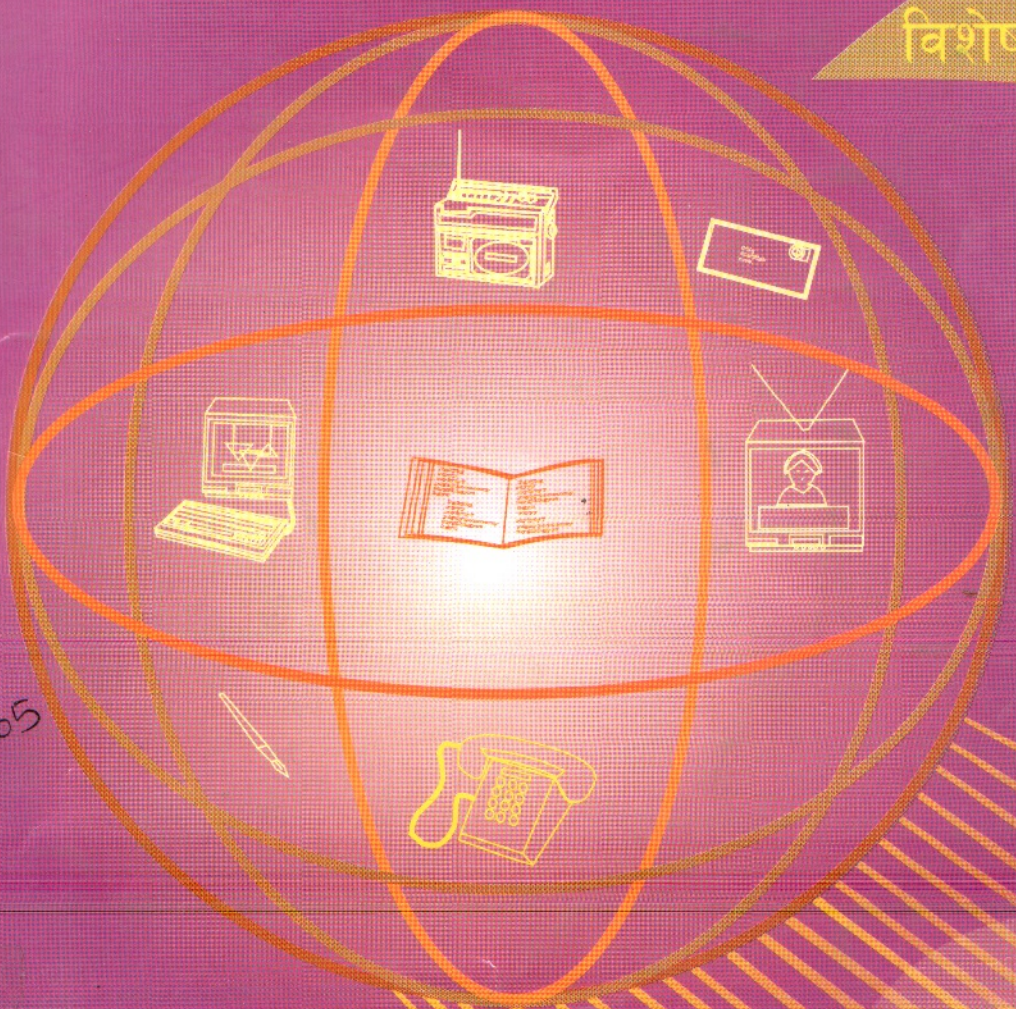
दूर शिक्षा

DISTANCE EDUCATION

विशेषाङ्क



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दूर शिक्षा *विशेषाङ्क*

Distance Education *Special Issue*

सल्लाह

अर्जुनबहादुर भण्डारी

बुनु श्रेष्ठ

सम्पादक

सुनीता मालाकार

नवीन कुमार सिंह

कमला पोखरेल

द्रोण दाहाल

खुविराम अधिकारी

श्री ५ को सरकार

शिक्षा तथा खेलकुद मन्त्रालय

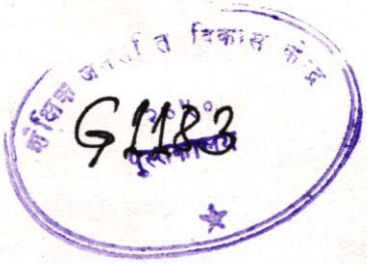
शैक्षिक जनशक्ति विकास केन्द्र

सानोठिमी, भक्तपुर

२०६२

प्रकाशक :
श्री ५ को सरकार
शिक्षा तथा खेलकुद मन्त्रालय
शैक्षिक जनशक्ति विकास केन्द्र
सानोठिमी, भक्तपुर

(लेख रचनाहरूमा अभिव्यक्त गरिएका विचार लेखकहरूका निजी विचार हुन्)



आवरण पृष्ठ डिजाइन
- सुमन बज्राचार्य

टाइप सेटिङ तथा डिजाइन
- लक्ष्मी श्रेष्ठ

श्री ५ को सरकार
मा. राधाकृष्ण मैनाली
शिक्षा तथा खेलकूद मन्त्री
निजी सचिवालय

माननीय शिक्षा तथा खेलकुद मन्त्रीज्यूको निजी सचिवालय केशरमहल, काठमाण्डौं, नेपाल

फोन नं. ४४१९४९९
४४१४६९०

मिति.....२०६२।३।२४

विषयः– शुभ- कामना ॥

दूर शिक्षा केन्द्र, शैक्षिक जनशक्ति विकास केन्द्रमा एकीकरण हुनपूर्व आरम्भ गरिएको "दूर शिक्षा" पत्रिकालाई निरन्तरता दिदै यस वर्षबाट दूर शिक्षा विशेषाङ्कको रुपमा प्रकाशित हुन लागेकोमा मलाई खुशी लागेको छ ।

"दूर शिक्षा विशेषाङ्क" दूर शिक्षासम्बन्धी लेखरचनाको संगालो हो । यी लेखरचनाले पाठकहरुलाई दूर शिक्षाका बारेमा प्रशस्त जानकारी प्रदान गर्नेछन् भन्ने मैले विश्वास लिएको छु । आजको वर्तमान विश्वको शैक्षिक क्रियाकलापमा दूर शिक्षाले विशेष स्थान ओगटेको छ । औपचारिक शिक्षामा होस् वा अनौपचारिक शिक्षामा विश्वका विभिन्न देशमा दूर शिक्षाको प्रयोग विभिन्न रुपमा विगतका केही दसकदेखि हुँदै आएको विषयलाई लिएर विशेष उल्लेख गरिरहनु नपर्ला । हाम्रो देशमा पनि श्री ५ को सरकार, शिक्षा तथा खेलकुद मन्त्रालयले दूर शिक्षा पद्धतिको प्रयोग प्राथमिक शिक्षक तालिममा केही दशक पहिलेदेखि नै गर्दै आएको छ र यसमा सफलता पनि हासिल गरेको छ । यसै अनुभवका आधारमा आगामी वर्षदेखि निम्नमाध्यमिक तथा माध्यमिक शिक्षक तालिममा पनि दूर शिक्षा पद्धतिको प्रयोग शैक्षिक जनशक्ति विकास केन्द्रले गर्ने भएको छ ।

अन्त्यमा, यस पत्रिकामा रहेका लेखरचनाहरु अध्ययन-अध्यापनका क्षेत्रमा सबैका लागि उपयोगी बन्न सकून् भन्दै प्रकाशनका लागि हार्दिक शुभ-कामना प्रकट गर्दछु ।

राधाकृष्ण मैनाली
मन्त्री
शिक्षा तथा खेलकुद मन्त्रालय

शिक्षा तथा खेलकुद मन्त्रालय

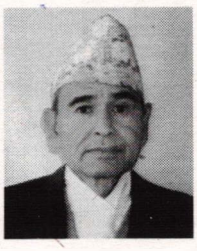
श्री ५ को सरकार
शिक्षा तथा खेलकुद मन्त्रालय
(शिक्षा तथा खेलकुद मन्त्रालयको मोहर)
केशरमहल, काठमाडौं, नेपाल

फोन नं. ४४११७७४
४४१२०१३
४४१८७८३
४४१८७८४

केशरमहल,
काठमाडौं, नेपाल ।

पत्र संख्या:-
चलानी नं.:-

मिति : २०६२।३।२४



शुभकामना

वार्षिक रुपमा प्रकाशित हुँदै आएको "दूर शिक्षा" यस वर्ष पनि दूर शिक्षा विशेषाङ्कको रुपमा शैक्षिक जनशक्ति विकास केन्द्रबाट प्रकाशन हुन लागेकोमा मलाई ज्यादै नै खुशी लागेको छ । यस किसिमबाट पत्रिका प्रकाशन हुने कार्यलाई प्रशंसनीय रुपमा लिन सकिन्छ भन्ने मलाई लाग्छ ।

शिक्षा विकासका लागि दूर शिक्षा आजको समयको माग हो । आजको एकाइसौं शताब्दिमा सूचना तथा संचारका माध्यममा भएको विकासले दूर शिक्षाको विकास र विस्तारलाई सम्भव पनि बनाएको छ । हाम्रो जस्तो विकासोन्मुख देश र भौगोलिक विकटतातले दुर्गम मानिएको भू-भागका लागि दूर शिक्षा आवश्यकताको विषय पनि हुन गएको छ । तर दूर शिक्षाका माध्यमबाट देश जति लाभान्वित हुनुपर्ने हो त्यस किसिमको लाभ भने देशलाई पुऱ्याउन सकिएको छैन । दूर शिक्षालाई कुन रुपमा कसरी अगाडि बढाउने हो भन्ने बारेमा हामीले अझै निर्क्यौल गर्न बाँकी छ । यस सम्बन्धमा हामी अझै पछि परेका छौं । यो अभाव यस दूर शिक्षामा समावेश गरिएका लेखरचनाहरुले केही हदसम्म पूरा गर्न सक्लान् कि भन्ने पनि मलाई लाग्छ ।

अन्त्यमा, यस "दूर शिक्षा विशेषाङ्क" मा समावेश लेखरचनाहरु अध्ययन अध्यापन गर्नेहरुका लागि उपयोगी बन्न सकून भन्दै प्रकाशनको सफलताका लागि शुभ-कामना व्यक्त गर्दछु ।

(चुमार्ने सिंह बस्नेत)
का.मु. सचिव

सम्पादकीय

वर्तमान विश्वमा दूर शिक्षाको महत्त्वपूर्ण भूमिका छ । प्राचीन इतिहासमा पनि दूर शिक्षा र खुला सिकाइको अवधारणा लागू भएको थियो । विद्यालय, विश्वविद्यालयमा कक्षागत वातावरणमा आधारित शिक्षण सिकाइको थालनी भएपछि दूर शिक्षा/खुला सिकाइसम्बन्धी प्रचलन कम भएर गएको हो ।

सर्वसाधारण जनतालाई शिक्षा प्रदान गरेर सामाजिक दायित्व पूरा गर्ने जिम्मेवारी सरकारले आफ्नो जिम्मामा लिएपछि शिक्षालाई औपचारिक र अनौपचारिक रूपमा विभाजन गरेर हेर्न थालियो । जनसङ्ख्याको वृद्धि र विस्तारका साथै विज्ञान र प्रविधिको विकासले गर्दा सन् १९६० को दसकपछि दूर शिक्षा/खुला सिकाइ पुन: अस्तित्वमा आउन थालेको कुरा हामी सबैले स्वीकार गर्नैपर्छ ।

आजको एक्काइसौं शताब्दी भनेको शिक्षा क्षेत्रमा दूर शिक्षा र खुला सिकाइको युग हो । दूर शिक्षा/खुला सिकाइको माध्यमबाट सबैका लागि शिक्षाका रूपमा सबैको घरदैलोमा शिक्षा उपलब्ध गराउन सकिन्छ । दूर शिक्षा/खुला सिकाइको माध्यमबाट सरल र सहज ढङ्गबाट कम लागतमा बहुसङ्ख्यक व्यक्तिहरूलाई गुणस्तरीय शिक्षा उपलब्ध गराउन सकिन्छ ।

हाम्रो देश नेपालमा वि.सं. २०३७ मा संस्थागत रूपमा रेडियो शिक्षा शिक्षक तालिम आयोजनाको नामले दूर शिक्षा विकसित भएको पाइन्छ । दूर शिक्षा प्रणालीलाई हामीकहाँ तालिम दिने पद्धतिको रूपमा विकसित गरिएको छ ।

"दूर शिक्षा" दूर शिक्षा विशेषाङ्कको रूपमा यस वर्ष पनि शैक्षिक जनशक्ति विकास केन्द्रबाट प्रकाशन हुन गइरहेको छ । यसमा दूर शिक्षासम्बन्धी लेखहरू मात्र समावेश गरिएका छन् । यस पत्रिकालाई प्रकाशन योग्य तुल्याउने कार्यमा सहयोग गर्ने सबै व्यक्तिहरूलाई हार्दिक धन्यवाद ज्ञापन गर्न चाहन्छौं ।

आषाढ, २०६२

शैक्षिक जनशक्ति विकास केन्द्र
सानोठिमी, भक्तपुर

विषयसूची

दूर शिक्षा व्यवस्थापनका चुनौतिहरू

- डा. मनप्रसाद वाग्ले*

आजको विश्वमा दूर शिक्षा पद्धति निकै लोकप्रीय हुदै गएको छ । कक्षाकोठामा पढाइने विभिन्न विषयवस्तुहरूलाई दूर शिक्षा विधिबाट शिक्षण गर्दा विद्यार्थीहरूमा यसको सकारात्मक प्रभाव परेको पाईएको छ । खास गरी दूर्गम क्षेत्रमा वसोवास गर्ने विद्यार्थीका लागि त यो पद्धतिबाट प्रदान गरिने शिक्षा वरदान नै सावित भएको छ । भनेको वेलामा उपयुक्त शिक्षक नपाईने, गुणस्तरीय सामग्रीको अभावमा चाहेको जस्तो शिक्षा पाउन मुश्किल हुने एवम् शहरी क्षेत्रका आफ्ना समकक्षीसँग प्रतिस्पर्धा गर्न नसकि शीर निहुराउनु पर्ने वाध्यता भएकाहरूलाई दूर शिक्षा गतिलो उत्तर बन्न पुगेको छ । आज विश्वका कुनाकाप्चामा छरिएर रहेका जनसमुदाय शिक्षित बन्नुमा यही पद्धती जिम्मेवार मान्न सकिन्छ । एकातिर बढ्दो प्राविधिक कारण र अर्कातर्फ प्रतिस्पर्धात्मक विश्वमा जिउन सबै मुलुकमा दूर शिक्षा मात्र एउटा यस्तो माध्यम बनेको छ जसबाट उपयुक्त समयमा उपयुक्त प्रविधिको प्रयोगले उपयुक्त ज्ञान हासिल गर्न मद्दत पुगेको छ ।

नेपालमा दूर शिक्षाको इतिहास करीव ५० वर्ष पूरानो भए तापनि औपचारिक शिक्षा पद्धतिमा यसको प्रयोग शून्य प्रायः नै मान्नु पर्दछ । शिक्षक तालिमका लागि प्रयोग भइरहेको रेडियोको प्रभावकारीता बढाउन हम्मे हम्मे परेको छ । केही विश्वविद्यालयहरूले औपचारिक शिक्षामा यसको प्रयत्न नगरेका होइनन् तर ती पनि आधुनिक प्रविधिको प्रयोगको पक्षमा निकै कमजोर सावित भएका छन् । यो पद्धतिका मुलभूत कुराहरूका बारेमा सुसूचित गर्ने र सम्भावना भएका ठाउँमा परीक्षण गरेर हेर्ने प्रयास सम्म सरकारले गरेको छैन । २०६० सालमा जारी भएको दूर शिक्षा निर्देशिका कार्यान्वयन हुन सकेको छैन । नवौं योजनादेखि खुला विश्वविद्यालय खोल्ने योजना सरकारले बनाएको भएता पनि अझै त्यो गर्भमानै रहेको प्रतित हुन्छ । दूर शिक्षा पद्धति वा खुला सिकाइ प्रणाली व्यवस्थापनमा हालसम्ममा अध्ययन अनुसन्धानले देखाएका चुनौतीहरू यस प्रकारका छन् ।

चुनौतिहरू

१. प्रशासनिक संरचना

एउटा खास प्रशासनिक संरचनाभित्र सञ्चालन भएको दूर शिक्षाको महत्व र मान्यता कम देखिएको छ । शुरुमा गरिनु पर्ने लगानी (initial investment) अलि चर्के हुने र त्यसको जोहो गर्न रकमको अभावमा दूर शिक्षा पद्धतिबाट शिक्षा प्रदान गर्छु भनेर

* प्राध्यापक, शि.शा.स., त्रि.वि.वि.

खुलेका संस्था र तिनका प्रशासनिक संरचना धराशायी भएका छन् । अरुसँग प्रतिस्पर्धा गर्ने मामलामा होस् वा नयाँ मोडल स्थापना गर्ने कुरा होस् त्यसमा सञ्चालकहरूलाई कठिनाइ उत्पन्न भएको छ । एउटै संगठन भित्रका विभिन्न एकाइ अथवा विभिन्न संगठनहरूबीच गरिनु पर्ने सम्झौता र सहमति समयमै हुन नसकेका थुप्रै उदाहरणहरू दूर शिक्षा प्रदायक संस्थाहरू भित्र भेट्न सकिन्छ । कार्य तालिका, शिक्षण शुल्क, नियमन प्रणाली, मुनाफाको बाँडफाँड, ऋण लगानी जस्ता विषयहरूमै विवाद उत्पन्न हुने भएकोले दूर शिक्षा संकटमा परेको छ ।

२. **सांगठनिक परिवर्तन**

धेरैजसो संगठनहरू परिवर्तन नरुचाउने हुन्छन् । परम्परागत शैलीमा बानी परिसकेकाहरू नयाँ विचार प्रति झुकाव राख्न सक्दैनन् र त्यसलाई झञ्झटिलो मानेर पूरानै पद्धतिको वकालत गर्छन् । दूर शिक्षा पद्धतिका नयाँ विचारहरू एक आपसमा छलफल नगरेसम्म यसको कार्यान्वयन कठिन र सुस्त हुन्छ । यसका लागि यो क्षेत्रमा पोख्त विशेषज्ञहरूको आवश्यकता पर्दछ । यसका सरोकारवालाहरूलाई यस पद्धति प्रति आश्वस्त पार्नु त्यत्तिकै कठीन काम मानिन्छ । त्यस्तै कुन उद्देश्य प्राप्तिका लागि सांगठनिक परिवर्तनको आवश्यकता भएको हो भन्ने पुष्टी गर्नु पनि एउटा जटील काम मानिएको छ ।

३. **प्राविधिक दक्षता, सहयोग र पूर्वाधार**

प्रविधिको परिवर्तनसँगै आफ्नो संस्थालाई परिवर्तन गर्नु भनेको निकै ठूलो चुनौति हो । एकातर्फ दूर शिक्षा पद्धतिको उपयोग गरी पढाउने शिक्षकहरूमा यसको ज्ञानको अभाव हुनु अर्को छेकवार हो । दूर शिक्षा पद्धति अनुसारको पाठ्यवस्तु तयार पार्नु, त्यसको लागि सहयोग सामग्री निर्माण गर्नु र सोही सिद्धान्त अनुसार कार्यान्वयन गर्नु आफैमा एउटा सिङ्गै जिम्मेवारी हो । त्यस्तै दूर शिक्षाका सरोकारवाला अझ शैक्षिक संस्थाहरूबाट encode गरिएका message हरू decode गर्नका लागि आवश्यक पर्ने उपकरण, प्रयोगशाला र भौतिक पूर्वाधारको अभावमा त झनै यसको व्यवस्थापन अलमलमै परेको भान हुन्छ ।

४. **सामाजिक अन्तर्क्रिया र गुणस्तर**

व्यक्ति व्यक्तिबीचको अन्तर्क्रियाबाट अलग दूर शिक्षाका पाठ्यवस्तुहरूका कारण विद्यार्थीले आफूलाई एक्लो महशुस गरेको हुन्छ । सैद्धान्तिक रूपबाट यसको प्रशंसा गरेर चित्त बुझाउने ठाउँ एउटा हो तर पारम्परिक प्रणालीबाट यो प्रविधियुक्त वैयक्तिक सिकाइको प्रणालीमा जानु भनेको धेरै विद्यार्थी र शिक्षकका लागि गाह्रो भएको पनि महशुस गरिएको छ । त्यसैले वेलावेलामा दूर शिक्षा पद्धतिबाट उत्पादित विद्यार्थीलाई

दोस्रोकोटीको रूपमा हेरिने समस्याबाट हामी अलग छैनौं । खासगरी यसको मूल्याङ्न पद्धतिमा र प्रयोगात्मक पक्षमा धेरैले औंला उठाएका छन् ।

५. शिक्षकको समय र क्षतिपूर्तिको व्यवस्था

दूर शिक्षाका योजना, विकास वा मूल्याङ्न होस् पारम्परिक पद्धति भन्दा यो बढी समय लाग्ने र बढी मेहनत गर्नुपर्ने क्षेत्र हो । यसमा शिक्षक वर्गको निकै ठूलो अठोटको खाँचो पर्दछ । त्यसैले यसमा कार्यरत विशेषज्ञ शिक्षकहरूको कार्यवोझका आधारमा पारिश्रमिक र अन्य प्रलोभन एवम् उनीहरूको समय उपयोगको कदर गर्नु वाञ्छनीय देखिन्छ ।

६. प्रविधिबाट खतरा महशुस

बढ्दो प्रविधिको प्रयोगबाट शिक्षकको सङ्ख्यामा कटौती हुन सक्ने भ्रमले गर्दा पनि दूर शिक्षा पद्धति प्रति सम्बन्धित पक्ष लचिलो देखिएको छैन । प्रविधिकै प्रयोगका कारण आफ्नो क्षमता र अधिकारमा खतरा महशुस गर्ने शिक्षक पनि प्रशस्तै छन् । यस्ता धारणाहरूकै कारण आफ्नो जागीर खतरामा पर्न सक्ने डर उनीहरूमा पैदा भएको पाइएको छ ।

७. कानूनी मामिला

इन्टरनेटको बढ्दो प्रयोगका कारण दूर शिक्षा पद्धतिले copyright, शैक्षिक प्रयोजनका मामिला, वौद्धिक सम्पत्तिका हक, सामग्रीको गैरकानूनी प्रयोग, Hacker का समस्या एवम् भाइरस जस्ता रोगबाट ग्रस्त इन्टरनेटले कानूनी निकास पाउन सक्दैन ।

८. मूल्याङ्कन/प्रभावकारिता

दूर शिक्षाको प्रभावकारितालाई वल पुग्ने खालका अनुसन्धानका कमी एवम् दूर शिक्षा प्रणालीका कमजोर मूल्याङ्न प्रणाली दूर शिक्षाको वाधक बनेका छन् ।

९. पहुँच

जतिसुकै अवसरको समानता भनेता पनि अत्याधुनिक प्रविधिको प्रयोगमा सवैको पहूँच वरावर हुन सक्दैन । खासगरी थुप्रै प्रशिक्षक र थुप्रै विद्यार्थीहरू web-base instruction जस्ता प्रविधिबाट निकै टाढा छन् ।

१०. विद्यार्थी सहायता सेवा

दूर शिक्षा प्रणालीले विद्यार्थीलाई पुऱ्याउनु पर्ने सल्लाह सेवा, पुस्तकालय सेवा, तत्स्थान भर्नाका सेवा र आर्थिक सहायताका पक्ष प्रश्नचिन्हका रूपमा खडा भएका थुप्रै दूर शिक्षा प्रदायक समस्या छन् ।

यस्ता व्यवधानहरू हटाई दूर शिक्षा एवम् खुला सिकाइको व्यवस्थापन गर्न के कस्ता उपाय अपनाउन सकिन्छ त भन्ने तर्फ हेरौं ।

समाधानका उपायहरू

व्यवधान	समाधान
प्राविधिक जोहो	• स्रोतकेन्द्रहरूको स्थापना र समन्वय गर्ने । • विद्युतीय सञ्चार साधनको कार्यान्वयन गर्ने । • प्रशिक्षक नियन्त्रित विद्युतीय कक्षाकोठा पद्धति को योजनाको विकास र प्रयोगमा जोड दिने ।
प्राविधिक पूर्वाधार	• प्राविधिक स्रोतको व्यवस्थामा ध्यान दिने । • सञ्चार पूर्वाधारको विकास गर्ने । • Intranet को प्रयोगमा प्राथमिकता दिने । • प्रशिक्षकहरूलाई छनौटको अवसर प्रदान गर्न धेरै साधनहरूको (tools) उपलब्धता गराउने ।
प्राविधिक दक्षता र तालिम	• कर्मचारी, शिक्षक, शैक्षणिक डिजाइनर र स्रोतकेन्द्र संयोजकहरूका लागि on-going training सञ्चालन गर्ने । • आफ्नै कर्मचारी र शिक्षकमध्ये दूर शिक्षा प्रणालीमा दखल राख्नेहरूबाट तालिम सञ्चालन गर्ने ।
पाठ्यसामग्री विकास	• दक्ष प्राविधिक ठेक्कामा ल्याउने । • प्रशिक्षकहरूलाई दूर शिक्षा तालिम दिने । • विशेषज्ञहरूको pool बनाउने । • कोर्श लागू गर्नुपूर्व परीक्षणको व्यवस्था मिलाउने ।
सांगठिनक संरचना	• दूर शिक्षा प्रणालीका व्यवस्थापन र तालिममा एकरूपता ल्याउन केन्द्रीय संरचना लागू गर्ने ।
आर्थिक पक्ष	• लागत विश्लेषण गरी समय समयमा छलफल गर्ने । • लागत वचत हुने खालका प्रविधिपरक कक्षाकोठा जस्तै प्रशिक्षक नियन्त्रित विद्युतीय कक्षाकोठाको उपयोग गर्ने । • स्थानिय टेलिफोन प्रदायक संस्थासँग अनुरोध गरी telephone र internet को शुल्क घटाउन पहल गर्ने ।

