study Center;
- NIOS should update its website which should have a portal for OER (open educational resources) repository for the learning materials (print, video, and PPTs);
- The Institute may assess the impact of the program attended by the reputed government official.
- PCPs should have F2F training and training module for tutors and lead tutors;
- Put emphasis on social networking platform;
- Put emphasis on concept videos
- Academics should not be transferred to administrative department when they get promotion as academic activities are continuous process.
- Academic persons may get more free time for developing study materials and making quality audio, video programmes.
- Academic persons should be in regular contact with study centres and learners to get response from learners so that they can review SLMs
- More research needed on on-demand examination

NIOS was already actively seeking quality improvements on a number of relevant fronts and COL commissioned P2P team has identified a number of quality improvement needs which remain to be fully addressed. Has P2P team however affected decision-making, management style, organisational culture or any other important generic aspects of the NIOS's operations? The organisational culture has to be matched School's mission statement is consistent with the core values of ODL i.e. 'openness to people, places, methods and ideas' for development of quality of the programmes. Harvey (2002) states that peer reviewers are encouraged to ask questions but they are not trained as investigators. Sometimes they are not trained at all. There is very little attempt to challenge the preconceptions and prejudices of peers — after all their views are to be 'respected'. The little 'training' or 'briefing' is required for peer groups on what areas need to be examined and the sorts of things on which to focus. Silva et al (1997, p. 31) suggest that the prior experience of peer reviewers tends to influence the outcome of reports. Therefore, it is recommended that p2p event should incorporate the short training for the team.

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