कर्मचारी व्यवस्थापन	• अनुभवी व्यक्तिहरू उपयोग गर्ने । • दूर नियन्त्रण साधनहरूको जडान गरी तालिम, रुजुसूची र पृष्ठपोषणको व्यवस्था मिलाउने । • वाह्य विशेषज्ञसमेत रहने गरी दूर शिक्षा टोली गठन गर्ने । • नियम अन्तर्गत रहेर मात्र कर्मचारीको नियुक्ति र तालिम गर्ने ।
कार्यक्रमको व्यवसायीकरण	• सञ्चारका विभिन्न च्यानल प्रयोग गरी उही सूचना प्रवाह गर्ने । • आफ्ना क्रियाकलाप र उद्देश्यहरूको भिडियो बनाइ प्रचार गर्ने । • संस्थाको परिचय र काम झल्कने वुलेटिन, परिचय पुस्तिका र भित्ते पोस्टरहरू विकास गर्ने । • विशेष प्रकारको पूर्वाधार तयार भैसकेको अवस्थामा त्यसको नियमित मर्मत र सुधारमा ध्यान दिने । • भएकै प्रविधिबाट काम चल्ने भए त्यसैको उपयोगमा बढी ध्यान दिने र आफ्नो क्षमतामा वृद्धि भए पछि मात्र नयाँ प्रविधि भित्राउने ।
दूर शिक्षा अनुभव आदान प्रदान	• रणनीतिक योजना निर्माण र दूर शिक्षा नीतिको घोषणा गर्ने । • व्यवस्थापनसँग समझदारी र एकता प्रदर्शन गर्ने । • संस्थागतरूपमा कार्यकारीहरूलाई advocacy उपलब्ध गराई समर्थन जुटाउने ।
दूर शिक्षा सिकाइको विरुद्ध संस्थागत सिकाइ सम्बोधन	• दूर शिक्षा सम्बन्धी सेमिनार, गोष्ठीको आयोजना गर्ने । • प्रचलनमा आएको शिक्षण पद्धतिबाट नयाँ पद्धतिमा जाने पुलको व्यवस्था गर्ने (transition phase)।
दूर शिक्षाको योजना र कार्यान्वयन	• दूर शिक्षाको सिद्धान्त सार्वजनिक गर्ने । • पूर्वाधार निर्माण गर्ने । • कार्यान्वयनका निर्देशिका र यसका norms उपलब्ध गराउने ।

	• गुणस्तर विकासका उपाय पहिल्याउने । • स्थानीय स्तरमै दूर शिक्षाको सोच बनाउने नकी पश्चिमा मुलुकको नक्कल गर्ने ।
पाठ्यक्रम र कार्यक्रमको मूल्याङ्कन	• कार्यक्रम पूर्व, कार्यक्रम अवधि र कार्यक्रम पश्चात्का सूचना संकलन, मूल्याङ्कन र पृष्ठपोषणका व्यवस्था मिलाउने । • प्रशिक्षक र प्रशिक्षार्थीहरू बीच छलफल गराई कार्यक्रमका पृष्ठपोषण प्रदान गर्ने ।
विद्यार्थी उपलब्धी मापन र निरन्तरता	• निर्माणात्मक र निर्णयात्मक मूल्याङ्कन दुवैको प्रयोग गर्ने । • मापनमा पारम्परिक पद्धति भन्दा कम स्तरको हुने गरी कुनै सम्झौता नगर्ने । • नियमित मूल्याङ्कन व्यवस्था लागू गर्ने ।
विद्यार्थी अन्तर्क्रिया र सम्प्रेषणको अभाव	• प्रशिक्षक स्वयम् नै सक्रीय भइ विद्यार्थीका प्रोजेक्ट कार्यमा सरिक हुने प्रयत्न गर्ने । • सञ्चारमाध्यमको उपयोग गरी learner interaction बढाउने । • सम्बन्धको मानवीकरण गर्ने र विद्यार्थीप्रतिको चासो स्पष्ट पार्ने । • कक्षाकोठा सिकाइबाट दूर शिक्षा पद्धतिमा जाने कोर्सहरूको मात्रा बढाउँदै जाने ।
विद्यार्थी सल्लाह सेवा, पुस्तकालय पहुँच र प्रशासनिक सहयोग	• विद्यार्थी र कार्यक्रमबीच सह-सम्बन्ध निरन्तर राख्न संयोजकहरूको व्यवस्था गर्ने । • Web page बनाइ कोर्स रजिष्ट्रेशन, भर्ना, कक्षाका सूचना, सहायता प्रणाली जस्ता कुरा सार्वजनिक गर्ने । • On- line पुस्तकालयको व्यवस्था गर्ने
प्रविधिबाट खतरा महशुस गर्ने प्रशिक्षक	• भएकै शिक्षकबाट दूर शिक्षा पद्धति शुरुवात गर्ने । • दूर शिक्षा पद्धतिको विकास गर्न आवश्यक दरबन्दी थप गर्ने र भएकासँग सहकार्य गराउने । • दूर शिक्षा विधिको उपयोग गर्न प्रशिक्षक तालिमको विकास

	र कार्यान्वयन गर्ने । • पारम्परिक नोट टिप्ने कार्यलाई निरन्तरता दिने एवम् प्रविधि प्रयोगबाट त्रस्त प्रशिक्षकहरूलाई विस्तारै प्रविधि प्रयोग प्रति उत्प्रेरित गर्ने । • दृश्य सामग्री र श्रव्य दृश्य सामग्रीको प्रयोगबाट हुने फाइदा परीक्षण गरी सम्झाउने ।
दूर शिक्षा प्रति लचिलो हुन नसक्ने प्रशिक्षक	• दूर शिक्षा कार्यक्रममा सरिक प्रशिक्षकका लागि प्रलोभन र पुरस्कारको व्यवस्था गर्ने । • प्रशिक्षक निर्देशिकाको निर्माण गर्ने । • प्रशिक्षक तालिम कार्यक्रम विकास गर्ने ।
कोर्समा पहुँच पाउन विद्यार्थीमा भएको प्राविधिक समस्या	• सकेसम्म सजिलो प्रकारले उपलब्ध हुने कोर्स र software को व्यवस्था गर्ने । • Internet connection / direct dial को अवसरहरू उपलब्ध गराउने

माथि उल्लिखित उपायहरू अवलम्बन गर्न सके हाल दूर शिक्षा व्यवस्थापनमा देखा परेका धेरै जस्तो समस्याहरू समाधान हुन सक्ने देखिन्छ । मुल कुरा के हो भने दूर शिक्षा पद्धतिको कार्यान्वयन गर्ने संस्थाहरूमा शुरुको लगानी र त्यसपछि लगानीकर्ताको प्रतिवद्धता यसको व्यवस्थापनताई सफल बनाउने कारकतत्व हुन् । शुरुका केही वर्ष आर्थिक रूपले त्यति सान्दर्भिक नलागेता पनि क्रमशः यसको लागत घट्दै जाने र यो पद्धति प्रयोग गर्ने संस्थाहरू आत्मनिर्भर हुन सक्ने लगानीकर्तामा धैर्य हुनु पनि त्यतिकै जरुरी छ ।

References

Beaudoin, M. (1990): The instructor's changing role in distance education. The American Journal of Distance Education, 4(2), 21-29.

Catchpole, M. J. (1992): Classroom, open and distance teaching: A faculty view. The American Journal of Distance Education, 6(3), 34-44.

Dillon, C. & Walsh, S. M. (1992): Faculty: The neglected resource in distance education. The American Journal of Distance Education, 6(3), 5-21.

Duning, B. S., Van Kekerix, J. M., & Zaborowski, L. M. (1993): Reaching learners through telecommunications. San Francisco: Jossey-Bass.

Hardy, D. W. & Olcott, D. J. (1995): Audio teleconferencing and the adult learner: Strategies for effective practice. The American Journal of Distance Education, 9(1), 44-58.

Koontz, F. R. (1989): Critical barriers to the adoption of instructional television in higher education. Educational Technology, 45-48.

Olcott, D. J. (1991): Bridging the gap: Distance learning and academic policy. Continuing Higher Education Review, 55(1 & 2), 49-60.

Olcott, D. J. (1992): Policy issues in statewide delivery of university programmes by telecommunications. The American Journal of Distance Education, 6(1), 14-26.

Plater, W. M. (1995): Faculty work: Faculty time in the 21st century. Change (May/June), 23-33.

Smith, F. A. (1991): Interactive instructional strategies: Ways to enhance learning by technology. In Proceedings of the Seventh Annual Conference on Distance Teaching and Learning, 125-128. Madison, WI: University of Wisconsin.

Western Governors' Association. (1996): From vision to reality: A western virtual university. Denver, CO: Western Governors' Association.

Wolcott, L. L. (1993): Faculty planning for distance education. The American Journal of Distance Education, 7(1), 26-36.

Zane Berge, Ph.D.(NA): Perceptions of barriers to distance education in higher education & designing for; learning in online classrooms. http://cgi.umbc.edu/cgi-bin/dharley/misc/barrier_survey.pl.

बन्द विद्यालयका लागि खुला शिक्षा

- डा. विद्यानाथ कोइराला*

बन्दिलो संस्कार

तहगत संस्कारमा बन्दिलो बुद्धि हुन्छ । स्वीकार्ने बुद्धि, थोपर्ने बुद्धि, लुँइटेल र टाइला (सन्, २००५) को शब्दमा नछुट्याउने र नछुट्टिने बुद्धि । गणित ज्ञानको भण्डार कि क्रियाकलाप हो भनी नछुट्टिने नछुट्याउने बुद्धि । संस्कारको प्रतिनिधित्व हो कि अरु केही हो भनी नखुट्याउँने बुद्धि । अर्थात् रुढीवादी बुद्धि । शिक्षाको संरक्षणबादी (conservation) बोकेको बुद्धि । यो खाले बुद्धिले हाम्रो सूक्ष्म राजनीति (micro politics) चिनिन्छ । (जिरोक्स, सन्, १९९३) । चिन्तनको खाका (thinking frame) थाहा हुन्छ । सिकारूहरू कमजोर हुन्छन् भन्ने खाका । हामीले नै सिकाउनुपर्छ भन्ने खाका । आफ्नै ज्ञानलाई सर्वोपरि ठान्ने खाका । यसैले बन्दिलो संस्कारले हस्तान्तरणको शिक्षणकला (transferal pedagogy) बोक्छ । कक्षाको हस्तान्तरण । दिनभरी कक्षामै विद्यार्थी हुनुपर्छ भने कुराको हस्तान्तरण । यो र यस्तै हस्तान्तरणले सामाजिक कल्पनशीलता (social imaginary) गयो । यस अर्थमा शिक्षामा सामाजिक सम्बन्ध आएन । वोर्ज्यूको शब्दमा क्षेत्र (Field) आएन । सामाजिक अवस्थाको सजीव चित्रण भएको अवस्था (collective social positions) । न त यस्तो हस्तान्तरणले फुकोले भनेझैं "नवीन दृष्टिकोण" दियो । न त शक्ति सम्बन्धले कक्षाकोठाको विश्लेषण गर्ने दृष्टिकोण थियो । शिक्षक एवम् विद्यार्थीको विश्लेषण गर्ने दृष्टिकोण । ग्राम्सीको शब्दमा सामान्य चेतना (common sense) को दृष्टिकोण । वोर्ज्यूको शब्दमा वस्तुगत एवम् विषयगत (objectivity and subjectivity) आँखाले विषयवस्तु पढ्ने दृष्टिकोण (gates, 2000) । बर्नस्टिनको शब्दमा दृश्य र अदृश्य शिक्षणको उपस्थिति पर्गेल्ने दृष्टिकोण । यी विभिन्न दृष्टिकोणहरू समय समयमा देखा परेका छन् ।

संस्कार बदल्न "सबैको लागि शिक्षा"

आधुनिकोत्तर (post modern) सोचले हेर्दा चारओटा ज्ञानपुञ्ज छन् । हावी भएको पाश्चात्य ज्ञानपुञ्ज । वेवास्ता गरिएको पूर्वीय /जातीय /जात विशेषको ज्ञानपुञ्ज । पूर्व र पश्चिमको अन्तरसम्बन्ध खोज्ने ज्ञानपुञ्ज । जनजातीय क्षमता खोतल्ने ज्ञानपुञ्ज । कार्टर (सन् २००३) को चिन्तनमा पछिल्ला दुई ज्ञानपुञ्जले परस्पर विरोधी (binary opposite) बिन्दुबाट वैकल्पिक ज्ञान खोज्छ । लुप्त लेखन (hidden transcript) बाट ज्ञान पहिल्याउँछ । लोक गीतको ज्ञान । लोक

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कथाको ज्ञान/हाउभाउ (gesture) को ज्ञान । यस अर्थमा "सीमापारीको ज्ञान (Girous, 1993)। अरुहरूको ज्ञान ।

ज्ञानपुञ्ज खोज्ने सम्भावना कहाँ छ त ? कुन विषयमा "सबैका लागि शिक्षा कार्यक्रम" ले यस्तो ज्ञानपुञ्ज खोज्न सक्छ ? के उद्देश्यका लागि यो काम गर्न सक्छ ? कसरी सिकाउने शिक्षकहरू (educative teachers) लाई सिक्ने सिकाउँने (educational teachers) बनाउन सक्छ ? कसरी सिक्ने सिकाउनेहरूलाई प्रत्याभूति गर्ने शिक्षक (reflective teachers) बनाउन सक्छ ? कसरी आफ्नै संस्कारमा रमाउने (encultured) लाई अरुको संस्कारमा पुऱ्याउँन सक्छ ? कसरी अरुकै संस्कारमा रमाउने (accultured) लाई आफ्नो संस्कार सम्झाउन सक्छ ?

सबैका लागि शिक्षा दिने क्रममा सातओटा प्रतिवेदनहरू बने । विषयगत प्रतिवेदनहरू । ती सातओटै विषयगत प्रतिवेदनको विश्लेषणले भन्यो - खुला सिकाइ/दूर शिक्षा दुवैको ठाउँ छ । बाल विकास कार्यक्रम (early childhood development) को विषयगत प्रतिवेदनले त्यस्ता ६ ओटा ठाउँहरू देखाएको छ । अवधारणा स्पष्ट्याउन (पृ.६) । राष्ट्रिय प्रतिवद्धता सुनिश्चित गर्न । पृ.७) । अभिभावकहरूलाई सचेत बनाउन (पृ.८)। विकासका सहकर्मी (development partners) हरूबाट समन्वयात्मक कार्यक्रमको थालनी गर्ने परिवेश बनाउन (पृ १०)। स्थानीय निकायहरूलाई तालिम दिन (पृ.११) । सबैलाई सिक्ने सिकाउने अवसर दिन (पृ.१३) । अर्थात् ६ ओटा कार्यका लागि बालशिक्षा कार्यक्रमले दूर शिक्षा/खुला सिकाइको प्रयोग गर्न सक्छ ।

निशुल्क एवम् अनिवार्य शिक्षाको दस्तावेजले चाहिँ दशओटा ठाउँहरू देखाएको छ । खुला/दूर शिक्षाको प्रयोग हुने ठाउँ । सार्वजनिक मतैक्यता सुनिश्चित गर्न (पृ.५) । लैंगिक विभेद घटाउन (पृ.६) । अनिवार्य एवम् निशुल्क शिक्षा लागू गर्न चाहनेहरूको क्षमता बढाउन (पृ.८) । बहुलता सुहाउँदा बहुस्वरूपी कार्यनीतिहरू पहिल्याउन (पृ.१०) । सञ्चारका अनेकन साधनहरूको प्रयोग गर्ने परिवेश बनाउन (पृ.१४) । शिक्षा दिनु एवम् दिलाउनु अनिवार्य कार्य हो भन्ने सन्देश दिन (पृ. १५) । स्थानीय निकाय/सरकारमा अनिवार्य शिक्षा दिन सक्ने तागत छ भनी हनुमान चालीसा पढाउन (पृ.१५) । विकास कार्यकर्ताहरूलाई तताउन (पृ १९) । गुणस्तरीय शिक्षणका लागि शिक्षक तालिम दिन (पृ.२१) । विद्यालय छोडेका र नगएका दुवैथरि बालबालिकालाई घरदैलोमै शिक्षा दिन (पृ.२३) ।

जीवन जीविकाको सीप दिने तेस्रो विषयगत दस्तावेज छ । यो दस्तावेजले पनि पाँच ठाउँ खुला सिकाइ/दूर शिक्षा कार्यक्रम चल्न सक्ने सङ्केत गरेको छ । जीवन जीविकाका सीपहरू केके हुन् भनी राष्ट्रिय छलफल गर्न (पृ.१४) । विभिन्न जात, जातीय, एवम् धार्मिक समाजमा भएका जनजीविकाका सीपहरू पहिल्याउन (पृ.१४) । स्व-सिकाइ सामग्रीहरूको खोजी गर्न (पृ.१५) । मेडिया फोरम बनाउन (पृ.१६) । औपचारिक-अनौपचारिक शिक्षालाई एक अर्काका पूरक परिपाटी बनाउन (पृ.२२) ।

सबैका लागि शिक्षा दिने चौथो विषयगत दस्तावेज हो । सामाजिक एवम् लैंगिक समता । यो दस्तावेजले दश ठाउँमा खुला /दूर शिक्षा कार्यक्रम लागु हुन सक्ने बिन्दुहरू देखाएको छ । पूर्वीय जीवनत दर्शनले विभेद किन गऱ्यो भनी खोज्न, कहाँ विभेद भयो भनी पहित्याउँन, कहाँ विभेद पार्न सक्ने सम्भावना देखायो भनी पहिचान गर्न (पृ.२) । जीवनत सन्दर्भ र शास्त्रीय प्रावधानहरू कहाँ मिले वा मिलेनन् भनी खोज्न (पृ.३) । बहुल संस्कृतिको तागत पहित्याउन (पृ.४) । अपांग, दलित, जनजाति र धार्मिक समूहको चिनारी गराउन (पृ.५) । प्रत्येक समुदायमा महिलाहरूको स्थितिबोध गराउन (पृ.७) । बहुल समुदायको स्वगौरबको खोजी गर्न (पृ.१४) । बहुलताभित्र समायोजित सिकाइ कुना (learning corner) बनाउन (पृ.१६ र १७) । श्रव्य दृश्य सामग्रीको प्रयोग बढाउन (पृ.१९) । शिक्षा पाउने सुनिश्चित योजना (guaranteed education scheme) बनाउन (पृ. २७) । शिक्षाकर्मीहरूका लागि स्व-सिकाइको अवसर सुनिश्चित गर्न (पृ.३३) । पक्षीय (Pro) विज्ञहरू बनाउन (पृ.३५) ।

पाँचौ विषयगत दस्तावेजले जनजातिको शिक्षादीक्षाबारे चर्चा गर्छ । यस दस्तावेजले पनि ६ ओटा ठाउँमा दूर शिक्षा/खुला सिकाइलाई ठाउँ दिएको छ । पहिलो ठाउँ हो प्रत्येक जनजातिको आत्म सम्मान चिनाउने (पृ.३) । दोस्रो, ठाउँ उनीहरूको लिपि सिकाइ (orthography) को खोजी गर्ने (पृ.५) । तेस्रो, जनजातिहरूको शैक्षिकस्तरको अद्यावधिक जानकारी दिने (पृ.६) । चौथो, द्विभाषी र भाषिक स्थानान्तरण (language transfer) गराउन सघाउने (पृ.९)। पाँचौ, एकल वा बहुभाषी तालिम दिने (पृ.१०) । छैठौं, भाषिक उन्नयन (language promotion) का अनेकन सम्भावनाहरू खोजी प्रयोग गर्ने (पृ.१०) ।

विषयगत दस्तावेजको छैठौं विषयवस्तु प्रौढ साक्षरता हो । अघिल्ला दस्तावेजहरूले झैं यसले पनि पाँच ठाउँमा दूर शिक्षा/खुला सिकाइ कार्यक्रम खोज्छ । ती ठाउँहरू हुन् जात एवम् जातीय साक्षरताको अद्यावधिक जानकारी दिन (पृ.५)। साक्षरता अभियानका लागि आधुनिक सञ्चारका माध्यमहरूको परिचालन र प्रयोग गर्न (पृ.८) । स्थानीय निकायहरूलाई साक्षरता अभियानका नायक बनाउन (पृ.९)। औपचारिक एवम् अनौपचारिक शिक्षा जोड्ने पुलेसो कार्यक्रम शुरु गर्न (पृ.११) । अनौपचारिक शिक्षाका क्षेत्रमा कार्यगत अनुसन्धान (action research) को थालनी गर्न ।

सातौं विषयगत दस्तावेजले गुणात्मक शिक्षा सुनिश्चित गर्ने योजना बनाएको छ । यस योजनामा पनि चार ठाउँमा दूर शिक्षा/खुला सिकाइले प्रवेश पाउने सङ्केत मिल्छ । ती प्रवेशबिन्दुहरू हुन् । साक्षरता कार्यक्रम सञ्चालन गर्ने जिम्मेवार निकाय पहित्याउन र त्यसको क्षमता विस्तार गर्न (पृ.६) । आ-आफ्ना सन्दर्भ सापेक्ष गुणस्तरको परिभाषा गर्न (पृ. ११)। कुन जातजाति वा धार्मिक समुदायका कति बालबालिका स्कूलमा छन्, स्कूलमा हुनेहरूको शैक्षिक उपलब्धि के छ

भन्ने जस्ता जानकारीहरू दिन (पृ.२२) । आफ्नै गति र समय सापेक्ष हुनेगरी सिक्न चाहने व्यक्तिहरूको सिकाइ क्षमता बढाउन (पृ.२४) ।

माथिको विश्लेषणले देखायो कि दूर शिक्षा/ खुला सिकाइलाई सबैका लागि शिक्षाका विषयगत दस्तावेजहरूले ठाउँ दिएका छन् । (कार्की सन्, २००४) को ठम्याइमा पूर्ववर्ती ड्रपआउट्स (anticedent dropout) लाई शिक्षा दिने ठाउँ । उत्तरवर्ती ड्रपआउट्स (subsequent dropout) लाई पढाउँने ठाउँ । अर्को शब्दमा ड्रपआउटसको घटना दर (event dropout rate) घटाउने ठाउँ । ड्रप आउट्सको दर (statud dropout rate) घटाउने ठाउँ । (डोर्न, सन् १९९३) कार्की, सन् २००४ मा उधृत) को विचारमा केटाहरूको समस्या घटाउने ठाउँ । मूलधारको भाषा नजान्नेहरूलाई ड्रपआउट्स हुन नदिने ठाउँ (कार्की, २००४ पृ.१२८) । कार्टर (सन्, २००३) को शब्दमा आफ्नैपना (indigeneity) को खेती गर्ने ठाउँ । पाश्चात्य संसारलाई प्रकृति र विकासबीच तालमेल मिलाउन (harmony) लगाउने ठाउँ । एउटै शिक्षणकलामा ज्ञानशास्त्र (epistemology), ज्ञानस्रोत (ontology) र अध्ययनविधि (methodology) खोज्ने ठाउँ । ग्राम्सीको सोचमा पूँजिवादी कार्यशैली (mode या capitalism) सँग आवद्ध नेतृत्वको प्रधान्यता (hegeomony) पहिल्याउने ठाउँ । फुकोको चिन्तनमा शक्ति कहाँ बस्छ भनी पहिचान गर्ने ठाउँ । सम्बन्धमा ? केन्द्रमा ? जनस्तरमा ? कार्यान्वयनमा ? कहाँ शक्ति हुन्छ भनी छलफल गर्ने ठाउँ । दूर तथा खुला सिकाइले जनज्ञान खोज्न सक्छ । खोज्ने उपज्ञान गर्न (soundage) सक्छ । पाएको ज्ञानलाई विश्लेषणात्मक सामान्यीकरण (analytic generalization) गर्न सक्छ (Yin, 1994 cited in Gates, 2000) । स्वाभाविक सामान्यीकरण (naturalistic generalization) गर्न सक्छ (Stake, 1995 cited in Gates, 200) । आफ्नै दैनिकीमा ज्ञानको सामान्यीकरण गर्न सक्छ । द्वी वा बहुसांस्कृतिक समुदायले भोगेको तहगत एवम् असिल्दो सबन्ध (asymmetrical relationship) चिनाउँन सक्छ । प्रत्येक जातजातिका केटाकेटीको आ-आफ्नै सिक्ने शैली हुन्छ । बुझ्ने भाग मंगी हुन्छ भन्ने कुरालाई स्वीकार गराउन सक्छ (Gates, 2004) ।

निचोड

यो लेखबाट मैले एघारओटा निचोठहरू निकालें । पहिलो, निचोड हो विद्यालयहरू बन्दिला छन् । तिनले मात्रै सबैका लागि शिक्षा पुऱ्याउनन् । त्यसैले तिनमा खुला मोडहरू भित्र्याऔं । विषयगत मोड कलागत मोड । स्थानगत मोड । दोस्रो, निचोड हो । मेडियाहरू जनदैलोमा घुसिसके । तिनको अधिकतम दोहन गरौं र सबैलाई शिक्षा दिऔं । तेस्रो, निचोड हो हस्तान्तरकका दिनहरू गए । त्यसैले आदानप्रदान गरौं । शिक्षणकलाको आदानप्रदान । विषयवस्तुको आदानप्रदान । चौथो, निचोड हो एकल अध्याईले नपुग्ने भयो । बहुल अध्याई खोजौं । बहु अर्थमै काम गर्ने सहमति (consentual consensus) खोजौं । पाँचौं, निचोड हो, निश्चयवादी चिन्तनका दिन गए । तसर्थ एउटै चिन्तनको पनि संस्कारगत विकल्पहरू खोजौं । व्यवहारगत विकल्पहरू

खोजौं । भावनागत विकल्पहरू खोजौं । एउटै विषयवस्तुलाई बहु सिद्धान्तहरूले हेर्ने चिन्तन खोजौं । छैठौं निचोड हो विद्यालयमै पढ्नु पर्छ भन्ने दिनहरू टाढिए । जहाँ पनि शैक्षिक संस्कार खोज्ने दिनहरू भित्रिय । मेडियाले दिने शिक्षाका दिनहरू । त्यसैले खुला शिक्षालाई घरदैलोमा लगौं । सातौं निचोड हो । विद्यालयीय शिक्षाबाटै सबैको निम्ति शिक्षा सुनिश्चित हुन्छ भन्ने दिनहरू टुंगिए । विद्यालयले अनौपचारिक शिक्षा पनि चलाउने दिनहरू आए । समुदायको लागि शिक्षा /समुदायका बालबालिकाको शिक्षा । अर्थात् विद्यालयले खुला/दूर शिक्षा कार्यक्रमहरू पनि चलाउने मोडहरू रोजौं । आठौं निचोड हो सबैको लागि शिक्षा दिने विषयगत दस्तावेजहरू (thematic reports) को आशय बुझौं । तिनका प्रत्येक विषयगत दस्तावेजहरूले तोकेका कामहरूमा दूर शिक्षा/ खुला सिकाइका कार्यक्रमहरू आवद्ध गरौं । नवौं निचोड हो खुला /दूर शिक्षाका कार्यक्रमहरूले इंगित गरेका अनेकन सम्भावनाहरू खोजौं । दशौं निचोड हो बन्दिलो शिक्षाले औपचारिक बन्न सिक्यौं । खुला/दूर शिक्षा कार्यक्रम सञ्चालन गरेर लचिलो बन्न सिकौं । सोचमा लचिलो । विकल्पमा लचिलो कार्यक्रममा लचिलो /परीक्षणमा लचिलो । एघारौं निचोड हो । दवावी ज्ञान (dominant knowledge) को मात्रै मुख नताकौं । स्थानीय ज्ञान खोजौं । त्यही ज्ञानको अद्यावधिक गरौं । विश्वव्यापीकरण गरौं अर्थात् ज्ञानकुन्जको अन्तरसम्बन्ध पहिल्याऔं ।

सन्दर्भसामग्री

MOES/ UNESCO (2003): Meeting the goals of education for all. Thematic report No.1. Early childhood development. Kathmandu.

MOES/ UNESCO (2003): Meeting the goals of education for all. Thematic report No.2. Free and compulsory primary education. Kathmandu.

MOES/ UNESCO (2003): Meeting the goals of education for all. Thematic report No.3. Appropriate learning and life-skill education Kathmandu.

MOES/ UNESCO (2003): Meeting the goals of education for all: Thematic report No.4. Ensuring social equity and gender parity. Kathmandu.

MOES/ UNESCO (2003): Meeting the goals of education for all. Thematic report No.5. Ensuring the rights of the indigenous peoples and linguistic minorities. Kathmandu.

MOES (2003): Meeting the goals of education for all. Thematic report. No.7. Improving quality of basic and primary education Kamandu. Author.

Luitel, B. and Taylor, P. (2005): Overcoming culturally dislocated curricula in transitional society: An auto-ethnographic simony towards pragmatic wisdom. paper presented at .

The annual meeting of the American Educational Research Association (AERA), SIG(Self-study of teacher education practices Montreat, 11-15 April 2005.

Carter, L. (2003): Thinking differently about cultural diversity: Using post-colonial theory to (re) read science education. A paper published online in Wiley Inter science (WWW.interscience- Wiley.com)

Karki, V.B. (2004): Perceived antecedents and subsequent activities of primary school dropouts in Nepal. Unpublished thesis the US George Washington University.

Gates, P. (2000): A study of the structure of the professional orientation of two teachers of mathematics. Unpublished Ph.D thesis, University of Nottingham.

Geroux, G.A. (1993): Border crossings: cultural workers and the politics of education. New York.

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अनौपचारिक शिक्षाका विविध प्रारूपहरू

नेपालमा अनौपचारिक शिक्षाका विभिन्न प्रारूपहरू भेटिन्छन् । प्रत्येक प्रारूप अन्तर्गत नरम र कडा (soft र hard) दुवै प्रविधि प्रयोग गरी शिक्षार्थीसम्म पुग्ने गरिन्छ । पारम्परिक प्रारूपले मौलिक विधिमार्फत धार्मिक तथा सांस्कृतिक ज्ञान तथा सीप प्रदान गरिरहेको छ । यस्ता ज्ञान तथा सीप, पुराण, पुजापाठ, धार्मिक प्रवचन आदिबाट शिक्षार्थीसम्म पुऱ्याइन्छन् । यो प्रारूपलाई मौलिक साक्षरताको संज्ञा पनि दिन सकिन्छ । अनौपचारिक शिक्षाको दोस्रो प्रारूपले कुनै विकासका निश्चित क्षेत्र सम्बन्धी जानकारी प्रदान गर्दै आएको छ (जस्तै: स्वास्थ्य, कृषि, परिवार नियोजन, पशु चिकित्सा इत्यादि) । यी जानकारीहरू प्राय: रेडियो, टि.भि. मार्फत प्रदान गरिन्छन् । तर कहिलेकाहीं भेटघाट विधिमार्फत पनि यस्ता जानकारीहरू बाँडिन्छन् । त्यस्तै आधुनिक शिक्षासँगै व्यापक रूपमा चलाएको अनौपचारिक शिक्षाको तेस्रो प्रारूप हो-निश्चित समयसम्म नियमित कक्षा सञ्चालन गरी पढ्ने, लेख्ने, सीप सिकाउने साक्षरता कार्यक्रमहरू । यी बाहेक सीप सिकाउने चौथो प्रारूप पनि छ । त्यो हो - आफ्नो पारिवारिक पेसासम्बन्धी ज्ञान तथा सीप आफ्ना छोराछोरीहरूलाई सिकाउने । यस्ता सीप प्राय: अवस्थिति सिकाइ (situated learning) वा काम गर्दै सिक्दै गर्ने सिकाइ (apprenticeship learning) मार्फत शिक्षार्थीले सिक्छन्, अर्थात् कार्यथलोमै बसेर सीप सिक्ने ढाँचा ।

दूर शिक्षामार्फत शिक्षक/शिक्षिकाहरूलाई दिइने तालिम अनौपचारिक शिक्षाको पाँचौ प्रारूप हो भने औपचारिक विद्यालय जान नसक्ने बालबालिकाहरूको निम्ति सञ्चालित प्राथमिक तहको शिक्षा अनौपचारिक शिक्षाको छैठौं प्रारूप हो । टि.भि. तथा भेटघाट दुवै प्रयोगगरी एक वर्षे वि. एड.को औपचारिक डिग्री प्रदान गर्ने पद्धति अनौपचारिक शिक्षाको सातौं प्रारूप हो । साक्षरता सीप सिकेका शिक्षार्थीलाई चिट्ठीपत्रमार्फत पढ्ने, लेख्ने सीपको निरन्तरता दिइरहनु र उत्प्रेरणा जगाइरहनु आठौं प्रारूप हो । वैदेशिक रोजगारमा जान चाहनेको निम्ति प्रदानगरिने सीपमूलक शिक्षा अनौपचारिक शिक्षाको नवौं प्रारूप अन्तर्गत पर्छ ।

माथिको छलफलले नेपालमा नियमित भेटघाट, अनियमित भेटघाट आधुनिक प्रविधि, कार्यमूलक जस्ता अनेकन विधिहरूको प्रयोगगरी अनौपचारिक शिक्षा प्रदान गरिदै आएको देखायो । यी

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विधिहरूमध्ये तेस्रो र चौथो चाहीं दूर शिक्षा कार्यक्रमहरूमा अत्याधिक मात्रामा प्रयोग भएको देखिन्छ ।

अनौपचारिक शिक्षा र दूर शिक्षाकोबीचको अन्तरसम्बन्ध

अनौपचारिक शिक्षा औपचारिक पद्धतिभन्दा भिन्न तर उस्तै गुणस्तरको शिक्षा प्रदान गर्न सक्ने पद्धति हो । तसर्थ अनौपचारिक शिक्षाको कार्यान्वयन विधि पनि भिन्न हुन्छ । यसले शिक्षार्थीसम्म पुग्न एकै साथ विभिन्न विधि एवम् प्रविधिको प्रयोग गर्न सक्छ । यस अर्थमा दूर शिक्षा अनौपचारिक शिक्षा पद्धतिको एउटा माध्यम हो । अर्थात् अनौपचारिक शिक्षा पद्धतिअन्तर्गत शिक्षा प्रदान गर्ने एउटा माध्यम दूर शिक्षा हो ।

दूर शिक्षाले परैबाट शिक्षार्थीको सिकाइ आवश्यकता पूरा गर्न चाहिने आवश्यक सामग्री प्रोत्साहन र शिक्षण विधि पुऱ्याइरहन्छ । तर दूर शिक्षा भन्दैमा शिक्षार्थीहरूलाई सधैं टाढैबाट मात्र सेवा पुऱ्याउनु पर्छ भन्ने होइन । अनियमित भेटघाट विधि पनि दूर शिक्षाकै एउटा बाटो हो । टाढैबाट होस् वा बेलाबखत भेटघाटमार्फत होस् दूर शिक्षामार्फत लिने र दिने काम नियमित औपचारिक पद्धतिभन्दा बाहिरै बसेर हुन्छ । तसर्थ प्रयोग गर्न सक्छन् तर यो विषय यो अनौपचारिक शिक्षा पद्धति अन्तर्गत एउटा माध्यम हो । यो माध्यम औपचारिक पद्धतिले पनि यहाँ लेखका बस्तुभित्र पर्दैन । Lentell (Binns, सन् २००२ द्वारा उद्दत्) को भनाइमा दूर शिक्षाको मूल्य (value) (१) मानवका लागि खुला, (२) स्थानका लागि खुला, (३) विधिकोलागि खुला, र (४) विचारको लागि खुला हो । Lentell को यो अवधारणाले दूर शिक्षा र औपचारिक शिक्षाबीचको अन्तर सम्बन्ध बुझ्न मद्धत गर्छ । "खुला" शब्द वा अवधारणा अनौपचारिक पद्धतिसँग मेल खान्छ । Lentell को अवधारणाले दूर शिक्षामा सिक्ने सिकाउने माध्यम, विधि वा सामग्रीमा लचकता हुन्छ भन्ने जनाउँछ । यसले शिक्षार्थीलाई आफ्नो सिक्ने प्रक्रियामाथि नियन्त्रण गर्न दिन्छ भन्ने पनि जनाउँछ । यी लक्षणहरू अनौपचारिक शिक्षाको पनि विशेषता हुन् । यिनले अनौपचारिक शिक्षाको लचकता र व्यापकतालाई पनि जनाउँछ ।

Lentell कै अवधारणाबाट हेर्दा नेपालमा दूर शिक्षा र अनौपचारिक शिक्षाबीच सम्बन्ध कस्तो छ त ? अनौपचारिक शिक्षाको अनुभवले देखाउँछ कि नेपालमा सीमित उद्देश्य बोकेर हिँडेका संस्थाहरू छन् । उदाहरणका लागि: कृषि क्षेत्रले कृषिमा सुधार ल्याउने, स्वास्थ्य क्षेत्रले स्वास्थ्यमा सुधार ल्याउने, अनौपचारिक शिक्षा केन्द्रले प्रौढलाई पढ्न, लेख्न र साधारण सीप तथा ज्ञानमार्फत जनस्तरमा सुधार ल्याउने तथा बालवालिकालाई ३ देखि ५ कक्षा सम्मको शिक्षा दिने, शिक्षा शास्त्र संकाय डीनको कार्यालयले एक वर्षे वि.एडको डिग्री प्रदान गर्ने । यस्ता सीमित उद्देश्य र निश्चित क्षेत्र (शिक्षार्थी, पेसा, विषयबस्तु) बाट निर्देशित कार्यक्रमहरू सबैखाले मानव जातिका लागि खुला हुँदैनन् अर्थात् यस्ता कार्यक्रममाथि सीमित व्यक्तिहरूकै मात्र पहुँच हुन्छ । र यी कार्यक्रमहरू सीमित व्यक्तिहरूकै लागि मात्र उपयोगी हुन्छन् । त्यस्तै भौगोलिक

दृष्टिकोणले अति पिछडिएका वा छरिएका बस्तिहरूमा बसोबास गर्ने व्यक्तिहरूलाई न अनौपचारिक शिक्षा न दूर शिक्षाले नै समेटेको छ । समेटे पनि सीमित अवधिसम्म मात्र । शहरमै बसोबास गर्ने कामकाजी मानिसहरूलाई आफ्नो शैक्षिक योग्यता बढाउँदै लैजाने बाटो पनि यिनले दिँदैनन् । अनौपचारिक र दूर शिक्षा कार्यक्रमहरूले जुनसुकै स्थानमा जस्तो अवस्थामा बस्नेका लागि पनि सजिलै पढ्न पाउने व्यवस्था मिलाउन सकेका पनि छैनन् ।

विधिका दृष्टिकोणबाट हेर्दा पनि नेपालको अनौपचारिक र दूर शिक्षाले त्यति फड्को मार्न सकेका छैनन् । शिक्षार्थीको विविधता, भौगोलिक विविधता र सिक्न/सिकाउन पर्ने विषयको विविधतालाई हेर्दा विधिमा पनि विविधता हुनु अत्यन्त जरुरी देखिन्छ । तर यो विविधता ल्याउन सकिएको छैन ।

विचारको लागि खुला कार्यक्रमले शिक्षार्थी केन्द्रित शिक्षण/सिकाइ भन्ने बुझाउँछ । तर नेपालमा विद्यमान अनौपचारिक र दूर शिक्षा केन्द्रबाटै निर्देशित पाठ्यक्रम एवम् विषयहरूमा मात्र सीमित छन् । यसो हुँदा यी अनौपचारिक र दूर शिक्षा विचारमा पनि खुला छन् भन्न सकिने अवस्था रहेन । माथिको छलफलले अनौपचारिक र दूर शिक्षालाई जोड्ने लचकता, ब्यापकता र शिक्षार्थी केन्द्रीत अवधारणा वा विशेषताहरू नेपालको संदर्भमा प्रायः छैनन् नै भन्दा पनि फरक नपर्ने देखायो ।

दूर शिक्षा र अनौपचारिक शिक्षा आवद्ध भएका केही उदाहरणहरू

दूर र खुला सिकाइमार्फत अन्य देशहरूमा विभिन्न तह र प्रकारका शैक्षिक कार्यक्रमहरू सञ्चालन भइरहेका प्रसस्त उदाहरणहरू छन् । यी माध्यमहरूले माध्यमिक विद्यालयमा पढ्ने शिक्षार्थीदेखि शरणार्थीसम्मलाई शैक्षिक सेवा प्रदान गरेको पाइन्छ । केही उल्लेख्य उदाहरणमा, सोमालियाको शरणार्थी तथा घुमन्ते (nomads) जातिको निम्ति चलाएको दूर शिक्षा कार्यक्रम । यो कार्यक्रमले प्राथमिक तहको शिक्षक तालिम, सेवाकालीन शिक्षक शिक्षा, प्रौढ साक्षरता एवम् निरन्तर शिक्षा प्राथमिक स्वास्थ्य सेवा शिक्षा र प्रविधिसम्म प्रदान गरेको थियो (Bradley, सन् २००१) । दूर शिक्षामार्फत त्यस्तै अर्को अफ्रिकी देश सुडानमा (Sudan open learning organization) औपचारिक र अनौपचारिक दुवैखाले शैक्षिक कार्यक्रम उपलब्ध गराएको थियो अर्थात् साक्षरतादेखि क्याम्ब्रिज युनिभरसिटीको 'O' Level सम्म ।

त्यस्तै बेलायतको International Extension College ले ५६ विकासोन्मुख देशहरूमा गरेको अनुसन्धानले पनि अनौपचारिक र दूर शिक्षा अन्तर्गत शिक्षार्थीहरूलाई साक्षरता सीप, अनौपचारिक शैक्षिक डिग्री, प्राविधिक शिक्षा, सीपमूलक शिक्षा इत्यादि प्रदान गरिदै आएको देखायो (Dodds, सन् १९९६) । यी उदाहरणहरूले (क) अनौपचारिक शिक्षाको क्षेत्र औपचारिक शिक्षाको जतिनै ब्यापक हुन सक्छ । (ख) जुनै तहको औपचारिक शिक्षा कार्यक्रममा पनि दूर

शिक्षाको माध्यम प्रयोग गर्न सकिन्छ र (ग) अनौपचारिक र दूर शिक्षाले जस्ता खाले शिक्षार्थीलाई पनि समेट्न सक्छ भन्ने पाठहरू सिकाए । यी पाठहरूले अनौपचारिक शिक्षा र दूर शिक्षालाई अलग्याउन गाह्रो हुने पनि जनायो । जुन हाम्रो परिस्थितिमा हुँदै आइरहेछ । यी दुईलाई अप्राकृतिक ढङ्गमा छुट्याएर कार्यक्रम चलाउने र बिना समन्वय आ-आफ्ना सीमित उद्देश्य बोकेर हिँड्ने प्रवृत्तिले गर्दा नेपालमा अनौपचारिक शिक्षा र दूर शिक्षाको परिभाषा तथा बुझाइ नै संकीर्ण बनाइदियो । यो प्रवृत्तिले नै अनौपचारिक शिक्षा के हो ? दूर शिक्षा के हो ? यिनका कार्य क्षेत्रहरू के र कस्ता हुने भन्नेमा पनि अन्यौल सिर्जना गरायो ।

अनौपचारिक शिक्षा र दूर शिक्षासँग सम्बद्ध मुद्दाहरू

माथिका छलफल तथा राष्ट्रिय एवम् अन्तर्राष्ट्रिय उदाहरणहरूले अनौपचारिक शिक्षा र दूर शिक्षाबारे केही मुद्दाहरू उजागर गरेका छन् । ती मुद्दाहरूलाई तल छुट्टाछुट्टै प्रस्तुत गरिएको छ ।

(क) परिभाषामा द्विविधा

बेलायतको International Extension College ले ५६ विकासोन्मुख देशहरूको ७३ ओटा परियोजनाबारे गरेको अध्ययनले यो मुद्दा उल्लेख गरेको छ । विस्तारित शिक्षा जस्तैः कृषि, स्वास्थ्य, पशुपालन इत्यादि सम्बन्धी ज्ञान तथा सीप प्रदान गर्न सञ्चालन गरिने कार्यक्रमहरूलाई सम्बन्धित संस्था वा निकायहरूले अनौपचारिक शिक्षा नै ठानेनन् । यस्ता उदाहरण नेपालमा पनि देखिएका छन् । अर्थात् औपचारिक शिक्षा पद्धतिमार्फत तहगत शिक्षा प्राप्त गर्नु मात्र "शिक्षा" र प्रौढहरूले साक्षरता कक्षा मार्फत लेख्न, पढ्न र हिसाब गर्न जान्नु मात्र "अनौपचारिक शिक्षा" ठान्ने मनोवृत्ति ।

(ख) नवीनताको उपेक्षा

अनौपचारिक शिक्षा एवम् दूर शिक्षामा नयाँ नयाँ विधिहरूको प्रयोग नभएका होइनन् । चिट्ठी पत्रमार्फत साक्षरता सीपलाई निरन्तरता दिने प्रयास होस् वा अनियमित भेटघाटमार्फत निरन्तर शिक्षा दिने काम । यस्ता नवीनताहरू प्रयोग गरिन्छन्, जाँचिन्छन् र उपेक्षा गरिन्छन् फलस्वरूप सिक्ने सिकाउने विधि उही परम्परिक ढाँचामै फिर्ता हुन्छ । यो अनौपचारिक साक्षरता कार्यक्रमको विश्वव्यापी मुद्दा हो । कहिले भौतिक त कहिले आर्थिक त कहिले शिक्षार्थीहरूको उत्प्रेरणाको तह देखाउँदै नवीनताहरू पलायन हुन्छन् ।

(ग) दूर शिक्षा र अनौपचारिक शिक्षालाई अलग्याउने प्रवृत्ति

अनौपचारिक शिक्षालाई व्यापक बनाउन अर्थात् विविध भौगोलिक, आर्थिक, सांस्कृतिक तथा शैक्षिक अवस्थाका व्यक्तिहरूसम्म पुऱ्याउन दूर शिक्षाको प्रयोग अपरिहार्य छ । तर

जब यी दुईलाई छुट्टाछुट्टै रूपमा एवम् सीमित उद्देश्य पूरागर्न प्रयोग गरिन्छ तब अनौपचारिक शिक्षाले व्यापकता हासिल गर्न सक्दैन ।

(घ) दूर शिक्षामा लगानीको व्यापकता

दूर शिक्षा शैक्षिक समस्या हल गर्ने छिटो र सजिलो उपाय होइन (Bradley, सन् २००१) । यसलाई प्रभावकारी बनाउन दक्ष योजना, दक्ष जनशक्ति र पर्याप्त आर्थिक लगानीको जरुरत पर्छ । नियमित पद्धति वा औपचारिक पद्धतिमा विभिन्न कारणले गर्दा आउन नसक्नेहरूका लागि शैक्षिक अवसर उपलब्ध गराउन अनौपचारिक पद्धति ल्याइन्छ । तसर्थ यस पद्धतिमा आउनेहरूका निम्ति विशेष व्यवस्था तथा विविध प्रविधिहरूको प्रयोग गरिनु पर्छ । जस्तैः भौगोलिक अवस्था, पढाइको स्तर, सिकाइ सीप, विषयबस्तु, लैंगिक भिन्नता तथा उमेरको विविधतालाई ध्यानमा राख्दै विविध प्रविधिको प्रयोग गर्नु पर्ने हुन्छ । थोरै बजेट, अदक्ष मानवीय स्रोत र सीमित समय बोकेर बस्ने अनौपचारिक शिक्षा क्षेत्रले विविध प्रविधि, विषयबस्तु र व्यवस्थापनको माग तथा शैक्षिक आवश्यकता पूरा गर्न सक्दैन ।

उपाय

पारिभाषिक द्विविधा कसरी कम गर्ने ?

अनौपचारिक र दूर शिक्षाको परिभाषामा व्याप्त द्विविधा कम गर्न मुख्यतः दुई तहमा काम गर्नु पर्ने हुन्छ । पहिलो सैद्धान्तिक मतैक्यता कायम गर्ने । यसको निम्ति राष्ट्रिय सोच बाहिर आउनु जरुरी हुन्छ । अर्थात् अनौपचारिक शिक्षाले नेपालको परियोजनामा के जनाउँछ ? र दूर शिक्षाले नेपालको परिवेशमा के जनाउँछ ? यी प्रश्नको जवाफ शिक्षासंग सम्बन्धित राष्ट्रिय सोच, नीति तथा लक्ष तयगर्नेहरूले गरिदिनुपर्छ । उक्त तहले राष्ट्रिय अवधारणा अघि ल्याउनुपर्छ । नेपालको अनौपचारिक शिक्षाको राष्ट्रिय नीति के हुने ? के कस्ता माध्यमहरूको प्रयोग गरी कुन कुन तहको शिक्षा अनौपचारिक पद्धतिमार्फत उपलब्ध गराउने ? भन्ने निर्णय गर्नुपर्छ । दोस्रो, कार्यक्रमको तहमा मतैक्यता हुनुपर्छ अर्थात् कार्यगत मतैक्यता । यो तहमा शिक्षार्थी, स्थान, शैक्षिक तह, विधि एवम् प्रविधिको संदर्भमा कसले के के जिम्मा लिने ? दोहोरोपन कसरी कम गर्ने ? सरकारी र गैर सरकारी निकायहरूबीच कार्यक्रमको तहमा समझदारी एवम् साझेदारी कसरी कायम गर्ने भन्ने जस्ता कार्यगत समस्याको समाधान गर्नुपर्छ । यसको निम्ति केन्द्रदेखि गाउँ तहसम्मको सरकारी र गैर सरकारी निकायबीच कार्यगत समन्वय हुनुपर्छ । केन्द्रमा अनौपचारिक शिक्षा र खुला शिक्षा महाशाखाबीच समन्वय गरिनुपर्छ भने गाउँ तहमा पुग्दा अनौपचारिक शिक्षामा काम गर्ने गैर सरकारी संस्था र स्थानीय निकायको बीच समन्वय हुनुपर्छ ।

सफल नवीनताहरूलाई निरन्तरता कसरी दिने ?

जबसम्म अनौपचारिक शिक्षालाई संस्थागत रूप दिइँदैन तबसम्म नवीनतालाई पनि निरन्तरता दिन सकिँदैन । अनौपचारिक शिक्षा पद्धतिको रूपमा विकास भएपछि अनौपचारिक पद्धतिको जस्तै यसको पनि केन्द्रदेखि गाउँसम्म आफ्नै जिम्मेबार प्रशासनिक साथै प्राविधिक निकायहरू हुन्छन् । स्थायित्व पाए पछि नवीनताहरूको मूल्याङ्कन गरिन्छ र तिनका दस्तावेजहरू बन्न थाल्छन् । जसरी परियोजनाको रूपमा शुरु गरिएको अनौपचारिक प्राथमिक शिक्षालाई नियमित कार्यक्रमको रूप दिइयो त्यसैगरी यस्ता अन्य सफल नवीनताहरूले पनि स्थायित्व पाउन सक्ने सम्भावना हुन्छ । यस पद्धतिमा कार्यरत व्यक्तिहरूलाई पनि नवीनतासंग चिनारी गराउने, उत्प्रेरणा जगाउने र प्रोसाहित गर्न मद्धत पुऱ्याउँने काम गर्छ ।

अनौपचारिक शिक्षा र दूर शिक्षालाई कसरी गाँस्ने ?

माथि उल्लेख गरे झै केन्द्रीय तहमै यी दुईबीच कार्यगत मतैक्यता र साझेदारी हुनुपर्छ । अनौपचारिक शिक्षाका कुनकुन क्रियाकलाप, र तहमा दूर शिक्षाको प्रयोग गर्ने भन्ने निर्णय दुई निकायहरूले संयुक्तरूपमा गर्नुपर्छ । कुन निकायले के कस्ता स्रोत वा प्रविधि उपलब्ध गराउने ? जिल्ला वा गाउँ तहमा कस्को के जिम्मेवारी हुने ? यस्ता प्रश्नको जवाफ पनि जिम्मेवार निकायहरूबाटै आउनुपर्छ अर्थात् सरकारी निकायहरूबीच नै सोच र कार्यगत सम्बन्ध हुनुपर्छ ।

लगानी कसरी बढाउने ?

लगानी शब्दले आर्थिक, मानवीय र भौतिक तीनओटै स्रोतहरूलाई जनाउँछ । आर्थिक लगानीको समस्या कम गर्न मानवीय तथा भौतिक स्रोत बाँड्न सकिन्छ । सरकारी निकायहरूबीच साथै सरकारी र गैर सरकारी निकायहरूबीच स्रोत साझेदारीको नीति अपनाउनु पर्छ । मानवीय लगानी अभिवृद्धि गर्न गुणस्तर नै बढाउनु पर्छ । कक्षाकोठासम्मै शैक्षिक गुणस्तर उच्च भएका साथै अनौपचारिक शिक्षा प्रति सकारात्मक मनोवृत्ति राख्ने व्यक्तिहरूको उपयोग गर्नुपर्छ । शैक्षिक सामग्री तथा भौतिक पूर्वाधारहरू एक अर्कासंग बाँड्ने नीति लिएमा भौतिक स्रोतमाथिको भार पनि कम हुन जान्छ । यदि अनौपचारिक शिक्षालाई पद्धतिकै रूपमा विकास गर्ने हो भने त यसले औपचारिक पद्धति सरहनै आर्थिक सहयोग पनि पाउनु पर्छ ।

निचोड

अनौपचारिक शिक्षा र दूर शिक्षालाई छुट्टाछुट्टै निकायको रूपमा विकसित गर्नु उचित हुँदैन । प्रशासनिक सरलताका निम्ति अनौपचारिक र दूर शिक्षाका कार्यक्रमहरूलाई छुट्याइए पनि यी दुईबीच कार्यगत समन्वय हुनु अत्यन्त जरुरी छ । किनकि अनौपचारिक शिक्षा र दूर शिक्षा एक अर्काका पूरक हुन् । अनौपचारिक शिक्षाका सहभागी वा शिक्षार्थीसम्म पुग्न दूर शिक्षाका प्राविधिक स्रोतहरू व्यापक रूपमा प्रयोग गर्न सकिन्छ । यसो गर्नाका लागि अनौपचारिक

शिक्षाको विद्यमान अवधारणालाई तन्काउनु पर्छ । सोअनुरूपको नीति तथा रणनीतिहरू बनाइनुपर्छ । कार्यक्रम तहमा कार्यगत मतैक्यता वा समन्वय हुनुपर्छ । अहिलेका कार्यक्रमहरू तथा स्रोत परिचालनमा बयापकता अपनाउनु पर्छ ।

सन्दर्भसामग्री

Binns, F. (July, 2002): Wider community impact of open and distance education.,A paper presented in Pan Commonwealth Conference in Durban.

Bradley, J. (July, 2001): Distance education for refugees: The IES experience. A paper for NGO Education Forum.

दूर शिक्षा तथा खुला सिकाइमा गुणस्तरसँग गाँसिएका केही सवालहरू

- दीपक शर्मा*

पृष्ठभूमि

वर्तमान परिवेशमा दूर शिक्षा तथा खुला सिकाइको महत्व दिन प्रतिदिन बढ्दो छ । खुला शिक्षाको परम्परागत पत्राचार विधि आधुनिकतातर्फ अग्रसर हुँदै गएपछि खुला विद्यालय/विश्वविद्यालयको स्थापना र विस्तारका कुराहरू बढी अभ्यासमा आएका देखिन्छन् । हुन त हाम्रो सन्दर्भमा दूर शिक्षा भन्ने वित्तिकै धेरैले रेडियो शिक्षालाई बुझ्ने गरेको पाइन्छ । दूर शिक्षाका माध्यमभित्र रेडियो प्रसारण मात्र होइन छापिएका स्वाध्ययन सामग्री, श्रव्य दृश्य सामग्रीहरू, टेलिभिजन प्रसारण, पत्राचार, इमेल, इन्टरनेट सबै पर्दछन् । त्यसैले विविधता र लचकता दूर शिक्षा तथा खुला सिकाइको मौलिक विशेषता हो भन्न सकिन्छ ।

मूलतः दूर शिक्षा तथा खुला सिकाइ शिक्षाका विभिन्न तहमा पहुँच वृद्धि गर्ने प्रयास हो । विभिन्न कारणले विद्यालय/महाविद्यालयका औपचारिक शिक्षा प्रणालीमा समेटिन नसक्नेहरूका लागि यसले उपयुक्त अवसर प्रदान गर्दछ । हाम्रो जस्तो अल्प विकसित देश जहाँ शिक्षामा भौगोलिक विभेद छ, लैंगिक विभेद छ, जहाँ सुविधाविहीन वर्ग (disadvantaged group) ले सामाजिक, आर्थिक, सांस्कृतिक आदि कारणले शिक्षा र तालिमको अवसर पाएका छैनन् । त्यस्तो ठाउँमा दूर शिक्षा/खुला सिकाइ धेरै अर्थमा सान्दर्भिक छ । तर वर्तमान विश्व परिवेशमा प्रश्न पहुँचको मात्र रहेन, प्रश्न गुणस्तर शिक्षा र तालिमको पहुँचको रह्यो । सबैको लागि शिक्षा कार्यक्रमकै सन्दर्भमा हेर्ने हो भने पनि समग्र शिक्षामा गुणस्तरको सुनिश्चितता अहिलेको एउटा प्रमुख मुद्दा हो । यसै सन्दर्भमा विगतका अध्ययन अनुगमन प्रतिवेदनले औंल्याएका तथ्यहरूको आधारमा दूर शिक्षा खुला सिकाइमा गुणस्तरसँग सम्बन्धित केही प्रश्नहरूलाई यहाँ केलाउने प्रयास गरिएको छ ।

नेपालमा दूर शिक्षाको विगत र वर्तमान परिवेश

नेपालमा औपचारिक तवरमा दूर शिक्षा पद्धतिको सुरुवात गर्ने श्रेय रेडियो शिक्षा शिक्षक तालिम आयोजनालाई जान्छ । प्राथमिक शिक्षामा गुणस्तर वृद्धि गर्ने उद्देश्यले वि.सं. २०३५ मा आयोजना प्रारम्भ भएपछि रेडियो शिक्षा शिक्षक तालिम कार्यक्रम २०३७ साल भाद्र ४ गतेदेखि रेडियो नेपालबाट प्रसारण हुन थालेको हो । यस कार्यक्रमबाट २०४३ साल सम्म ६२ जिल्लाका ६,४९२ जना प्राथमिक विद्यालयमा अध्यापन गर्ने शिक्षकले बि-लेभल (B-Level) तालिम प्राप्त गरेको र २०४५ सालदेखि २०४९ सम्म ७,९९९ जना प्राथमिक शिक्षकहरूले १५० घण्टे आधारभूत शिक्षक तालिम प्राप्त गरेको देखिन्छ (अधिकारी, २०५९) देखिन्छ । २०५० सालमा यो आयोजना

* शा.अ. शै.ज.वि.के

दूर शिक्षा केन्द्रमा परिणत भएपछि यसले १८० घण्टे प्राथमिक शिक्षक तालिम र १० महिने सेवाकालीन प्राथमिक शिक्षक तालिमअन्तर्गत ३३० घण्टे तालिमका बिभिन्न प्याकेज कार्यक्रमहरू पनि सञ्चालन गरिसकेको छ । गत आ.व. २०६०।६१ देखि प्राथमिक शिक्षक तालिम दोस्रोचरणको ५ महिने (६६० घण्टे) तालिम सञ्चालन गरिँदै आएको छ । चालु आ. ब. २०६१। २०६२ को फाल्गुनदेखि यसले ६४ जिल्लामा करीव ७,००० प्राथमिक शिक्षककालागि पाँच महिने तालिम सञ्चालन गरिरहेको छ ।

शिक्षा मन्त्रालयअन्तर्गतका तालिम प्रदायक विभिन्न संस्थाहरू एकीकृत हुने क्रममा शैक्षिक जनशक्ति विकास केन्द्रमा गाभिइ दूर शिक्षा/खुला सिकाइ महाशाखामा यो केन्द्र परिणत भएको र शिक्षाका सबै तहका तालिम कार्यक्रममा दूर शिक्षाको माध्यमलाई उपयोग गर्ने दशौ पञ्च वर्षीय योजनामा अख्तियार गरिएको रणनीति (रा.यो.आ., २०५९) अनुरुप आगामी आ.व. २०६२।६३ देखि करिव ७,००० प्राथमिक शिक्षकलाई दिइने तालिमको अलावा निम्नमाध्यमिक र माध्यमिक तहका करीव ५,००० शिक्षकहरूका लागि पनि १० महिने सेवाकालीन तालिमको दोस्रो मोडुल अन्तर्गत ५ महिने कार्यक्रम सञ्चालन गर्ने तयारी करिब अन्तिम चरणमा पुगेको छ.। शिक्षक तालिममा दूर शिक्षा/ खुला सिकाइको प्रयोगको इतिहासमा यो अर्को नयाँ तर बढी चुनौतिपूर्ण फड्को हो भन्न सकिन्छ ।

यसका अतिरिक्त दूर शिक्षा/खुला सिकाइ सञ्चालनसम्बन्धी निर्देशिका (२०६०) मा निम्नमाध्यमिक तह, माध्यमिक तह र उच्च माध्यमिक तहको शैक्षिक कार्यक्रम, प्राविधिक शिक्षा तथा व्यवसायिक तालिम, अनौपचारिक शिक्षाअन्तर्गत निरन्तर शिक्षा र शिक्षक प्रशिक्षणसम्बन्धी शैक्षिक कार्यक्रम सञ्चालन गर्न सम्बन्धन दिने भन्ने प्रावधान र हालैका दिनमा शैक्षिक जनशक्ति विकास केन्द्रले भारतको इन्दिरा गान्धी खुला विश्वविद्यालयसँग दूर शिक्षा/खुलाइ सिकाइका क्षेत्रमा सहकार्य गर्न संस्थागत सम्बन्ध (institutional linkage) कायम गर्न चाहेको प्रसंग अनि एस.एल.सी दिने विद्यार्थीहरूलाई सहयोग सामग्री उपलब्ध गराउन गरेको प्रयासलाई हेर्दा प्रशासनिक (beaurocratic) संरचनाभित्रबाटै भैरहेका दूर शिक्षाका वर्तमान कार्य क्षेत्रलाई शैक्षिक जनशक्ति विकास केन्द्र, दूर शिक्षा/खुला सिकाइ महाशाखाले धेरै फराकिलो पार्न खोजेको देखिन्छ । अर्को तर्फ त्रि.वि.वि. ले चाहीँ उच्च शिक्षामा दूर शिक्षा प्रणाली लागु गर्ने निर्णय गरेको छ । यसले भारत र पाकिस्तानका खुला विश्वविद्यालयका क्रियाकलापको अध्ययन पश्चात् निश्चित केही विषयमा स्नातक र स्नातकोत्तर तहमा दूर शिक्षा प्रणाली लागु गर्ने तयारीमा जुटेको कुरा प्रकाशमा आइरहेको छ ।

गुणस्तरलाई हेर्ने दृष्टिकोण

हाम्रा दैनिक जीवनमा साधारण जनजिब्रोमा पनि शैक्षिक गुणस्तरको कुरा पाइलैपिच्छे हुने गर्दछ । फलानो शिक्षामा गुणस्तर भयो वा भएन भन्ने चर्चा सर्वाधिक रूपमा सुन्न सकिन्छ । तर के हो

त गुणस्तर भन्ने प्रश्नमा भने त्यति सहजै उत्तर पाउन सकिन्न । त्यसैले गुणस्तरीय शिक्षा भनेर जति सजिलो छ त्यसलाई ठम्याउन त्यत्तिनै कठीन । वास्तवमा, शैक्षिक गुणस्तरलाई शब्द र सूत्रमा परिभाषित गर्ने प्रयास गर्नुभन्दा पनि समय सापेक्षतामा चर्चा गर्नु बढी सान्दर्भिक हुन्छ । समकालीन समाजमा गुणस्तरताई विभिन्न पक्षबाट हेर्ने गरिएको छ । लगानीको तुलनामा उपलब्धि कम भएमा गुणस्तर कम भयो भनिन्छ, आन्तरिक र वाह्य सक्षमता आधारमा यसलाई मापन गर्न खोजेको पनि देखिन्छ । पाठ्यक्रम, पाठ्यसामग्री शिक्षण सिकाइ प्रक्रिया मूल्याङ्कन आदिले गुणस्तरमा प्रभाव पार्दछन् । पाठ्यसामग्री गुणस्तरीय भए, शिक्षण सिकाइ प्रक्रिया गुणस्तरीय भए मूल्याङ्कन प्रक्रिया, गुणस्तरीय भए समग्र शैक्षिक कार्यक्रम गुणस्तरीय हुन्छ भनी प्रक्रियामा जोड दिने पनि गरिन्छ । हिजो जे जति कुरा गरेर गुणस्तरीय छ भनिन्थ्यो आज त्यति नै मापदण्डहरू अपर्याप्त हुन सक्छन् । त्यसैले शिक्षामा गुणस्तरलाई भौतिक दृष्टिले भन्दा बढी वैचारिक र दार्शनिक दृष्टिले हेर्ने पनि गरिन्छ ।

गुणस्तरताई हेर्ने बजारमुखी अर्थतन्त्रको अर्को पाटो पनि छ । त्यो हो उपभोक्ता अर्थात् क्रेताको सन्तुष्टि । बजार अर्थव्यवस्थामा उपभोगको सन्तुष्टिले उत्पादकलाई मार्गदर्शन गर्छ । त्यसैले खुला सिकाइमा पनि उपभोक्ताको सन्तुष्टि सर्वाधिक महत्वको विषय हुनुपर्छ भन्न थालिएको छ । दूर शिक्षा/खुला सिकाइको सन्दर्भमा भन्नुपर्दा यदि हामीले शिक्षक तालिमबाट विद्यालय स्तरीय विभिन्न तह र कक्षाका पठनपाठन एवम् अनौपचारिक शिक्षातर्फ साँच्चिकै फड्को मार्न चाहेको हो भने गुणस्तरीयता हाम्रा लागि झनै चुनौतिको विषय हो । विश्व एकातिर सूचना प्रविधिको अत्याधिक विकास र विस्तारले साँघुरिदै गैरहेको छ भने अर्को तर्फ अल्प विकसित राष्ट्रको हैसियतले नेपाल विश्व व्यापार संघमा प्रवेश गरे पश्चात् अब झनै भोलिका दिनमा बजारमुखी विश्व अर्थतन्त्रले हाम्रा समग्र शैक्षिक कार्यक्रमलाई बढ्दा प्रभाव पार्दै लाने निश्चित छ । दूर शिक्षा/खुला सिकाइ पनि यसको अपवाद हुन सक्दैन किनभने अब यसलाई भौगोलिक, राजनैतिक र वैचारिक सिमानाले बाँधेर उपभोक्तालाई छेक्न सकिदैन बरु आफैं अन्तर्राष्ट्रिय प्रतिस्पर्धामा जाने आँट गर्नुपर्छ । अबका दिनमा केवल हुम्ला जुम्लाको उदाहरण देखाए र इमेल, इन्टरनेट र वेभ साइटमा आधारित प्रतिस्पर्धात्मक सिकाइको सामना गर्न नखोज्ने वा युरोप अमेरिकाको उदाहरण देखाएर जहाँ पनि इमेल इन्टरनेट भन्दा तलको कुरै नगर्ने दुवै अव्यवहारिक सोच हुन्छन् । त्यसैले दूर शिक्षामा पनि हदैसम्मको विविधता र लचकता दुवै आवश्यक छ ।

शिक्षाको गुणस्तरलाई प्रभाव पार्ने पहिलो वैचारिक आधार भनेको शिक्षा प्रदान गर्ने संस्थाको भिजन अर्थात् दूर दृष्टि नै हो । दूर शिक्षासम्बन्धी हाम्रो दूर दृष्टि के हो ? यसो भन्दा के हाम्रो सोच नै छैन त भन्ने प्रश्न आउँछ । कुरा त्यसो होइन । पेसागत संस्थाको संस्थागत भिजन दस्तावेजहरूमा लिपिवद्ध भएर आउन पर्‍यो । दूर शिक्षा/खुला सिकाइ महाशाखाले शिक्षाका विभिन्न वैकल्पिक कार्यक्रम सञ्चालन गर्ने उद्देश्य राखेपनि यसको मुख्य जोड भनेको शिक्षकलाई दिने तालिममा सीमित रहेको छ । आज विद्यालय शिक्षामा बीचैमा पढाइ छाड्नेलाई मूल धारमा

ल्याउने कुरा छ, सधैं विद्यालय जान नसक्नेलाई आफ्नो अनुकूल सिक्ने र अनुकूल समयमा मूल्याङ्कन गरिदिने लचिलो प्रणाली स्थापना गर्ने कुरा छ । वर्तमानमा कक्षा आठ उत्तीर्ण गरेका विद्यार्थीले निश्चित अवधि पूरा भएपछि प्राइभेट एस.एल.सी दिन पाउने व्यवस्था छ तर उनीहरूलाई चाहिने सहयोग खै त भन्ने प्रश्न उचित ढङ्गले संबोधन गर्नुपर्ने अवस्था छ । दूर दृष्टिले यी सबैलाई दिशा निर्देश गर्दछ ।

दूर शिक्षामा आधारित शिक्षक तालिममा गुणस्तरको खोजी

शिक्षक तालिमले शिक्षकको उत्पादकत्व बढाउनु पर्छ, उनीहरूको श्रममा थप गतिशीलता ल्याउनु पर्दछ । तालिमले शिक्षकको सोचाइ, उसको व्यवहार, उसले प्रयोग गर्ने शिक्षण विधि र कक्षा व्यवस्थापनमा फरकता ल्याउन सक्यो कि सकेन भन्ने कुरामा समग्र कार्यक्रमको गुणस्तर प्रतिविम्वित हुन्छ । शिक्षकको सोच व्यवहार र विधिमा फरकता आउनको लागि उनीहरू सिकाइमा स्वउत्प्रेरित र आफैमा लगनशीलता हुनु पर्दछ । स्वतः स्फूर्त जागरण पनि एक महत्वपूर्ण पहल हो जुन प्रभावकारी पाठ्यसामग्री र प्रसारण सामग्रीले सिर्जना गर्न सक्छ भन्ने मान्यता राखिन्छ ।

यदि कुनै व्यवसायी वा उत्पादकले सरकारी संरक्षण, लाइसेन्स र कोटा प्रणालीबाट खुला र उदार परिवेशमा आयो भने उसले प्रतिस्पर्धि भएर बाँच्नको लागि उपभोक्ताको सन्तुष्टिलाई अहम् प्राथमिकता दिन्छ । उसको उत्पादन उपभोक्ताको आवश्यकतामा आधारित हुन्छ । आर्थिक उदारीकरणको सन्दर्भलाई समेत विचार गर्दा हामीले दूर शिक्षालाई गुणस्तरीय बनाउनु भन्नुको अर्थ र सबै तहमा जीवनोपयोगी शिक्षा भन्नु पनि यसलाई यसका उपभोक्ताको आवश्यकतामा आधारित बनाउनु हो । प्रसारित विषयवस्तु शिक्षक/पाठक अथवा श्रोताको आवश्यकता, रुचि र स्तर सुहाउँदो हुनुपर्ने कुरा निर्विवाद छन् । शिक्षकको आवश्यकता अनुरूप तालिम सञ्चालन भएन भन्ने गुनासोले उनीहरूको सन्तुष्टिको तह मात्र होइन तालिम सामग्रीको गुणस्तरको कमजोर पाटोलाई समेत उजागर गर्दछ ।

हाल सञ्चालन भै रहेका शिक्षक तालिममा दूर शिक्षा कार्यक्रमका प्रमुख तीन पक्ष छन् । पहिलो, स्वाध्ययन सामग्रीको अध्ययन, दोस्रो, रेडियो पाठ श्रवण र तेस्रो, सम्पर्क कक्षामा छलफल । यी तीन पक्षमा केन्द्रित हुदै विगतमा दूर शिक्षा केन्द्रले गरिआएका कामसँग सम्बन्धित केही अध्ययन र अनुगमनका प्रतिवेदनहरूमा हेर्ने हो भने पनि गुणस्तरसँग जोडिएका अनेकौं सवाल फेला पर्दछन् ।

क) स्वाध्ययन सामग्रीसँग जोडिएका सवालहरू

दूर शिक्षा तालिमको प्रभावकारितासम्बन्धी चिरागले गरेको अध्ययन अनुसार ९७% शिक्षकहरूले स्वाध्ययन सामग्री उपयोगी हो भन्ने धारणा व्यक्त गरेपनि स्वाध्ययन सामग्री पढ्न करै लागेका मध्ये वहुमत (५४%) शिक्षकले नियमित रूपमा उक्त सामग्री नपढ्ने र ४५% शिक्षकले स्वाध्ययन

सामग्रीमा दिएका अभ्यासहरू कहिल्यै नगर्ने अवस्था (CHIRAG, 2001) ले शिक्षकहरूको स्वतः स्फूर्त जागरणको तहलाई उजागर गर्ने मात्र होईन स्वाध्ययन सामग्रीको गुणस्तर कमजोर छ भन्ने तथ्यलाई पनि कुनै न कुनै ढङ्गमा अभिव्यक्त गर्दछ । स्वाध्ययन सामग्रीमा गुणस्तरको चर्चा गर्दा विषयवस्तुको चयन कसरी गरिएको छ ? विषय छनौट कसरी हुन्छ ? के कस्ता लेखको छनौट गरिएको छ ? लेखकलाई तालिम छ कि छैन ? लेखकको छनौट उपयुक्त ढङ्गले भएपनि लेखन समय पर्याप्त दिइएको छ कि छैन ? भन्ने कुराहरू संगै गाँसिएर आउँछन् । एकातिर यी अहम् सवाल छन् भने अर्कोतर्फ भाषाशैली र प्रस्तुतीकरण पढौं पढौं लाग्ने छ कि छैन चित्रहरू आकर्षक छ कि छैन भन्ने कुरा देखि त्यसको लेआउटसम्म आउँछ, कागजको गुणस्तर र छपाइले समेत यसमा प्रभाव पार्दछन् ।

ख) रेडियो प्रसारणसँग जोडिएका सवालहरू

रेडियो पाठ प्रसारणमा गुणस्तरियताको कुरा गर्दा पनि अनेकौं सवालहरू छन् । रेडियो सुन्नै पर्ने अवस्थामा पनि अधिकांश शिक्षक (७३%) ले नियमित रूपले रेडियो नसुन्नु (CHIRAG, 2001) ले प्रसारणको औचित्यमै प्रश्न उठाउन पनि सक्दछ । आजभोलि खल्तीमा स-साना रेडियो राखेर हिँड्ने काम गर्ने चलन बढ्दै गएको अवस्थामा पक्कै पनि घरको काम वा समयले नभ्याएर मात्र तालिमका सहभागिले रेडियो नसुनेका होलान् भन्ने ठाउँ कमै रहन्छ । त्यसैले प्रसारण समय ठीक छ छैन, भन्ने देखि रेकर्डिङ र प्रसारण प्राविधिक दृष्टिकोणले उपयुक्त छ छैन अर्थात् प्रसारणमा प्राविधिक हिसाबले कुनै व्यवधान छ कि ? प्रसारित विषयवस्तु शिक्षकको आवश्यकता, रुचि र स्तर सुहाउँदो छ छैन भन्ने कुरासम्मले रेडियो पाठ प्रसारणको गुणस्तर निर्धारण हुन्छ ।

प्रसारण जीवन्त छ छैन यो पनि एउटा छलफलको विषय बन्नु पर्दछ । प्रसारणलाई जीवन्त बनाउने विभिन्न तत्वहरू हुन्छन् । प्रसारण गर्ने विषयवस्तुको छनौट कसरी हुन्छ ? स्क्रिप्ट लेखन कोबाट हुन्छ ? स्क्रिप्ट लेखनको तालिम दिइएको छ कि छैन ? कलाकारको छनौट कसरी हुन्छ ? उनीहरूको बोली सुनौं सुनौं लाग्ने हुन्छ कि हुँदैन आदि । यसै प्रसंगमा हालैका दिनमा एफ एम प्रसारणहरूले आफ्नो प्रसारण जीवन्त बनाउन गरेको प्रयासबाट हामीले केही सिक्ने कि नसिक्ने ? भारतीय टि.भी च्यानल आस्थामा आउने रामदेवको प्रवचन र योगाभ्यासबाट आज सयौं युवायुवती र वृद्ध वृद्धा नेपालीहरूले आफ्नो आचरण खानपान र स्वास्थ्य स्थितिमा सुधार आएको दावी गर्दै हिँड्छन् । दूर शिक्षाको प्रसारणमा गुणस्तरीयताको कुरा गर्दा यस्ता अनुभवसँग गाँस्न मिल्ने कि नमिल्ने? रेडियो नेपालकै प्रसारणमा गीति कथा सुन्न लालयित एउटा युवा जमात शैक्षिक कार्यक्रम सुन्न चाहदैंन भने त्यसकै प्रसारणबाट हामीले सिक्ने कुरा रहेछन् भनेर विचार गर्ने कि नगर्ने ? सिक्नको लागि टाढा जानु पर्दैन हाम्रै वरपर पनि थुप्रै कुराहरू छन् ।

रेडियो शिक्षा शिक्षक तालिम आयोजनाकी ट्यूसन कार्यक्रमको मूल्याङ्कन सम्बन्धि सेरिडको प्रतिवेदन (सन्, १९८८) ले के कुरा औल्याएको देखियो भने कुनै विषयमा रेडियो प्रसारणको गति

छिटो भयो (अधिकारी २०५९ मा उद्दृत) त्यसैले चाहे जसरी बुझ्न सकिएन । अन्तरक्रियात्मक रेडियो शिक्षण कार्यक्रमको सेरिडलेनै गरेको अध्ययनले प्रसारण सुधार गर्न प्रत्येक सहभागीले बुझ्ने गरी रेडियो पाठहरू सरल भाषामा तयार हुनुपर्छ भन्ने सुझाव दियो (CERID, 2001) र गत बर्ष मात्र दूर शिक्षा खुला सिकाइ महाशाखा आफैंले गरको अनुगमन प्रतिवेदनमा पनि रेडियो पाठमा बोल्ने कलाकारहरूको बोलीको गति केही ढिलो हुनुपर्छ र त्यसमा प्रयोग हुने वाक्यहरू सरल र छोटा हुनुपर्ने भनी उल्लेख भएको देखियो (दूर शिक्षा, २०६१) । यसरी ५/६ वर्षदेखि लगातार लिपिवद्ध हुँदै आएका यस्ता सुझावहरूले अझै पनि हामीलाई हाम्रो कामको गुणस्तरमा सोच्न वाध्य पार्दछ ।

ग) सम्पर्क कक्षासँग जोडिएका सवालहरू

सम्पर्क कक्षाको प्रसंग उठाउँदा धेरै शिक्षकहरूले (८६%) छलफल गर्ने, अनुभवको आदान प्रदान गर्ने एक आपसमा अन्तरक्रिया गर्ने गरेको र स्रोत केन्द्रमा गरिने क्रियाकलापहरू उत्तम रहेको भन्ने सम्बन्धित शिक्षकहरूको राय प्रतिक्रिया देखिन्छ । तथापि शिक्षकहरू तोकिएको समयमा उपस्थित नहुने स्रोत केन्द्रमा क्यासेट प्लेयर र चक्काको राम्रा उपयोगिता हुन नसकेको र कतिपय शिक्षकले धेरै समय आउन जान खर्चनु पर्ने भएकोले सम्पर्क कक्षाका गतिविधिमा अपेक्षित गुणस्तरीयता कायम हुन नसकेको देखिन्छ (CHIRAG, 2001) । अझ यसमा स्रोतव्यक्तिको दक्षता र कार्यबारे त अध्ययन हुन बाँकी नै छ ।

सत्यताको अर्को पाटो

माथि जो जति चर्चा गरियो त्यसबाट नकरात्मक निष्कर्ष निकाल्न र हाम्रो प्रयासमा गुणस्तरीयता छँदै छैन भनेर आरोपित गर्न चाहिँ मिल्दैन । माथि उल्लेखित सेरिड र चिरागको अध्ययनपछि नयाँ तालिम पाठ्यक्रम, नयाँ स्वाध्ययन सामग्री र नयाँ रेडियो स्क्रिप्टको प्रयोग भई सकेको सन्दर्भ पनि छ । हालैको अनुगमन प्रतिवेदनमा स्वाध्ययन सामग्रीमा प्रयोग गरिएको भाषा स्तर सुहाउँदो र चित्रहरू उपयुक्त भएको भन्ने अधिकांश प्राथमिक शिक्षकहरू (७०%) को विचार, स्वाध्ययन सामग्रीमा दिएका क्रियाकलाप धेरै उपयोगी छ भन्ने अधिकांश स्रोत शिक्षक (६९%) को ठम्याइ र रेडियो पाठ स्वाध्ययन सामग्रीका लागि उपयोगी रहेको भन्ने करिब आधा शिक्षक (५०%) को भनाइले (दूर शिक्षा, २०६१) हाम्रा राम्रा पक्षलाई पनि उजागर गरेको छ। शिक्षकहरूले स्वाध्ययन सामग्री पढ्नु र रेडियो सुन्नु अगाडि र उक्त क्रियाकलापपछि आफ्नो कक्षा शिक्षण सिकाइमा फरकता आएको अनुभव गरेका छन् । यसले हाम्रा सामग्रीहरू परिष्कृत हुँदै गएको कुरा देखाउँछ । तर हामीले यत्तिमै सन्तोष गर्ने अवस्था चाहिँ होइन । त्यहि असन्तोष हुनुपर्ने पाटोलाई अझै सुधारको लागि चर्चा परिचर्चा गर्न खोजिएको हो ।

निष्कर्ष

नेपालमा दूर शिक्षा खुला सिकाइको सान्दर्भिकताताई दिन पर दिन झनै महसुस गर्न थालिएको छ । शिक्षक तालिममा यसको २५ वर्षे इतिहासलाई केलाउँदा पनि यसले निकै फड्को मारि सकेको अनुभव हुन्छ । तालिम सञ्चालन गर्ने तौर तरिकाहरूमा परिष्कृत हुँदै गएका छन् । तर पनि गुणस्तरमा सिकायत गर्ने ठाउँहरू प्रसस्त रहेका छन् । फेरी गुणस्तर सुधारको प्रयास आफैं कहिल्यै नटुंगिने यात्रा पनि हो । तर पनि यदि हाम्रा प्रसारण र पठन सामग्रीहरूले पाठकहरूलाई पर्याप्त सन्तुष्टि दिन सकेको भए, उनीहरूलाई उत्प्रेरित गर्न र उनीहरूमा स्वतःस्फूर्त जागरण ल्याउन सकेको भए तालिममा रेडियो सुन्न र स्वाध्ययन सामग्री पढ्न करै लागेकाले मात्र होइन त्यो परिधि भन्दा बाहिरका मानिसहरूले पनि त्यसलाई सुन्ने र पढ्ने चाहना राख्दथे होलान् भन्ने प्रश्नलाई आगामी दिनमा गरिने कामको गुणस्तरको सवालमा जोडेर हेर्नु पर्दछ ।

सन्दर्भसामग्री

अधिकारी, खुबिराम र खनाल, बोधकुमार (२०५९) : दूर शिक्षा हिजोदेखि आजसम्म, दूर शिक्षा २०५९ पृ ६५-७१ दूर शिक्षा केन्द्र, सानोठिमी, भक्तपुर ।

CHIRAG, (2001) : Effectiveness of Distance Teacher Training in Nepal. Distance Education Centre. Sanothimi, Bhaktapur.

CERID, (2001) : Evaluation of Pilot: Dual audience Interactive Radio Instruction for Teacher Training. Distance Education Centre. Sanothimi, Bhaktapur.

दूर शिक्षा केन्द्र, (२०६०) : दूर शिक्षा/खुला सिकाइ सञ्चालनसम्बन्धी निर्देशिका । सानोठिमी, भक्तपुर ।

दूर शिक्षा केन्द्र, (२०६१) : दूर शिक्षा वार्षिक अनुगमन प्रतिवेदन । सानोठिमी, भक्तपुर ।

रा. यो. आ. (२०५९) : दशौं योजना २०५९- २०६४ राष्ट्रिय योजना आयोग, सिंहदरवार, काठमाडौं ।

दूर शिक्षा प्रणालीको नयाँ योगदान क्षेत्रः सम्भाव्यता विश्लेषण

- शिवकुमार सापकोटा*

पृष्ठभूमि

पछिल्लो दशकमा दूर शिक्षा तथा खुला सिकाइ अभियान निकै बढी प्रचलनमा आएको दृष्टान्त भारत, चीन, अष्ट्रेलिया, बेलायत जस्ता देशहरूमा सञ्चालित उच्च शिक्षा लगायत शैक्षिक कार्यक्रम क्षेत्रको अभ्यासबाट स्पष्ट हुन्छ । आर्थिक एवम् शैक्षिक दृष्टिले विकासशील राष्ट्रहरूमा तीव्र जनसङ्ख्या वृद्धि आर्थिक विकासको मन्द गति, भौगोलिक विकटता र विविधता, सांस्कृतिक संवेदनशीलता, सिकारूको सिकाइ आवश्यकता र अभिरुचीमा विविधता एवम् निरन्तर शिक्षाको आवश्यकता इत्यादि शैक्षिक विकासका मुद्दाहरूलाई संवोधन गर्ने रणनीतिको रूपमा दूर शिक्षा तथा खुला सिकाइ प्रणालीको अवलम्बन गरिएका उदाहरण प्रशस्त पाइन्छ । यसलाई नियमित (regular) शैक्षिक प्रावधानको वैकल्पिक तथा परिपूरक शैक्षिक व्यवस्थाको रूपमा समेत लिएको पाइन्छ ।

नेपालमा पनि प्रस्तुत अवधारणाको परिधिलाई आत्मसात् गरी दूर शिक्षा तथा खुला सिकाइको अभ्यास मूलतः सन् १९६० को दशकबाट प्रारम्भ भएको हो । करिब ४५ वर्ष लामो इतिहासमा केही विश्वविद्यालयहरू जस्तै त्रिभुवन विश्वविद्यातय शिक्षा संकाय र पूर्वान्चल विश्वविद्यातयअन्तर्गत विगत केही वर्षदेखि शैक्षिक उपाधिका कार्यक्रमहरू (academic courses) सञ्चालन प्रारम्भ गरेको पक्षलाई अपवाद मान्ने हो भने मुख्य गरी शिक्षक तालिम कार्यक्रम सञ्चालन (delivery) प्रयोजनका निमित्त मात्र दूर शिक्षा तथा खुला सिकाइ प्रणालीको प्रयोग भएको अवस्था छ । सन् १९८० को दशकदेखि शिक्षक विकास र शैक्षिक जागरण कार्यक्रम कार्यान्वयनमा मूलतः रेडियो र स्वाध्ययन सामग्री जस्तो प्रविधि उपयोग भएको तथ्य प्राप्त हुन्छ । वर्तमान अवस्थामा प्राथमिक र माध्यमिक तहको ५/५ महिना अवधि भएको तालिम सञ्चालनमा मात्र दूर शिक्षा मोडको प्रयोग भएको छ ।

उपर्युक्त सन्दर्भमा प्रस्तुत लेखले शिक्षा क्षेत्रमा शिक्षक तालिम र अन्य केही नयाँ क्षेत्रहरूको पहिचान गरी दूर शिक्षा तथा खुला सिकाइ प्रणालीको नयाँ अवसर उजागर गर्ने विषयवस्तु समावेश गरको छ । यस्ता सम्भाव्य क्षेत्र, नयाँ प्रशिक्षार्थी समूहको पहिचान र भावी योजना समेतका पक्षहरूलाई विशेष छलफल गरिने छ ।

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* प्रा.अ.,शै.ज.वि. के.

तथ्य विश्लेषण

माध्यमिक विद्यालयतर्फ तोकिएको उमेर समूह (१०-१४) का जम्मा २९ लाख ८० हजार बालबालिकामध्ये १७ लाख २० हजार मात्र विद्यालयभित्र रहन सकेको र कुल १२ लाख ६० हजार शिक्षाबाट बन्चित हुनु परेको तथ्य सन् २००३ को तथ्याङ्कबाट स्पष्ट हुन्छ ।

प्राथमिक विद्यालयबाट निम्नमाध्यमिक तहमा प्रवेश गर्ने सक्षम विद्यार्थीहरूको (transition rate) तथ्याङ्क २००३ लाई आधार मान्दा करिब ७५% देखिन्छ । बाँकी रहन आउने करिब १ लाख ४५ हजार विद्यार्थीहरू प्राथमिक तह अध्ययन पूरा गरेका तर माथिल्लो तहमा निरन्तर अध्ययन जारी नगर्ने अथवा रोजगार बजारमा जाने वाध्य सङ्ख्याको रूपमा हेर्न सकिन्छ ।

SLC परीक्षाको नतिजा विश्लेषण गर्दा प्रत्येक वर्ष असफल हुने विद्यार्थीहरूको सङ्ख्या उत्लेख्य रूपमा पाइन्छ । वि.सं. २०५४ देखि २०५८ सातसम्मको नतिजा प्रवृत्ति देहाय अनुसार प्रस्तुत गरिएको छ ।

तालिका १ : SLC नतिजा विश्लेषण (२०५४-२०५८)

साल	नियमित तर्फ			एक्जेम्प्टेड तर्फ			आंशिक		
	परीक्षार्थी	उत्तीर्ण %	अनुत्तीर्ण सङ्ख्या	परीक्षार्थी	उत्तीर्ण %	अनुत्तीर्ण सङ्ख्या	परीक्षार्थी	पास%	अनुत्तीर्ण सङ्ख्या
२०५४	१,१३,२५७	४७.५४	५९,४११	२९,८१३	१९.७८	२३,९१६	४४,५३८	७३	१२,०२५
२०५५	१,३९,२०२	४९.२०	७०,७१४	२९,५९२	२६.४३	२१,७६६	५९,५३१	५८.२७	२४,८९५
२०५६	२,०५,५३९	४५.७२	१,११,५६१	३२,०८२	२२.८५	२४,७५१	८१,०९७	५८.१५	३३,९४१
२०५७	१,३२,२१०	३१.६२	९०,४०९	५२,०१६	२५.५८	३८,७१०	६९,०६०	६३.७६	२५,०२९
२०५८	१,५२,३३४	३१.२२	१,०४,७६९	४८,७४३	८.२२	४४,७३५	५८,७११	६४.९६	२०,५७०
वार्षिक औसत	-	-	८७,३७२	-	-	३०,७७५	-	-	२३,२९२

यसरी विगत ५ वर्षको SLC परीक्षाको नतिजा विश्लेषणबाट वार्षिक औसत रूपमा नियमित तर्फ ८७ हजार, एक्जेम्प्टेड तर्फ ३० हजार र आंशिक तर्फ २३ हजार भन्दा बढी विद्यार्थीहरू अनुतीर्ण रहनु परेको अवस्था स्पष्ट छ । सबै प्रकारको परीक्षाको वार्षिक औसत हेर्दा प्रत्येक वर्ष १ लाख ४० हजार भन्दा बढी विद्यार्थीहरू SLC परीक्षामा असफल भई निराश जिन्दगी ज्यून वाध्य छन् । त्यस्ता असफल विद्यार्थीहरू विद्यालय सम्पर्कभन्दा टाढा रहनु पर्दा आगामी वर्षको SLC परीक्षा तयारी कार्य नितान्त व्यक्तिगत ज्ञान र प्रयासमा सीमित रहने गर्दछ । क्षेत्रीय र लैंगिक दृष्टिकोणबाट प्रस्तुत तथ्याङ्क अध्ययन गर्दा सुदूर पश्चिमाञ्चल क्षेत्र, मध्यपश्चिमाञ्चलका पहाडी जिल्लाहरूका विद्यार्थी र महिलाहरूको सङ्ख्या तुलनात्मक रूपमा बढी पाइन्छ ।

उच्च माध्यमिकतर्फ कक्षा १२ को नतिजा प्रवृत्ति अध्ययन गर्ने हो भने परीक्षामा असफल हुने विद्यार्थीहरूको सङ्ख्या उल्लेख्य पाउन सकिन्छ । जसको प्रस्तुतीकरण निम्न तालिकामा अवलोकन गर्न सकिन्छ ।

तालिका २ : कक्षा १२ को नतिजा विश्लेषण (२०५७-२०६१)

साल	परीक्षार्थी	अनुत्तीर्ण सङ्ख्या
२०५७	१५,९८३	९,४४७
२०५८	२४,३६८	१६,०१३
२०५९	४०,६८०	२८,४३०
२०६०	३७,१३१	२५,०५५
२०६१	५७,२०९	३४,६१३
वार्षिक औसत	-	२२,७११

यसरी विगत ५ वर्ष अवधिको कक्षा १२ को नतिजा अध्ययन गर्दा २०५७ सालमा सबैभन्दा कम विद्यार्थीहरू (९,४४७) अनुत्तीर्ण रहनु पर्‍यो भने २०६१ सालमा सबै भन्दा बढी विद्यार्थीहरू (३४,६१३) असफल हुन परेको तथ्य छ । अनुत्तीर्ण विद्यार्थीहरूको वार्षिक औसत पनि २२ हजारभन्दा बढी देखिन्छ ।

शैक्षिक असफलताका कथाले औंल्याएको आवश्यकता

(१) निम्नमाध्यमिक र माध्यमिक तह पढ्ने उमेरका वास्तवातिका १२ लाख ६० हजारभन्दा बढीको सङ्ख्यामा शिक्षाको अवसरबाट वञ्चित रहनु परेको छ । शिक्षाको सुविधा प्राप्त गर्न विभिन्न कारणले असफल रहेको यो जनसङ्ख्या वर्षेनी थपिदै जान्छ र अन्तोत्वगत्वा यसले शैक्षिक क्षेत्रको सार्वजनिक संयन्त्रलाई चुनौती थप्नेछ । यस मुद्दालाई यथाशिघ्र उपयुक्त माध्यमबाट शिक्षाको सुविधा उपलब्ध गराउनुको विकल्प छैन ।

(२) प्राथमिक विद्यालय पूरा गर्न असफल तथा माथिल्लो कक्षामा लगातार भर्ना भई आफ्नो अध्ययनलाई निरन्तरता दिन विविध कारणले असफल ठहरिएको जनसङ्ख्या वार्षिक रूपमा १ लाख ४५ हजारभन्दा बढी देखिन्छ । यस्ता विद्यार्थीहरूले साविक तह पूरा गर्न विशेष प्रकारको पूरक शैक्षिक सहायता अपेक्षा गरको अनुभव गर्न सकिन्छ । यदि यस्ता विद्यार्थीलाई समयमै उपयुक्त उपचार दिन नसके यसको पनि सङ्ख्या बढ्दै जान्छ र कालान्तरमा असफल युवाहरूको ठूलो जमातले समाजलाई हमेशा विकृति तर्फ दोहोऱ्याउन सक्छ ।

(३) नेपालमा विद्यालय शिक्षाको उपलब्धिलाई SLC परीक्षाको नतिजासँग जोडेर मूल्याङ्कन गर्ने गरिन्छ । यस सन्दर्भमा हेर्दा प्रत्येक वर्ष बहुसङ्ख्यक परीक्षार्थीहरू अनुत्तीर्ण हुनु परेको तीतो यथार्थ स्वीकार्न वाध्य हुनु परेको छ । हाम्रो शैक्षिक व्यवस्थामा वर्षेनी करिब १ लाख ४० हजारभन्दा बढी परीक्षार्थीहरू असफलताको हीन भावनाबाट ग्रसित जीवन भोग्न बाध्य छन् । मौका परीक्षाबाट नगन्य सङ्ख्यामा उत्तीर्ण हुने अवसर उपलब्ध भए पनि यसले त्यतिको ठूलो अनुत्तीर्ण सङ्ख्यामा कुनै तात्विक योगदान गर्ने गरेको पाइँदैन । यस्तो असफल विद्यार्थी समूहले आफ्नो ज्ञान र मेहनतका भरमा जतिसुकै तयारी गरे पनि आगामी वर्षको परीक्षामा उत्तीर्ण हुने अवसर ज्यादै सानो सङ्ख्यालाई मात्र उपलब्ध भएको तथ्य प्रस्तुत नतिजा प्रवृत्तिबाट स्पष्ट भएको छ । अन्ततः SLC परीक्षामा एक पटक असफल भएका ती विद्यार्थीहरू कालान्तरसम्म असफल नै रहने र अन्तोत्वगत्वा परीक्षामा सामेल हुने उर्जा नै समाप्त हुन गई अध्ययन कार्यलाई सदाका लागि बीट मार्ने अवस्थामा पुग्दछन् । यस परिप्रेक्ष्यमा SLC अनुत्तीर्ण विद्यार्थीहरूका लागि परीक्षा तयारी प्रयोजनका निमित्त विशेष शैक्षिक सहायता उपलब्ध गराउने संयन्त्र निर्माण गर्नु पर्ने टड्कारो आवश्यकता देखिन्छ ।

(४) उच्च माध्यमिक तहको कक्षा १२ को नतिजा विश्लेषणबाट पनि वर्षेनी २२ हजारभन्दा बढी विद्यार्थीहरू असफल रहन पुगेको पाइन्छ । यिनीहरू पनि परीक्षा तयारीका निमित्त विशेष शैक्षिक सहायताको पर्खाइमा अतृप्त तृष्णा बोकेर बसेका छन् । क्षेत्रीय दृष्टिले हेर्दा पश्चिमी र खास गरी पहाडी क्षेत्रका विद्यार्थीहरू बहुसङ्ख्यक रुपमा यस वर्गभित्र पर्छन् ।

दूर शिक्षा तथा खुला सिकाइ प्रणालीका लागि सम्भाव्य नयाँ कार्य क्षेत्र

प्रस्तुत तथ्याङ्क र तिनको विश्लेषणको सन्दर्भमा दूर शिक्षा/खुला सिकाइ प्रणालीले नीति, योजना तथा कार्यक्रम सहित प्रस्तुत हुन सक्नुपर्दछ र समयको यस आवश्यकतालाई आफ्नो संस्थागत अवसरको रूपमा आत्मसात् गर्न सक्नुपर्दछ ।

सम्भाव्य कार्यक्षेत्र

(१) वैकल्पिक माध्यमिक शिक्षा कार्यक्रम

माध्यमिक शिक्षा उमेर समूह (१०-१४) का जम्मा १२ लाख ६० हजार र प्राथमिक तहबाट नि.मा.वि. मा अध्ययन निरन्तर गर्न नसकेका १ लाख ४६ हजारभन्दा बढी सङ्ख्यामा रहेका बालवालिकाहरूका लागि लक्षित यस कार्यक्रममा माध्यमिक तहको प्रचलित पाठ्यक्रममा आधारित विशेष course plan विकास गर्नुपर्ने हुन्छ । रेडियो, स्वाध्ययन सामग्री, श्रव्य दृश्य सामग्री एवम् face-to-face कार्यशाला एवम् शैक्षिक सहायता जस्ता दूर शिक्षा विधिका माध्यमहरूलाई सन्तुलित र सशक्त ढङ्गले उपयोग

गरेर यस्तो कार्यक्रम सञ्चालन गरिनुपर्दछ । स्थानीय विद्यालयहरूलाई कार्यशाला एवम् शैक्षिक सहायता प्रदायक केन्द्रका रूपमा प्रयोग गर्ने संयन्त्र आवश्यक पर्दछ ।

यस कार्यक्रमअन्तर्गत विद्यार्थीहरूलाई १० औं कक्षाको अन्तमा नियमित SLC परीक्षामा सामेल गराउने प्रविधि मिलाइनुपर्दछ । यस कार्यक्रमबाट १४ लाख भन्दा बढी बालबालिकाहरू लाभान्वित हुने छन् ।

(२) SLC परीक्षा तयारी पुरक शिक्षा कार्यक्रम

SLC परीक्षामा असफल भएका वर्षेनी १ लाख ४० हजार भन्दा बढी सङ्ख्यामा रहेका विद्यार्थीहरूका लागि लक्षित यस कार्यक्रमलाई दूर शिक्षा विधिबाट कार्यान्वयन गर्न सकिन्छ । अधिकांश विद्यार्थीहरू अंग्रेजी, विज्ञान, गणित, नेपाली जस्ता विषयहरूमा अनुत्तीर्ण हुनु परेको तथ्यलाई मध्यनजर गरी तिनै विषयमा केन्द्रित पूरक शिक्षा कार्यक्रम विकास गरिनुपर्दछ । यस कार्यक्रमले मूलत: स्वाध्ययन, शिक्षण सहयोग र परीक्षाको तयारीका अभ्यास जस्ता विषयमा जोड दिनुपर्ने हुन्छ । श्रव्यदृश्य सामग्री प्रर्दशन, स्वाध्ययन सामग्रीको प्रकाशन र स्थानीय विद्यालयहरूमा निश्चित समय अन्तरालमा face-to-face कार्यशाला सञ्चालन गर्न सकिनेछ ।

कुल ३ देखि ४ महिनासम्म सञ्चालन गर्न सकिने यस्तो कार्यक्रमबाट विद्यालय शिक्षाको सक्षमता वृद्धि गर्न उल्लेख्य रूपमा योगदानमूलक बन्न जाने अपेक्षा गर्न सकिन्छ ।

(३) कक्षा १२ परीक्षा तयारी विशेष शैक्षिक सहायता कार्यक्रम

वार्षिक रूपमा औसत २२ हजारभन्दा बढी सङ्ख्यामा रहेका कक्षा १२ को अन्तिम परीक्षामा असफल विद्यार्थीहरूका लागि लक्षित कार्यक्रम हो, यो । यस कार्यक्रमलाई समेत दूर शिक्षा विधिअन्तर्गत सञ्चालन गर्न लागत प्रभावकारिता र लक्षित समूहको आवश्यकताका आधारमा उपयुक्त हुने देखिन्छ । लक्षित समूहको आकार र कार्यक्रमको संवेदनशीलतालाई ध्यानमा राखी स्वाध्ययन सामग्री विकास, वितरण र correspondence विधिबाट मागमा आधारित शैक्षिक सहायता प्रदान गर्न सकिन्छ । वर्षमा परीक्षाको ठीक चार महिना अगाडिदेखि परीक्षासम्म निरन्तर रूपमा यस्तो कार्यक्रम चालु गर्नुपर्ने हुन्छ । आवश्यकता अनुसार लक्षित समूहको सङ्ख्यात्मक चापका आधारमा निश्चित उच्च मा.वि. हरू छनौट गरी तिनलाई face-to face कार्यशाला केन्द्रको रूपमा उपयोग गर्नु पर्ने हुन्छ ।

निष्कर्ष

विद्यालय शिक्षाको आन्तरिक र वाह्य सक्षमता (efficiency) अभिवृद्धि गर्ने, शिक्षाको गुणस्तर सुनिश्चित गर्ने, शैक्षिक सुविधालाई लक्षित समूहको पहुँचसम्म सर्वसुलभ रूपले पुऱ्याउने उद्देश्य अनुरूप गतविगतदेखि नै सरकार र दातृ संस्थाहरूले प्राथमिकताका साथ योजनावद्ध कार्यक्रमहरू सञ्चालनमा ल्याएको पाइन्छ । साथै सुविधाविहीन, आर्थिक अवस्था कमजोर भएका जातीय, लैंगिक र सांस्कृतिक दृष्टिले दुर्वल बालवालिकाहरूको शिक्षामा अवसर सुनिश्चित गर्नु विद्यमान शैक्षिक नीति र कार्यक्रमको प्राथमिकता प्राप्त क्षेत्र रहन पुगको छ । यसरी शैक्षिक विकासमा निजी क्षेत्र लगायत राष्ट्रिय लगानीकर्ता एवम् चन्दादाताहरूको पनि चाख त्यत्तिकै बढिरहेको अवस्था छ ।

यस लेखमा प्रस्तुत दूर शिक्षाअन्तर्गत कार्यान्वयन गर्न सकिने प्रस्तावित कार्यक्रमहरूले पनि सरकार एवम् वाह्य तथा आन्तरिक दातृसंस्थाहरूको प्राथमिकतालाई अर्थपूर्ण ढङ्गले योगदान पुऱ्याउने भएको हुँदा प्रस्तुत कार्यक्रम कार्यान्वयनका लागि सरकार र दातृ संस्थाहरूको पनि उत्साहजनक सहयोग, साझेदारी, तत्परता उपलब्ध हुने निश्चित प्राय देखिन्छ । तसर्थ, स्रोत व्यवस्थापनका निमित्त कुनै कठिनाइ नपर्ने स्पष्ट सम्भावनालाई आंकलन गर्न सकिन्छ ।

सबैका लागि शिक्षा र सहश्राब्दी विकास लक्ष्य लगायतका अन्तर्राष्ट्रिय प्रतिवद्धता व्यक्त कार्यक्रममा समेत प्रस्तावित कार्यक्रमले योगदान पुऱ्याउने देखिन्छ । यसरी दूर शिक्षा तथा खुला सिकाइ प्रणालीलाई केवल शिक्षक तालिम कार्यक्रम सञ्चालनमा मात्र सीमित नराखी शैक्षिक क्षेत्रको आवश्यकतालाई पहिचान गर्ने र तिनलाई अवसरको रूपमा आत्मसात गरी अगाडि बढ्नु पर्ने बेला आइसकेको छ । देशको अपेक्षा, समाजको आवश्यकता र शिक्षार्थीको रोदनलाई बुझ्न र उपयुक्त योजना सहितका प्रभावकारी कार्यक्रम सञ्चालनमा आफूलाई व्यावसायिक ढङ्गले सक्रिय तुल्याउनु दूर शिक्षा/खुला सिकाइ प्रणालीका लागि आजको कठोर आवश्यकता बनेको छ ।

सन्दर्भसामग्री

HSEB, (2005): Examination Statistics of Higher Secondary Education (unpublished). Higher Secondary Education Board. Sanothimi, Bhaktapur.

DEC, (2003): DURSIKSHA, Distance Education Centre, Sanothimi, Bhaktapur.

DOE, (2003): School Level Education Statistic of Nepal. Department of Education (DOE), Sanothimi, Bhaktapur.

OCE, (2002): SLC Examination Statistics 2058. Office of Controller of Examination MOES, Sanothimi, Bhaktapur.

OCE (2000): SLC Examination Statistics 2057. Office of Controller of Examination. MOES. Sanothimi, Bhaktapur.

OCE (1999): SLC Examination Statistics 2056. Office of Controller of Examination. MOES. Sanothimi, Bhaktapur.

OCE (1998): SLC Examination Statistics 2055. Office of Controller of Examination. MOES. Sanothimi, Bhaktapur.

OCE (1997): SLC Examination Statistics 2054. Office of Controller of Examination. MOES. Sanothimi, Bhaktapur.

दूर सिकाइ र नेपालमा यस पद्धतिको विकास : संक्षिप्त चर्चा

- तोयानाथ खनाल*

पृष्ठभूमि

अहिले विश्व शिक्षा मञ्चका सबै सदस्य राष्ट्रहरू सन् २०१५ सम्ममा सबैका लागि शिक्षा सम्बन्धी आ-आफ्नो कार्ययोजना कार्यान्वयनमा व्यस्त रहेका छन् । विश्व करिब ११ करोड ३० लाख बालबालिकाहरू प्राथमिक शिक्षाको पहुँचबाहिर रहेको र ८८ करोड प्रौढहरू निरक्षर रहेको अवस्थामा आएको यो अन्तर्राष्ट्रिय अभियान पूरा गर्न प्रतिवद्धता जनाएजस्तो गरी सजिलो छैन तर पनि शिक्षा मानव सभ्यता र विकासको मेरुदण्ड भएकाले यसको पहुँच सबैमा पुऱ्याउने अभियानलाई चुनौती र प्रेरणा दुवै रूपमा लिएर अगाडि बढ्नु सबैका लागि हितकर हुन्छ । सबैका लागि शिक्षा भन्ने अभियानको कार्यान्वयनका बाधक तत्वका रूपमा मूलत गरिवी, भौगोलिक विकटता र पछौटेपनलाई लिन सकिन्छ ।

गरिवीका कारणले मानिसको दिउँसोको अधिकांश समय ज्याला मजदूरीकै काममा बित्दछ । त्यस्तो समुदायलाई शिक्षाको पहुँचमा ल्याउन मूलत: विहान बेलुकाको समय लिनुपर्ने हुन्छ । यसका लागि अनौपचारिक शिक्षासम्बन्धीका कार्यक्रमहरू उपयोगी मानिन्छन् भने विशेष गरेर सञ्चारको सर्वसुलभ साधन मानिएको रेडियोले पनि ठूलो सहयोग पुऱ्याउँछ । शिक्षासम्बन्धी सचेतनाको कमी भएका कतिपय समुदायलाई विभिन्न उपायहरूद्वारा सचेत बनाएर विद्यालय शिक्षामा उनीहरूको पहुँच बढाउनु पनि त्यत्तिकै आवश्यक छ । यसका लागि प्रत्यक्ष भेटघाटबाट सम्पन्न हुने कार्यक्रमका अतिरिक्त सञ्चारका माध्यमहरूको प्रयोगद्वारा सर्वसुलभ ढङ्गले शिक्षासम्बन्धी सचेतना फैलाएर शिक्षामा पहुँच बढाउन सकिन्छ ।

भौगोलिक विकटताका कारणले कतिपय स-साना बस्तीका बालबालिकाहरू आफ्नो नजिकको विद्यालयमा जान सकिरहेका छैनन् । उनीहरूका लागि विद्यालयको स्थापना गरेर शिक्षामा पहुँच पुऱ्याउन गरिब मुलुकहरूका लागि बढी खर्चिलो र बोझिलो हुन्छ । यस्तो अवस्थामा पनि शिक्षामा पहुँच पुऱ्याउनका लागि सञ्चारका सम्भव भएसम्मका साधनहरूको प्रयोग गर्न सकिन्छ । विश्वका कतिपय विकसित मुलुकहरूमा विभिन्न सञ्चार माध्यमहरूको प्रयोगद्वारा दूर सिकाइ पद्धतिमा खुला विश्वविद्यालयसमेत स्थापना भई सञ्चालन भएको अवस्थामा हामीले पनि यस पद्धतिको उपयोग गर्न सकेका खण्डमा सबैका लागि शिक्षासम्बन्धी राष्ट्रिय कार्ययोजनाको सफल कार्यान्वयनका लागि ठूलो सघाउ पुग्दछ ।

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* प्रा.अ., शै.ज.वि.केन्द्र

परिचय

शिक्षामा प्रयोग गरिएको यो दूर सिकाइ पद्धतिको सुरुवात पत्राचार विधिबाट सन् १८४० मा बेलायतबाट भएको हो । त्यसपछि सन् १८७३ मा अमेरिकामा निर्माण भएको "Home Study Society" ले दूर सिकाइका क्षेत्रमा उल्लेख्य योगदान दिएको पाइन्छ । सिकारूको सिक्ने चाहनालाई पूरा गर्न परम्परागत शिक्षण संस्थाका चार दिवालबाट सिकारूलाई बाहिर ल्याएर दूर सिकाइका माध्यमबाट आधुनिक वैज्ञानिक ढङ्गले शिक्षामा पहुँच बढाउन र शैक्षिक उपाधि दिलाउन सकिन्छ भने आफूले हासिल गरेको शिक्षालाई समसामयिक रूपमा अद्यावधिक गर्न पनि सकिन्छ । दूर सिकाइले मूलत शिक्षक र सिकारूका बीच दैनिक भेटघाट नभएरै पनि छापिएका सामग्रीहरूको स्वाध्ययन सञ्चार माध्यमको अत्याधिक प्रयोग र नियमित सम्पर्क कक्षाका माध्यमबाट शिक्षण सिकाइलाई अगाडि बढाउने काम गर्दछ ।

यस पद्धतिको सिकाइले कागजी प्रमाणपत्र खोज्ने प्रवृत्तिभन्दा व्यक्तित्व विकास गर्ने प्रवृत्तिलाई बढावा दिएको पाइन्छ । सन् १८०० को मध्यतिर सुरु भएको Deschooling को सोचाइलाई प्रयोगमा ल्याउने महत्वपूर्ण माध्यमका रूपमा यसलाई लिइन्छ । औपचारिक शैक्षिक संस्थामा सिकारूलाई उत्प्ररित गर्ने भन्ने कुरा आउँछ तर यस पद्धतिमा शिक्षकले सिकारूलाई उत्प्रेरित गर्ने होइन सबैभन्दा पहिले त सिकारू नै सिक्नका लागि आफैं उत्प्रेरित हुनुपर्छ । त्यसपछि सिकारूले यस पद्धतिका लागि निर्माण गरिएका विशेष किसिमका सञ्चार प्रविधिहरूको प्रयोग गरेर आफ्नो सिकाइलाई अगाडि बढाउँछ । त्यसैले यस पद्धतिको शिक्षण सिकाइमा शैक्षिक उपलब्धिस्तर उच्च हुन्छ भने अनुत्तीर्ण हुने र dropout हुने दर कम हुन्छ ।

दूर सिकाइका उद्देश्य

औपचारिक शैक्षिक संस्थामा आउन नसकेकाहरूका निम्ति शिक्षामा पहुँच दिनु, उच्च शिक्षा हासिल गर्न खोज्नेहरूलाई उच्च शिक्षाको अवसर दिनु, पेसामा संलग्न व्यक्तिहरूका लागि व्यावसायिक विकास गर्ने मौका दिनु र आफ्नो ज्ञान र सीपलाई अद्यावधिक गर्ने अवसर प्रदान गर्नुलाई दूर सिकाइका उद्देश्यहका रुपमा लिन सकिन्छ । यसका साथै विकट भौगोलिक परिवेशका महिला र पिछडिएका दलित जनजातिहरूलाई शिक्षा हासिल गर्न बाधा गर्ने तत्वहरू हटाई उनीहरूलाई सुलभ ढङ्गले शिक्षामा पहुँच पुऱ्याउनु, आर्थिक र सामाजिक कारणले पछाडि परेका वयस्कहरूका लागि सीपमूलक शिक्षाको अवस्था सुनिश्चित गर्नु, शिक्षक भएका र हुन चाहनेहरूका लागि सुलभ ढङ्गले तालिम उपलब्ध गराउनु, शिक्षामा हासिल भएको महत्वपूर्ण उपलब्धिहरूको प्रबोधीकरण गर्नु, विभिन्न शैक्षिक संस्थाहरूका लागि प्राज्ञिक र प्रशासनिक सहयोग उपलब्ध गराउनुलाई पनि दूर सिकाइका उद्देश्यका रुपमा लिन सकिन्छ ।

उत्प्रेरणा, आत्मनिर्भरता, सृजनशीलता र सकारात्मक सोच दूर सिकाइसँगै गाँसिएका कुराहरू हुन् अर्थात् यस पद्धतिबाट सिकाइलाई अगाडि बढाउने सिकारू सबभन्दा पहिले सिक्नका लागि आफैं उत्प्रेरित हुनुपर्छ । यस पद्धतिको शिक्षण सिकाइमा सिकारूले आ-आफ्नो गतिमा सिक्ने हुँदा उनीहरू आत्मनिर्भर र अनुशासित हुनुपर्दछ । यो पद्धति सिकारूले प्राप्त गरेको उपाधिलाई अद्यावधिक गर्ने र नयाँ उपाधि पनि दिने पद्धति भएकाले सिकारूमा सृजनशीलता भएमा मात्र उसले अपेक्षित उपलब्धि हासिल गर्न सक्दछ । सिकारूले आफूमा सकारात्मक सोचाइको विकास गरेमा उसले यस पद्धतिका लागि विकास गरिएका सम्पूर्ण विधि र प्रविधिहरूको प्रयोग गरेर वैज्ञानिक ढङ्गले शिक्षा हासिल गरी आफू लाभान्वित हुन सक्दछ ।

सिकाइ पद्धति

दूर सिकाइ पद्धतिमा छापिएका शैक्षिक सामग्रीहरूका माध्यमबाट स्वाध्ययन, पत्राचार विधिको प्रयोग, रेडियो कार्यक्रम, टेलिभिजन कार्यक्रम, अध्ययन केन्द्रहरूको स्थापना, सम्पर्क कक्षामा सहभागिता, क्यासेट तथा CD चक्का जस्ता सामग्रीहरूको प्रयोग, टेलिफोन Email र Internet सुविधाको प्रयोग र कार्यशाला अथवा प्रयोगात्मक कार्यहरूताई सिकाइलाई अगाडि बढाउने माध्यमका रूपमा प्रयोग गर्न सकिन्छ । यस पद्धतिमा मुखामुख पद्धतिका लागि छानिएका पाठ्यपुस्तक र पत्रपत्रिकाको प्रयोग र सम्पर्क कक्षामा शिक्षक र सिकारूबीच अन्तरक्रिया पनि प्रयोग गरिने भएकाले यसले खुला शिक्षामा भएको लचकतालाई इंगित गर्दछ । अर्थात् परम्परागत शैक्षिक संस्थामा सीमित विधिको प्रयोग हुन्छ भने दूर सिकाइमा अनेकौं नयाँ विधि र प्रविधिमार्फत सिक्न सिकाउन सकिन्छ । त्यसैले अहिले यो पद्धति शिक्षामा अत्यन्त लोकप्रिय पद्धतिका रूपमा विकसित भएको छ ।

लक्षित समुदाय

दूर सिकाइका लक्षित समुदाय भनेको भौगोलिक विकटताका कारणले औपचारिक शिक्षाबाट बञ्चित समुदाय हो । साना साना वस्तीहरू भएका ठाउँमा शिक्षण संस्था स्थापना गरी शिक्षाको पहुँच पुऱ्याउन बढी खर्चिलो हुने र विद्यार्थीहरूको सङ्ख्या पनि कम भएर शैक्षिक संस्थाहरूको प्रभावकारिता त्यत्ति राम्रो हुन नसक्ने भएकोले यस पद्धतिले त्यस्ता ठाउँका विद्यार्थीहरूलाई सुलभ र किफायती ढङ्गले शिक्षा उपलब्ध गराउँछ । आर्थिक तथा सामाजिक कारणले औपचारिक शैक्षिक संस्थाहरूमा गएर शिक्षा हासिल गर्ने अवसर नपाएका तर शिक्षा हासिल गर्न चाहनेहरू पनि यस पद्धतिका लक्षित समुदाय हुन् । निश्चित शैक्षिक उपाधि हासिल गरेर कुनै पेसामा संलग्न व्यक्तिहरूले उच्च शिक्षा हासिल गर्न पनि यस पद्धतिको प्रयोग गर्न सक्दछन् । आफूले हासिल गरेका ज्ञान र सीपलाई अद्यावधिक गर्न चाहनेहरू पनि दूर सिकाइ पद्धतिका लक्षित समूहमा पर्दछन् । अहिलेको आवश्यकता सबैलाई शिक्षा उपलब्ध गराउने भएकाले शिक्षाको अवसरबाट बञ्चित बालक, वयस्क र प्रौढहरू सबैलाई लक्षित समूह बनाएर विभिन्न

सञ्चार माध्यमहरूको प्रयोग गरी दूर सिकाइसम्बन्धी शैक्षिक कार्यक्रमहरू सञ्चालन गर्न सकिन्छ ।

नेपालमा दूर सिकाइको विकास

नेपालमा दूर सिकाइ पद्धतिको प्रयोगको सुरुवातका रूपमा कलेज अफ एजुकेशनको प्रौढ शिक्षा महाशाखाबाट वि.सं. २०१४ सालमा प्रौढ शिक्षा कार्यक्रमका लागि रेडियो नेपालबाट प्रसारित कार्यक्रमलाई लिन सकिन्छ । त्यसपछि वि.सं. २०३५ सालमा स्थापना भएको रेडियो शिक्षा शिक्षक तालिम आयोजनालाई यसै क्षेत्रमा भएको अर्को प्रयासका रूपमा लिन सकिन्छ । यस आयोजनाले प्राथमिक तहका शिक्षकका लागि चाहिने न्यूनतम योग्यता हासिल नगरेका तर शिक्षण पेसामा संलग्न भएका शिक्षकहरूको शैक्षिक योग्यता अभिवृद्धि गर्ने उद्देश्य लिएको थियो । स्थापनाकालदेखि २०४५ सम्म दुई चरण गरेर सञ्चालन भएको यस आयोजनाबाट ६,९९६ जना शिक्षकहरू लाभान्वित भएका थिए । शाही उच्च शिक्षा आयोग (२०४०) को प्रतिवेदनले खुला विश्वविद्यालयको अवधारणा प्रस्तुत गऱ्यो । प्रजातन्त्रको पुनःस्थापनापछि बनेको राष्ट्रिय शिक्षा आयोग ।२०४९) ले पनि यस अवधारणालाई थप बल दियो भने नवौं पञ्चवर्षीय योजनाले उच्च शिक्षाको अवसरलाई लागत प्रभावकारिताका आधारमा विस्तार गर्न खुला विश्वविद्यालय सञ्चालन गर्ने नीति लिइने छ भन्ने उल्लेख गऱ्यो । चालु दशौं योजनाले त एउटा खुला विश्वविद्यालय स्थापना गर्ने भनी स्पष्ट उल्लेख गरेको छ । खुला विश्वविद्यालय स्थापना गर्नका लागि शिक्षा मन्त्रालयले बनाएको कार्य समिति (२०५७) ले खुला विश्वविद्यालयसम्बन्धी अवधारणा र मस्यौदा विधेयकसमेत शिक्षा तथा खेलकुद मन्त्रालयमा प्रस्तुत गऱ्यो । तर यो मस्यौदा विधेयक संसदमा नै नगएको अवस्था छ ।

विद्यालय तहको शिक्षाका लागि पनि अहिले अनौपचारिक शिक्षा केन्द्रले प्राथमिक तहसम्बन्धी कार्यक्रम दूर सिकाइ पद्धतिमा सञ्चालन गरिरहेको छ भने शिक्षा तथा खेलकुद मन्त्रालयले दूर शिक्षाको सञ्चालनसम्बन्धी निर्देशिका २०५९ स्वीकृत गरिसकेको छ । यस निर्देशिकाअनुसार निम्नमाध्यमिक तह, माध्यमिक तह, उच्चमाध्यमिक तह, प्राविधिक शिक्षा तथा व्यावसायिक तालिम, शिक्षक प्रशिक्षणसम्बन्धी शैक्षिक कार्यक्रम र अनौपचारिक शिक्षाअन्तर्गतको निरन्तर शिक्षासम्बन्धी शैक्षिक कार्यक्रम सञ्चालन गर्ने गरी खुला विद्यालयका लागि सम्बन्धन दिन सकिने व्यवस्था छ । तर अहिले दूर शिक्षा केन्द्र, शैक्षिक जनशक्ति विकास केन्द्रमा एकीकृत भएका अवस्थामा सम्बन्धनको काम अगाडि बढेको छैन । २०३७ सालदेखि सुरु भएको रेडियो शिक्षा शिक्षक तालिम कार्यक्रमको निरन्तरताका रूपमा अहिले पनि प्राथमिक तहका शिक्षकका लागि सञ्चालन भइरहेको १० महिने सेवाकालीन तालिममा ५ महिने तालिम दूर शिक्षा पद्धतिमा सञ्चालन भइरहेको छ भने आगामी आ.व.देखि निम्नमाध्यमिक र माध्यमिक तहका शिक्षकहरूका

लागि सञ्चालित १० महिने सेवाकालीन शिक्षक तालिममध्ये ५ महिने तालिम दूर शिक्षा पद्धतिमा सञ्चालन हुँदैछ ।

त्रिभुवन विश्वविद्यालयले दूर सिकाइ पद्धतिमा स्नातक तहको कार्यक्रम सञ्चालन गरिरहेको साथै पूर्वान्चल विश्वविद्यालयले पनि यस पद्धतिमा शैक्षिक कार्यक्रम सञ्चालन गरिरहेको छ । विश्वविद्यालयहरूबाट सञ्चालित यी कार्यक्रमहरूको उपलब्धि राम्रो पाइएको छ । भारतीय विश्वविद्यालयहरूका लागि पढाउने नेपाली केन्द्रहरूलाई पनि नेपालमा दूर सिकाइको विषयमा भएका प्रयासहरूको उदाहरणका रूपमा लिन सकिन्छ । नेपालमा दूर सिकाइका क्षेत्रमा गैर सरकारी क्षेत्रबाट भएका प्रयासहरूलाई पनि उल्लेख्य रूपमा लिन सकिन्छ CHIRAG नाममा गैर सरकारी संस्थाले सन् १९९३ देखि दूर शिक्षाको विकाससम्बन्धी काम गरिरहेको छ । यस संस्थाले नेपालमा खुला विद्यालय स्थापना गर्ने सम्बन्धमा एक प्रस्तावना श्री ५ को सरकार शिक्षा तथा खेलकुद मन्त्रालयमा सन् १९९४ मा पेश गरेको थियो ।

समस्या र मुद्दाहरू

नेपालमा दूर सिकाइसम्बन्धी लामो प्रयास भए पनि यसबाट चोहजति उपलब्धि हासिल गर्न सकिएको छैन । अझै पनि दूर सिकाइसम्बन्धी प्रयासहरू शिक्षक तालिममा मात्र केन्द्रित भएको अनुभव गरिएको छ । अधिकांश शिक्षकहरू पूर्ण तालिम प्राप्त नभएका अवस्थामा यस पद्धतिबाट सुलभ र किफायती ढङ्गबाट तालिम उपलब्ध गराउन त सकिन्छ तर एकातिर सबै शिक्षकहरूले यस पद्धतिको तालिमका खास मर्महरू थाहा नपाउनाले तालिमबाट अपेक्षित लाभ प्राप्त गर्न सकिएको छैन भने यस पद्धतिको तालिमलाई वैकल्पिक उपायका रुपमा नलिइएका कारणले गर्दा पनि अहिले धेरै शिक्षकहरू आंशिक तालिमप्राप्त शिक्षकका रुपमा रहेका छन् । यदि यस पद्धतिको शिक्षक तालिमलाई वैकल्पिक उपायका रुपमा लिएर शिक्षक तालिमको अभियानलाई अगाडि बढाउने हो भने धेरै शिक्षकहरूले आंशिक तालिम प्राप्त शिक्षकका रुपमा बस्नुपर्ने थिएन साथै मुखामुख पद्धतिको तालिमको पनि प्रभावकारिता बढ्ने थियो । नेपालमा दूर सिकाइलाई प्राविधिक तथा व्यावसायिक शिक्षाको विकास र विस्तारका लागि उपयोग नगरिनुलाई पनि समस्याका रुपमा लिन सकिन्छ । दूर सिकाइलाई प्राविधिक तथा व्यावसायिक शिक्षाका क्षेत्रमा पनि उपयोग गर्न सकियो भने सीपयुक्त दक्ष जनशक्तिको उत्पादनमा महत पुगी रोजगारीको वृद्धि हुने थियो । सरकारी पक्षमा प्रतिवद्धताको कमीलाई पनि नेपालमा दूर सिकाइको विगत विस्तारमा समस्याकै रुपमा लिन सकिन्छ । खुला विश्वविद्यालयको स्थापेनासम्बन्धी ऐनको मस्यौदा मस्यौदामा सीमित गरिनु र नवौं र दशौं पञ्चवर्षीय योजना अवधिमा खुला विश्वविद्यालय स्थापना गरिने उल्लेख भए पनि अहिलेसम्म स्थापना हुन नसक्नुलाई सरकारी प्रतिवद्धताको कमी भन्न सकिन्छ ।

दूर सिकाइको उपयोगिता

विद्यालय शिक्षाको पहुँचबाहिर रहेको विश्वका ११ करोड ३० लाख बालवालिका र ८८ करोड निरक्षर प्रौढहरूलाई शिक्षाको पहुँचभित्र पुऱ्याउने एक मात्र उपयोगी पद्धति दूर सिकाइ हो । यस पद्धतिबाट विभिन्न कारणले शिक्षाको पहुँचबाहिर रहेका तर शिक्षा हासिल गर्ने तीव्र इच्छा भएका मानिसहरू लाभान्वित हुन्छन् । यस पद्धतिमा सूचना र सञ्चारका अत्याधिक माध्यमहरू प्रयोग हुने भएकाले सूचना र सञ्चारको पहुँच पुगेका क्षेत्रका जनताहरूले बढी लाभ पाउँछन् भने अन्य क्षेत्रमा पनि पहुँच बढ्ने आशा गर्न सकिन्छ । यस पद्धतिमा प्रयोग हुने रेडियो र टेलिभिजन कार्यक्रमबाट आ-आफ्नो कार्यक्षेत्रमा बसेर धेरै कुराहरू सिक्न सकिन्छ । अहिलेको समस्या असल र योग्य शिक्षकको कमी पनि हो । दूर सिकाइका माध्यमबाट सीमित असल र योग्य शिक्षकहरू सबैका पहुँचमा पुग्न सक्दछन् । यसबाट योग्य र असर शिक्षकहरूबाट गुणस्तरीय शिक्षाकृ पहुँच बढाउन सकिन्छ । सबैमा शिक्षाको पहुँच पुऱ्याउन अब थप शैक्षिक संस्थाहरू स्थापना गर्नुभन्दा दूर सिकाइ पद्धतिको प्रयोग गर्नु नै आर्थिक हिसाबले फाइदाजनक काम हो । शिक्षण सिकाइको यस नयाँ पद्धतिले परम्परागत शिक्षण सिकाइका बन्देजहरू हटाएर खुला वातावरणमा सिकारूलाई सिक्न प्रेरित गर्दछ । त्यसैले अहिलेको आवश्यकता भनेका जुनसुकै उपायबाट दूर शिक्षा/खुला सिकाइ पद्धतिलाई शिक्षा क्षेत्रमा बढीभन्दा बढी मात्रामा प्रयोगमा ल्याउनु हो ।

सीमाहरू

दूर सिकाइ पद्धति शिक्षाका लागि उपयोगी कार्यक्रम हो तथापि यसका पनि निश्चित सीमाहरू छन् । यस पद्धतिबाट सिकाइ अगाडि बढाउनका लागि सिकारू स्वयम् उत्प्रेरित हुनुपर्ने भएकाले स-साना बालवालिकाहरूका लागि यस पद्धतिले अपेक्षित मात्रामा फाइदा नपुऱ्याउन सक्छ । यस पद्धतिबाट अधिक मात्रामा फाइदा लिनका लागि सबै सञ्चारका माध्यमहरूको पहुँच हुनु अति आवश्यक छ तर अहिलेसम्म पनि कतिपय अनकन्टार ठाउँहरूमा सञ्चारका माध्यमहरू नपुगिरहेको अवस्था छ । त्यस्ता क्षेत्रमा बसोबास गरिरहेका जनताहरूका लागि दूर सिकाइले अपेक्षित मात्रामा फाइदा पुऱ्याउन सकेको छैन । कतिपय विषय र विषयवस्तुहरूका विषयमा स्पष्ट हुनका लागि शिक्षक र सिकारू र सिकारू सिकारूबीच प्रत्यक्ष अन्तरक्रिया हुनुपर्ने भएकाले यसका लागि दूर शिक्षा/खुला सिकाइ अपेक्षित मात्रामा उपयोगी नहुन सक्छ । शिक्षामा शैक्षिक सामग्रीहरूको छनौट र प्रयोग अति आवश्यक मानिन्छ तर दूर शिक्षा/खुला सिकाइ पद्धतिमा सबै शैक्षिक सामग्रीहरू प्रयोग गरेर शैक्षिक कार्यक्रम सञ्चालन गर्न सम्भव हुँदैन । साथै शिक्षणसिकाइको प्रभावकारिताका लागि विषय र विषयवस्तुको प्रकृतिका आधारमा सबै विधिहरूको प्रयोग गर्नु आवश्यक हुन्छ । जुन कुरा दूर शिक्षा/खुला सिकाइमा सम्भव छैन । विकट भौगोलिक परिवेशमा सबै सिकारूका लागि पायक पर्ने स्थानमा सम्पर्क कक्षाको व्यवस्था गर्न नसकिने भएकाले सम्पर्क कक्षाबाट सबैले समान रूपमा फाइदा लिन सक्दैनन् ।

दूर सिकाइका बारेमा सबै सरोकारवालाहरूमा सचेतना नहुनाले पनि यस पद्धतिको चाहेजति उपयोग हुन सकेको छैन । शिक्षामा मूल्याङ्कनलाई अभिन्न अङ्गका रूपमा लिइन्छ तर दूर सिकाइमा मूल्याङ्कनका सम्पूर्ण साधनहरूलाई सहजरूपमा उपयोगमा ल्याउन कठिन हुन्छ ।

उपसंहार

दूर सिकाइका फाइदा र सीमाहरू छन् तर तुलनात्मक रूपमा यस पद्धतिका फाइदाहरू नै बढी मात्रामा पाउन सकिन्छ । यस पद्धतिमा बढीभन्दा बढी सञ्चारका माध्यमहरूको प्रयोग गरिने भएकाले पनि कतिपय विकट ठाउँमा समेत सूचना र सञ्चारका माध्यमहरूको पहुँच बढ्नसक्छ । यस पद्धतिमा भएका कमी कमजोरीहरूलाई न्यूनीकरण गर्दै उपयोग गरेमा सबैमा शिक्षाको पहुँच बढाउन सकिन्छ । विद्यमान मुखामुख पद्धतिका शैक्षिक संस्थाहरूलाई दोहोरो पद्धति (मुखामुख दूर सिकाइ पद्धति) को प्रयोग गर्ने संस्थाका रूपमा बदल्न सकियो, दूर सिकाइका लागि आवश्यक स्थानहरूमा साधनसम्पन्न अध्ययन केन्द्रहरूको स्थापना गर्न सकियो, मुखामुख पद्धतिका शिक्षकहरूलाई दूर सिकाइका शिक्षकका रूपमा र लेखकका रूपमा रूपान्तरण गर्न सकियो भने दूर सिकाइले मौलाउने अवसर पाउनेछ । साथै यस पद्धतिको उपयोगका लागि सरोकारवालाहरूमा अपेक्षित मात्रामा सचेतना बढाउन सकियो भने दूर सिकाइले सहज रूपमा स्थापित हुने मौका पाउने थियो, जसबाट सन् २०१५ सम्ममा सबैका लागि शिक्षा भन्ने अन्तर्राष्ट्रिय शैक्षिक अभियानको सफल कार्यान्वयन हुने अपेक्षा गर्न सकिन्छ । यसका लागि दूर सिकाइलाई पूरक पद्धतिका रुपमा होइन वैकल्पिक पद्धतिका रुपमा लिएर विद्यालयीय शिक्षा र विश्वविद्यालयीय शिक्षा, प्राविधिक तथा व्यवसायिक तालिमसम्बन्धी कार्यक्रम र शिक्षक तालिमसम्बन्धी कार्यक्रमहरूलाई सञ्चालनमा ल्याउनुपर्दछ ।

सन्दर्भसामग्री

दशौं पञ्चवर्षीययोजना (२०५९ - २०६४)
नवौं पञ्चवर्षीययोजना (२०५४ - २०५९)
राष्ट्रिय शिक्षा आयोगको प्रतिवेदन, २०४९
The World of open and distance Learning
दूर शिक्षा २०६१, ०६०, ०५९, ०५८
शैक्षिक उन्नयन वर्ष १ अंक १
Towards Virtualization
दूर शिक्षाको सञ्चालनसम्बन्धी निर्देशिका, ०५९
Open and distance Learning today
Planning and implementing open and distance learning system

दूर शिक्षा र शिक्षक तालिम

- खुविराम अधिकारी*

परिचय

सन् १९६० को दशकमा नै दूर शिक्षा तथा खुला सिकाइलाई शिक्षक तालिमको लागि अँगालिएको हो । आजभोलि यसको प्रयोगको क्षेत्र व्यापक रूपमा विस्तार भैरहेको छ । सूचना प्रविधिले यसको महत्व बढाउन योगदान दिएको छ । सूचना प्रविधिको विकास र विस्तारसँगै यसको महत्व र क्षेत्र पनि बढेको छ । दूर शिक्षा पद्धतिमा सिकाइ सामग्रीको प्रमुख भूमिका हुन्छ । जसको लागि विभिन्न किसिमका मिडियाहरूको प्रयोग गरिनुपर्दछ । सूचना प्रविधिको विकासले आज केही देशहरूमा दूर शिक्षा रोचक बनेको छ तथा सञ्चार प्रविधिको रूपमा प्रयोग गर्ने अवस्थामा आएको छ । शिक्षक शिक्षा र तालिमको लागि दूर शिक्षा विश्वभरि नै व्यापक रूपमा प्रयोग भइरहेको छ । चाहे ठूलो देश होस् वा सानो, विकसित होस् वा विकासोन्मुख धेरैजसो देशहरूले विभिन्न सन्दर्भमा यसको प्रयोग गरेका छन् । ब्राजिल, चीन, इन्डोनेसिया तथा नाइजेरिया शिक्षक तालिममा दूर शिक्षा पद्धति प्रयोग गर्ने प्रमुख राष्ट्र हुन् । प्रत्येक देशले यसको प्रयोगमा जोड दिएको छ । आफ्ना कार्यक्रमहरूलाई प्रभावकारी बनाउन आधुनिक प्रविधिको प्रयोगमा विस्तार गरिएको छ । दूर शिक्षा पद्धति आज सबैको साझा माध्यम बनेको छ । पहुँचमा वृद्धि गर्न होस्, वा शिक्षण सिकाइमा गुणस्तर अभिवृद्धि गर्न होस् वा कम खर्चमा धेरैलाई एकपटक अवसर प्रदान गर्नुहोस् वा फुर्सद नभएकालाई आवश्यकता अनुसारको योग्यता तथा सीप अभिवृद्धि गर्नुहोस् आजभोलि सबैले यसको प्रयोग गरिरहेका छन् । मानव संसाधनको विकास गर्न तथा निरन्तर रूपमा पेसागत दक्षता अभिवृद्धि गर्नका लागि यसको प्रयोग भइरहेको छ ।

विश्व जनसङ्ख्याको कम्तिमा १% मानिस औपचारिक शिक्षा प्रणालीमा शिक्षकको रूपमा कार्य गर्दछन् । विश्वका शिक्षकहरूमध्ये दुई तिहाई शिक्षकहरू विकासोन्मुख देशहरूमा रहन्छन् (UNESCO, 1998) विश्व जनसङ्ख्याको वृद्धिदरअनुसार बालबालिकाहरूको लागि विद्यालय सङ्ख्या पनि बढ्दै जान्छ । सोही अनुसार शिक्षकहरूको सङ्ख्या पनि वृद्धि हुँदै जान्छ । कुनै पनि देशको लागि ठूलो सङ्ख्यामा रहेको मानवीय जनशक्तिको विकास गर्नु पक्कै पनि चुनौतीपूर्ण कार्य हुन जान्छ । यसैले सीमित स्रोत र साधन भएको विकासोन्मुख देशलाई कम खर्चमा मानव सशाधन विकास गर्न उपयुक्त माध्यम भनेको दूर शिक्षा पद्धति नै हो ।

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* प्रा.अ , शै.ज.वि.के.

दूर शिक्षा शिक्षक तालिममा तालिम सामग्री

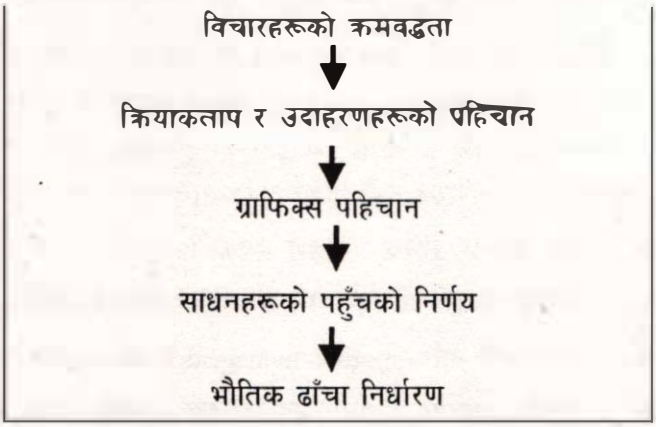
दूर शिक्षा तथा खुला सिकाइको मार्फतबाट शिक्षक तालिम सञ्चालन गर्न गुणस्तरीय तालिम सामग्रीको आवश्यकता पर्दछ । दूर शिक्षा पद्धतिमा तालिम सामग्री विकास गर्दा विविध पक्षमा ध्यान पुऱ्याउनुपर्दछ । दूर शिक्षा तथा खुला सिकाइमा उपलब्ध मिडिया अनुसार तालिम सामग्री विकास गर्नुपर्दछ । दूर शिक्षा तथा खुला सिकाइमा प्रयोगमा आउने मिडिया र सो अन्तर्गत पर्ने सामग्रीहरू मूलतः ४ समूहमा विभाजित गर्न सकिन्छ । ती हुन् : (क) छपाइ सामग्री (पुस्तक, पम्प्लेट, स्वाध्ययन सामग्री, अध्ययन निर्देशिका, नक्सा, चार्ट, फोटोग्राफ, पोष्टर, न्यूजपेपर, जर्नल, कार्यपुस्तिका तथा अभ्यास पुस्तिका) । (ख) श्रव्य तथा श्रव्य दृश्य सामग्री (श्रव्य क्यासेट, डिस्केट, CD, रेडियो प्रसारण, स्लाइड/फिल्म स्ट्रिप, भिडियो क्यासेट, टेलिभिजन प्रसारण, मल्टिमिडिया/कम्प्यूटरमा आधारित प्रविधि, अन्तर्क्रियात्मक रेडियो कार्यक्रम । (ग) परियोजना कार्य (मानवीय अन्तर्क्रिया, टेलिफोन वार्ता, भिडियो कन्फ्रेन्सिङ) । (घ) फेस-टु-फेस अन्तर्क्रिया कार्यक्रम (सेमिनार, कार्यशाला, ट्यूसन कार्यक्रम, सम्पर्क कक्षा)

सामग्री विकास प्रक्रिया

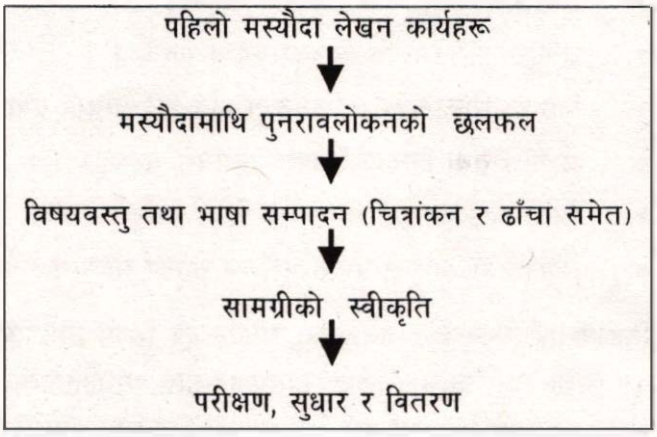
कुनै पनि शैक्षिक कार्यक्रमको लागि तालिम सामग्री विकास गर्ने आ-आफ्ना तरिकाहरू हुन्छन् । सिकारूको इच्छा आवश्यकता पूरा गर्ने खालको सामग्री विकास गर्नु आजको चुनौती हो । दूर शिक्षा खुला सिकाइमा पनि तालिम सामग्री विकास गर्ने विभिन्न तरिकाहरू अवलम्बन गरिएको छ । तीमध्ये तालिम सामग्री विकास गर्ने एउटा तरिका निम्न अनुसार प्रस्तुत गरिएको छ ।

प्रथम चरण
योजना (Planning)

दोस्रोचरण
लेखनका लागि तयारी
(Preparaing for Writing)



तेस्रो चरण
लेखन र पुनर्लेखन
(Writing and Rewriting)



दूर शिक्षा पद्धतिमा मिडिया छनौट गर्दा ध्यान दिनुपर्ने पक्षहरू

दूर शिक्षा तथा खुला सिकाइमा मिडियाहरूको भूमिका निर्क महत्वपूर्ण रहेको हुन्छ । प्रभावकारी सिकाइको लागि मिडियालाई औजारको रुपमा लिइएको छ । दूर शिक्षा तथा खुला सिकाइमा आधुनिक प्रविधि तथा सञ्चारका माध्यमहरूको उचित प्रयोग गरी पहुँच सरल र सहज बनाउनुपर्दछ । यसै सन्दर्भमा मिडिया छनौट गर्दा विचार पुऱ्याउनु पर्ने पक्षहरू निम्नअनुसार प्रस्तुत गरिएको छ ।

- सिकारूलाई सजिलैसँग उपलब्ध हुने माध्यमलाई प्राथमिकता दिने ।
- सिकारूलाई सबभन्दा बढी उपयुक्त सजिलो हुने माध्यम अपनाउने ।
- सिकारूलाई आकर्षण गर्ने मिडिया माध्यम अपनाउने ।
- सिकारूको मिडिया प्रयोग गर्ने सीप छ छैन त्यसमा ध्यान दिने ।
- सिकारूले प्रयोगको लागि खर्च गर्न सक्ने मिडिया छनौट गर्नुपर्ने ।

दूर शिक्षा /खुला सिकाइ सामग्रीहरूमा हुने विशेष विशेषताहरू

दूर शिक्षा तथा खुला सिकाइअन्तर्गत सञ्चालन गर्ने कार्यक्रमहरूमा तालिम सामग्रीलाई प्रमुख आधारको रुपमा लिइन्छ । तालिम सामग्री सिकारूले फुर्सदको समयमा अध्ययन गर्ने भएकोले स्वाध्ययनको लागि उपयोगी हुने खालको हुनुपर्दछ । सिकारूले सामग्री पढेपछि के पाउने भन्ने कुरा स्पष्ट हुनु पर्दछ । केही विशेषताहरू तल प्रस्तुत गरिएको छ ।

- प्रष्ट रूपमा उद्देश्य समावेश भएको ।
- सामग्री कसरी अध्ययन गर्ने सम्बन्धमा सल्लाह उल्लेख भएको ।
- सिकाइको लागि shortish manageable chunk हरू समावेश भएको ।
- प्रशस्त मात्रामा उपयोगी उदाहरणहरू उल्लेख भएको ।
- सिकारूको अनुभवको समावेश भएको ।
- उपयुक्त स्थानमा चित्रहरूको प्रयोग भएको ।
- विभिन्न सिकारूको आवश्यकता पूर्ति गर्ने सामग्री प्रयोग भएको ।
- अभ्यास तथा क्रियाकलापहरू समावेश भएको ।
- सिकाइलाई आफ्नो विचारहरू लेख्ने स्थान दिएको ।
- सिकारूको आफ्नो प्रगति परीक्षण गर्नका लागि पृष्ठपोषण समावेश भएको ।

सिकारूलाई सिकाइप्रति जवाफदेही बनाउन दूर शिक्षा सामग्रीमा समावेश गर्नुपर्ने पक्ष

दूर शिक्षा तथा खुला सिकाइ सामग्रीहरूलाई अन्तर्क्रियात्मक तथा प्रभावकारी बनाउन सकेमा मात्र कार्यक्रमहरू प्रभावकारी हुने भएकोले तालिम सामग्रीलाई सिकाइप्रति जवाफदेही बनाउनु जरुरी हुन्छ । यस्ता सामग्रीहरूलाई कसरी जवाफदेही तथा अन्तर्क्रियात्मक बनाउने भन्ने सम्बन्धमा केही ध्यान दिनुपर्ने पक्षका सम्बन्धमा निम्नअनुसार भएमा बढी सान्दर्भिक र स्तरीय हुन सक्छ ।

अध्ययनको क्रममा सोच विचार गर्ने, वक्समा (√) लगाउने रुजुसूची तयार गर्ने, बहुवैकल्पिक प्रश्नहरू समावेश गरी उत्तर दिन लगाउने, txt मा phrase underline गर्ने अवसर प्रदान गर्ने, तालिका पूरा गर्न लगाउने, खाली ठाउँ भर्न लगाउने, शब्द तथा पेज सङ्ख्या लेख्ने अवसर प्रदान गर्ने र प्याराग्राफ तथा मुख्य वाक्य लेख्ने अवसर प्रदान गर्ने ।

शिक्षक तालिममा दूर शिक्षा पद्धति अपनाउनु पर्ने कारणहरू

शिक्षक तालिम विभिन्न माध्यमबाट प्रदान गर्न सकिन्छ । सबै शिक्षकहरूलाई एकैपटक मुखामुख (face-to-face) पद्धतिबाट दिने कार्य प्राय असम्भव हुन्छ । शिक्षकहरूलाई आफ्नो विद्यालयमा बसेर नै पेसागत दक्षता अभिवृद्धि गर्ने अवसर दिएमा विद्यालयमा शिक्षण सिकाइ गर्न कुनै बाधा

नपर्ने भएकोले पनि दूर शिक्षा पद्धतिको क्षेत्र दिन प्रतिदिन बढ्दै गएको छ । यहाँ दूर शिक्षा पद्धति अपनाउन पर्ने केही तर्कहरू मावेश गरिएको छ ।

- धेरैजसो देशले आज यसको प्रयोग गर्दै आएका ।
- कम खर्चमा शिक्षक तालिम प्रदान गर्न ।
- विकट तथा दुर्गम भेगका शिक्षकहरूलाई सिकाइको अवसर प्रदान गर्न तथा स्रोतमा पहुँच पुऱ्याउन ।
- शिक्षक शिक्षा र तालिम ठूलो सङ्ख्यालाई प्रदान गर्न ।
- सेवाकालीन शिक्षकहरूलाई "off the job" तथा आवासीय तालिमको विकल्पको रूपमा ।
- Initial training तथा continuting professional development को लागि ।
- तालिममा सिकेका ज्ञान तथा सीपलाई कक्षाकोठामा प्रभावकारी रूपमा प्रयोग गर्न (reflection) को लागि "on the job learning" बाट उपलब्धि हासिल गर्न ।
- व्यापक र द्रुतगतिमा शिक्षासँग सम्बन्धित विषयवस्तुको सूचना प्रवोधिकरण गर्न । जस्तैः पाठ्यक्रम परिचालनमा शिक्षण विधिहरू आदि जानकारी गराउन ।

दूर शिक्षा तथा खुला सिकाइबाट सञ्चालित शिक्षक शिक्षा र तालिमको मुख्य क्षेत्र

समग्रमा हाल विश्वभरी दूर शिक्षा /खुला सिकाइमार्फत शिक्षक शिक्षा र तालिम सम्बन्धमा मुख्य ३ ओटा क्षेत्रमा कार्यक्रमहरू सञ्चालन भएका छन् । ती हुन् : Initial training for unqualified teachers, continuing professional development and curriculum reform.

संगठनात्मक मोडेलहरू

दूर शिक्षा तथा खुला सिकाइ पद्धतिबाट सञ्चालित शिक्षक शिक्षा कार्यक्रमहरू देशको नीति, पूर्वाधार, उद्देश्य तथा भौतिक अवस्था अनुसार फरक फरक रहेका छन् । यहाँ विभिन्न देशहरूमा सञ्चालनमा आएको केही मोडेहरूको प्रस्तुत गरिएको छ ।

१. दूर शिक्षण वा खुला विद्यालय / विश्वविद्यालय

संगठनात्मक मोडेल (Models)	उदाहरण
१. विश्वविद्यालय दूर शिक्षा र खुला विश्वविद्यालयहरू	• खुला विश्वविद्यालय, बंगलादेश • रेडियो र टि.भी केन्द्रीय विश्वविद्यालय, चाइना • इन्दिरा गान्धी राष्ट्रिय खुला विश्वविद्यालय, भारत • खुला विश्वविद्यालय, हडकङ • खुला विश्वविद्यालय, यू.के.

	• विश्वविद्यालय, दक्षिण अफ्रिका • खुला विश्वविद्यालय, श्रीलंका
परम्परागत विश्वविद्यालय	
• द्वय माध्यम • मिश्रित माध्यम	• जाम्बिया विश्वविद्यालय • मलावी विश्वविद्यालय • लण्डन विश्वविद्यालय, इन्स्टिच्युट अफ एजुकेशन हाइअर प्रोग्राम • साइबर शिक्षक तालिम केन्द्र र खुला साइबर विश्वविद्यालय कोरिया
२. कलेज अफ एजुकेशन (शिक्षक कलेज) प्राइभेट दूर शिक्षा कलेज	• वेलिज शिक्षक तालिम केन्द्र • राष्ट्रिय शिक्षक संस्था नाइजेरिया • साउथ अफ्रिका: प्रोमट कलेज, सक्सेस कलेज
३. कन्सोरिया निजिर सरुवारी एजेन्सीहरू	• टि. भी. फुटुरा ब्राजिल • टेलिभिजनद्वारा निरन्तर विज्ञान शिक्षा, फिलिपिन्स
४. गैर सरकारी संघसंस्थाहरू	• खुला सिकाइ शैक्षिक प्रणाली कोष, साउथ अफ्रिका • सुडान खुला सिकाइ संगठन
५. शिक्षा मन्त्रालयसँग साझेदारी दातृ संघसंस्थाहरू गैर सरकारी संघ संस्थाहरू	• एक्सन एड. यु.के., डि. एफ आइ.डी यू के । पश्चिम युगाण्डामा प्राथमिक शिक्षकहरूको क्षमता अभिवृद्धिका लागि आयोजना । • युनिसेफ : मंगोलियामा प्राथमिक शिक्षकहरूको लागि नयाँ धारणा र विधिहरूको अभिमुखीकरण आयोजना । • नेशनल माइड फर्निड यु.के ।
६. शिक्षा मन्त्रालय	• कलेज अफ लिडर सीप फर स्कूल मेनेजर, यू.के.।
७. अन्तर्राष्ट्रिय एजेन्सीहरू	• कमन वेल्थ अफ लर्निड (COL) • युरोपियन युनियन टेलीभेटिक्स फर टिचर ट्रेनिड

नेपालको सन्दर्भमा दूर शिक्षामा शिक्षक तालिम

करिब २५ वर्षदेखि शिक्षक तालिम दूर शिक्षाको माध्यमबाट सञ्चालन हुँदै आएको छ । प्रवेशिका अनुत्तीर्ण शिक्षकहरूको लागि तालिम तथा ट्यूसन कार्यक्रम सञ्चालन USAID को सहयोगमा

भएको हो । विभिन्न किसिमका तालिम कार्यक्रमहरू सञ्चालन हुने क्रममा दूर शिक्षालाई व्यवस्थित बनाउन दूर शिक्षा स्थापना गरिएको थियो । केन्द्रको स्थापनाकालदेखि १२ वर्षसम्म प्राथमिक शिक्षक तालिममा मात्र केन्द्रित भएकोले श्री ५ को सरकारले शिक्षा मन्त्रालयअन्तर्गत विद्यालयस्तरको शिक्षक तालिम सञ्चालन गर्ने ३ ओटा संस्थाहरूलाई २०६१ भाद्रमा एकीकृत गऱ्यो । हाल शैक्षिक जनशक्ति विकास केन्द्रअन्तर्गत दूर शिक्षा तथा खुला सिकाइ महाशाखाको व्यवस्था गरी शिक्षक तालिम तथा खुला सिकाइसँग सम्बन्धित अन्य कार्यहरू सञ्चालन गर्दै आएको छ । प्राथमिक तहको शिक्षक तालिम मात्र दूर शिक्षा पद्धतिमार्फत सञ्चालन गरिएकोमा अबदेखि निम्नमाध्यमिक तथा माध्यमिक तहको सक्षमतामा आधारित शिक्षक तालिम दोस्रो मोडेल (५ महिना) दूर शिक्षा पद्धतिबाट सञ्चालन गर्ने व्यवस्था श्री ५ को सरकारले गरेको छ । दूर शिक्षा पद्धतिबाट सञ्चालित कार्यक्रमहरूलाई प्रभावकारी बनाउन मिडियाहरूको प्रयोग जरुरी हुन्छ । प्राथमिक शिक्षक तालिमको लागि स्वाध्ययन सामग्री, रेडियो प्रसारण, सम्पर्क कक्षा, Audio cassette जस्ता माध्यमहरू प्रयोग गरिएको थियो भने निम्नमाध्यमिक तथा माध्यमिक तहको सक्षमतामा आधारित शिक्षक तालिमको लागि छपाई सामग्री (स्वाध्ययन सामग्री) श्रव्य क्यासेट, श्रव्य दृश्य सामग्री तथा कार्यशाला जस्ता माध्यमहरू प्रयोग गरिनेछ ।

यसैगरी शिक्षक शिक्षा तथा तालिमको सन्दर्भमा त्रिभुवन विश्वविद्यालयले Early childhood विषयमा १ वर्षे वि.एड, पूर्वान्चल विश्वविद्यालयले पनि १ वर्षे वी. एड कार्यक्रम सञ्चालन गरेको छ । यसैगरी विभिन्न शैक्षिक संस्थाहरूले पनि दूर शिक्षा तथा खुला सिकाइको माध्यम प्रयोगमा ल्याउने प्रक्रिया वृद्धि भएको छ । सञ्चारका आधुनिक प्रविधिको प्रभावकारी प्रयोगबिना दूर शिक्षा कार्यक्रमलाई प्रभावकारी बनाउन सकिदैन ।

निचोड

दूर शिक्षा तथा खुला सिकाइ आजको माग हो । हाम्रो जस्तो विकासोन्मुख देशको लागि यसको आवश्यकता जरुरी छ । विद्यालय तहको शिक्षादेखि उच्च शिक्षाका अतिरिक्त शिक्षक तालिम जस्ता क्षेत्रमा दूर शिक्षा तथा खुला सिकाइको क्षेत्र वृद्धि गर्नुपर्दछ । भौगोलिक विकटता रहेको स्थानमा घर-घरमा यसको पहुँच पुऱ्याउन सकेमा पिछडिएको समुदायलाई शिक्षाको मूलधारमा ल्याउन ठूलो सहयोग पुग्दछ । सूचना र प्रविधिको क्षेत्रमा भएको आमूल परिवर्तनले विकसित गरेको प्रविधिलाई यसको माध्यम बनाउन सकेमा दूर शिक्षा तथा खुला सिकाइ कार्यक्रम दिगो र प्रभावकारी बनाउन सकिन्छ ।

सन्दर्भसामग्री

Derek, R.: An action guide for teacher and trainer., Kogan page, 120 pentonville road, London, NIGJN.

Perraton, Hillary: Teacher education through open and distance learning World review of distanced open learning Vol. 3, the Common Wealth of Learning.

Open and Distance Education in South Asia and SACODiL for Mutual Cooperation

- Prof. H.N. Bhattarai (Dr.)*

Introduction

Open and Distance Education (ODE) has been widely accepted as a viable alternative mode of imparting education in many countries. It has been an alternative to the conventional mode of education, as the conventional system was unable to accommodate all those who desiring to get higher education in the context of ever growing population. The resource constraints to expand conventional system has led more and more countries to opt this system. It has also been useful to provide educational opportunities to that section of the society, which was deprived of education through conventional system for one reason or the other. It could reach to the remote corners of the country by the use of ICT (Information and Communication Technology). Since ODL (Open and Distance Learning) system is not confined within the four walls of an institution at a particular place and at a particular allocated time, it provides educational opportunities to working people or specially women, who cannot leave their homes. The professionals may continue their education and training for their career development. The system provides cost effective educational facilities to the people of all ages. To day, the ODL system has become more effective due to the recent developments in information and communication technologies, which are widely used in this system.

The ODL concept was initially introduced in the United Kingdom in the sixteen. The first Open University was established in the UK in 1969 by a Royal charter. An open university was conceived to be more flexible than a conventional one. The mission of the Open University was stated to be: Open as to people (no age limit, large and diverse student body), open as to methods (no conventional method of attending lectures, no time limit etc), open as to places (spread throughout the country and beyond to EU- countries); and open as to ideas. Since, an open university provides facilities to learners learn in their own pace, time and place, the method of distance education was used in the system thus resulting into a system of open and distance learning. A learner in this system is provided with the specially prepared self-study materials like printed course materials, audio and visual cassettes containing lectures

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on the courses and in some cases facilities of teleconferencing as well as the use of radio and television broadcasts. This, the ODL system has been able to cater to a bigger mass in a cost-effective and flexible manner. Consequently, the role of an Open University has been growing especially in developing countries since, the conventional system being over streteled due to the resource constraints.

ODL in South Asia

The first Open University in South Asia was the Allama Iqbal Open University of Pakistan established in 1974. In fact, it was the second University after the Open University of UK in the world. It has now expanded to a mega University with several regional campuses, about two dozen regional centres and about one and half thousands study centres spread throughout Pakistan. At present, its enrollment is more than five hundred thousands at a time. It offers courses in general education as well as technical/ professional disciplines. The programmes are being offered include, M.Phil and Ph.D. in some areas.

The second University in the region was the Open University of Sri-Lanka established in 1980. There are more than a dozen universities in Sri-Lanka but the Open University is the biggest in terms of enrollments. It offers programmes not only in general education but also in technical fields such as science and engineering.

In India, the first Open University was established in Andhra Pradesh in 1982 by state legislation. The Indira Gandhi National Open University was established in 1985 with the stated aims of providing cost-effective quality education to a large sector of population, including those who are in remote and far-flung areas of the country. This university was mandated with an additional responsibility of coordinating all the Open Universities in different states of India, which number is more than a dozen now. It is also mandated to set norms and standards for open and distance learning in order to maintaining the quality of education provided by the ODE system. This university is spread throughout the country and beyond. It has grown into a mega university with an enrolment of more than a million.

Bangladesh Open University was established in 1992 with the stated objectives of transforming the country's vast human resources into an educated and trained workforce by extending to them wide range of academic programmes, both formal and informal. Its role in imparting education and training has been continuously expanding.

In the SAARC regions, only the above four countries have open universities, which providing higher education and training. The remaining three countries, Nepal, Bhutan and Maldives, have yet to establish an Open University.

Efforts in Developing ODL System in Nepal

The importance of distance learning was realized in Nepal as early as in the seventies. Since then various programmes for training primary school teachers through the medium of radio were started. At present, the Distance Education/Open Learning division conducts various types of teachers training programmes through distance mode. Recently, Tribhuwan University and Purbanchal University have started some courses in bachelor in education using distance mode. The idea of establishing an open university dates back to eighties. The Royal Education Commission Report 2040 B.S., had already mentioned the importance of open education. After 1990 the two high level education commissions (The National Education Commission report 2049 B.S and the High Level National Education Commission 2055 B.S.) strongly recommended the establishment of an Open University in order to provide access to different levels of education to the wide section of the society. Both the ninth and the tenth five year national plan documents clearly state that an Open University would be established in Nepal. In 2055 B.S. a team was formed by the Ministry of Education to make a feasibility study and prepare an action plan for the establishment of an Open University. The study report was sent to the University Grants Commission (UGC) in 2057 to study the report and make recommendations for appropriate actions. Accordingly, the UGC prepared a draft for the proposed Open University act and sent it to the government as long back as 2057 B.S. However, the necessary legal framework has not come into existence yet. If Open University is established in time, many of the problems facing higher education at present would have been solved.

Cooperation in ODL Among SAARC Countries

Open and Distance Learning institutions can not only provide education and training at various levels , but the facilities available may also be used to reach remote areas of the country to educate a greater mass of the people in a non-formula way. It would help to reduce illiteracy and consequently promote poverty alleviation. Realizing this potential, the heads of states or governments of the SAARC countries directed, at the tenth SAARC submit held in Colombo in 1998, to form a SAARC forum to promote cooperation in this field. Subsequently, several meetings of the Vice-Chancellors of Open Universities/ authorities of related institutions were held and a framework of

an organization named as SAARC Consortium on Open and Distance Learning (SACODiL) was developed and submitted to SAARC for approval (See the article: "SACODiL: A framework for Regional Cooperation" by the author in " Distance Education, 2059"). The SACODiL was finally approved by the Standing Committee of SAARC at its twenty ninth session during the SAARC submit held in Islamabad in January, 2004.

Main Objectives of SACODiL

The main objectives of SACODiL are to promote cooperation and collaboration among institutions imparting knowledge through open and distance learning within member states in areas including the following:

- Sharing of resources including courses, modules, and personnel currently available from respective institutions,
- Joint developments of programmes/ courses,
- Evolving mechanism for credit transfer, accumulation and accreditation,
- Sharing information technology to reach out to remote and underprivileged people,
- Other matters relating to achieving the relevant goals.

Composition and Modus Operandi

SACODil has a board of governors comprising the Vice-Chancellors of National Open Universities or heads of major open and learning institutions or authorities of related educational bodies, national focal points of the SAARC in the Ministries of Foreign/External Affairs of the member countries and SAARC Secretariat. The composition of the present board of governors as approved by the standing committee of SAARC is as follows:

1. Vice-Chancellor, Bangladesh Open University, Bangladesh
2. Head of Relevant Educational Institute, Bhutan.
3. Vice-Chancellor, Indira Gandhi National Open University, India.
4. Head of Relevant Educational Institute, Maldives
5. Member-Secretary, University Grants Commission, Nepal
6. Vice-Chancellor, Allama Iqbal Open University, Pakistan
7. Vice-Chancellor, Open University of Sri Lanka, Sri Lanka
8. National Focal Points of SAARC in the Ministries of Foreign/ External Affairs of member countries
9. SAARC Secretary General or his representative

- The chairperson of the board of Governors is to be selected from amongst its members in alphabetical order by rotation.
- The chairperson of SACODiL is to operate on a three year rotational basis and the secretarial will be located in the institution/ organization to which the chairperson belongs. In the event a member country choose not to chair the Board of Governors, the next country in line will assume the chairpersonship.
- The chairperson is to be the executive head of SACODiL for three years and he/she is to nominate a secretary from his/her own organization to provide the necessary secretarial assistance. The cost of maintaining the secretariat is to be borne by the concerned institution/organization.
- The secretariat will act as a central point for correspondence, maintaining SACODiL records, monitoring the progress of assignments, convening the meetings, taking follow-up actions and also any other function conferred on it by the Board of Governors for the fulfillment of the objectives of SACODiL.
- It is desirable to have full participation. However, as per the SAARC practice a total of five member countries (host plus four) comprise the quorum of Board of Governors' meetings.
- The Board of Governors meet at least once in a calendar year.
- The decisions of the Board of Governors are to be taken by consensus as required under the SAARC charter.
- Each member of the Board of Governors nominates an officer/ officers of his/her organization, who could be nodal point for liaison with the secretariat of SACODil, as well as to provide the necessary assistance to run its activities.

It was unanimously agreed that the first chairperson of SACODiL is the Vice-Chancellor of Indira Gandhi National Open University.

Functions

The Board of Governors have the responsibility for determining the principles, policies, and priorities that guide its activities and responsible for carrying out the following functions:

- Review and approve strategic plans and annual work programmes, monitor implementation and evaluation of the results.
- Making of administrative and financial regulation, proposing annual budgets and fund raising activities.
- Decide on new studies, new areas of cooperation consistent with the objectives of the SACODiL
- Make recommendations to create new operational mechanism as and when required in furtherance of the objectives of the SACODiL and
- Submit an annual report to the SAARC secretariat.

First Meeting of the Board of Governors

The first meeting of the Board of Governors of SAARC Consortium on Open and Distance Learning (SACODiL) was held at Indira Gandhi National Open University. New Delhi, on 19-21 January 2005 at the invitation of the government of India. It was represented by the board members of all the countries. The main decisions were taken at the first meeting are as follows:

General

- Since the National Open Universities and National Distance Learning Institutions are under the administrative control of Ministries of Education, it is recommended that an officer from the Ministry of Education of each member country with the rank of joint secretary or above may be included on the Board of Governors of SACODil.
- A logo of SACODiL was approved.
- SACODil may collaborate with UNESCO Commonwealth of Learning (COL), South Asia Foundation, DFID (UK) and such other international agencies for the implementation of approved regional academic programmes. The chairperson will negotiate specific programmes with these organizations/agencies and share details with SACODiL members.

Learner Mobility, Credit Transfer/ Recognition and Recognition of Mutual Degrees

- It is recommended that as a first step the Open Universities in member states should recognize 12 +3 pattern of BA, BSc and B. Com. degrees as equivalent to eachother and the Vice-Chancellors/ Heads of Distance Education Institutions should obtain approval of their statutory authorities.

- The acceptance of such degrees be taken note of by all member states. Measures may be taken to ensure that degrees / diplomas awarded by statutory Open Universities/ Distance Education Institutions are treated at par with the corresponding degrees/ diplomas awarded by conventional university/ institution. In this context, it was agreed that SACODiL and the Committee of the Heads of University, Grants Commissions/ Equivalent bodies should cooperate and draft suitable guidelines.

- The Board authorized that a committee comprising Vice-Chancellor of Sri-Lanka Open University as chairperson, Vice-Chancellors of Allama Iqbal Open University and Bangladesh Open University, with Prof. S.C Garg, Member Secretary as convener, may develop norms for standardization of credit, for credit transfer to facilitate mobility of students among member states, Initially, the committee should focus on programmes like MBA, MCA/MCS and teachers training. The committee would send its recommendation to the chairperson SACODil by 1st May 2005.

ICT Compatibility and Connectivity

- The requirement of software in distance education is quite substantive in view of phenomenal growth in number of students. The Open Universities in the region have obtained visible capabilities. The Board resolved that compatibility aspect in terms of these capabilities should be examined for ensuring mutual compatibility/ communication. It was further resolved that efforts will be made to share these resources wherever possible applicable.

- The importance of EDUSAT connectivity for open and distance learning systems was appreciated. The Board decided that the chairperson may take further necessary steps in this respect. Meanwhile, letters of interest would be sent by the institutional heads to the chairperson of National Core Group for EDUSAT appointed by the Government of India addressed to the VC-IGNOU.

Development of Database

- The open and distance learning system is dynamic and fast growing. Some best practices have emerged which may be useful for replication and adoption by different institutions. In this scenario, the Board of Governors decided that a database for all open and distance learning statutory Universities/ institutions should be developed by the SACODiL Secretariat in collaboration and

cooperation with all members with mirrors of database in each National Open University / Distance Learning Institutions in Member States.

- As a futuristic step the Board decided that efforts should be initiated for developing SACODiL repositories for research, digital libraries.

Promoting ODL in the Region

- The SACODiL Secretariat writes to the Vice-Chancellors of the Open Universities seeking information on identification of strengths and requirements. The requisite information to be sent to the SACODiL Secretariat by 15 March, 2005.
- Member states where ODL institutions are emerging would be examined the information and approach by the SACODiL Secretariat. Any proposal for sharing of course material would be considered favorably by Member Open Universities at rationalized rates. Those members could convey to the SACODiL secretariat their requirement on (i) Exposure to distance learning (ii) Building capacities for design and development of self-instruction materials (SIM), and (iii) Delivery system, evaluation system, etc. The SACODiL secretariat is to advise suitably to meet their requirements.
- The Board welcomed the offer by India to host a five-day workshop on capacity building on E-content in April 2005. It would be a SACODiL and Indira Gandhi National Open University joint initiative. This would be first in a series of workshops in this emerging area
- The Board welcomed the offer of Sri-Lanka to host a conference on UN Millennium Development Goals through ODL on 20-22 June, 2005. This would be a joint initiative of the Common Wealth of Learning (COL), SACODiL and Sri-Lanka Open University.
- The Board further welcomed the offer of Pakistan to host a three-day workshop on Research through Distance Learning Institutions in the first week of Sep. 2005. Exact dates would be conveyed by AIOU to the SACODiL secretariat by 15 Feb., 2005. This would be a joint initiative of SACODiL and AIOU.
- The Board also welcomed the offer of Bangladesh to host a five-day workshop on Multimedia Programme development in December 2005. Exact dates for the workshop will be conveyed by the Bangladesh Open University to

SACODiL secretarial by 28 Feb., 2005. This would be a joint initiative of SACODiL and Bangladesh Open University.

Developing Joint Programmes

- The committee appointed above (for learner mobility) will identify areas for developing joint programmes. The recommendation of the committee will be placed before the next meeting of the Board.

SACODiL Website

- The Board approved development and hosting of a website of SACODiL with "sacodil.org" as the address. The current secretariat will develop the website and pass on its mirror image to the country where SACODiL secretariat moves after three years. Each country to provide up to three WebPages through e-mail to the SACODiL secretariat by 28 Feb., 2005, which, inter alia, should include mailing address, e-mail addresses, institutional website, other major distance education institutions in each country and major achievements in ODL.
- In order to make the findings of research in ODL available to the academics, it was decided that research reports by researcher in member states would be made available through SACODiL website. The research report will be submitted to the Vice-Chancellors / Heads of member institutions of respective countries. The countries where there are well established Open Universities, the Heads of the institutes get the research reports reviewed and if the review is favorable the research report would be transmitted through e-mail to the SACODiL secretariat for necessary action. In case of the countries where Open Universities do not exist, the research report will be forwarded by the concerned member of the Board to the SACODil secretariat for further appropriate action.
- The Board agreed to institute an Award in recognition of outstanding contribution to the growth of ODL system in member states. The concept paper will be placed before the next meeting of the Board for its counteraction and approval.

If Nepal were to establish an Open University, it is obvious that there is an opportunity of receiving technical/material assistance and cooperation within the framework of SACODiL as well as through different Open Universities and other international agencies bilaterally. It would greatly facilitate in developing the University. Despite the national policy of establishing an Open University as stated

in various reports and five-year national plan documents and recommendations from various quarters including the University Grants Commission, it is unfortunate that proper priority has not yet been given towards establishing an Open University in Nepal. Most opportune time is slipping by and the problems remain perpetuated. It is hoped that it will be realized sooner than later.

A Plea for Open School System : A Proposal*

- Dr. Kedar N. Shrestha*

Background

This is an open essay to serve two purposes. The first purpose is to expose the fallacies on which the existing closed education system is based. The second purpose is to plea to establish an open education system in the country. Nepal has a very closed education system, which the country inherited from the British Colonial India more than half a century ago. The establishment of the School Leaving Certificate (SLC) Board in 1939 is one milestone in the process of establishing a closed education system. In a closed system, educational process is regulated by the rules and regulations made by people who hardly had any experience or understanding of the educational process and these rules and regulations are regarded as God-given commandments. Any one who violates these rules is punished. Following are the three examples to explain how a closed system functions on the basis of the legal rules and regulations made by the executives:

Legal Rule for Students to Appear SLC Examination

- Students willing to appear the SLC examination as regular students should pass the sent-up examination from a government recognized secondary school.

Case I

In the SLC examination conducted in 2004, a case appeared in a SLC examination centre at Lalitpur where some students came to take the examination where they found that their names did not appear in the list of the students who could sit for the examination. Upon investigation, the bewildered parents and the students found that the school which sent them to sit for examination was not a recognized secondary school. The existing rule does not allow any one to sit for examination unless they are sent by a recognized secondary school. So, because of the criminal act of the unrecognized school where they happened to study the students were penalized. Their examination will not be legally valid and the students lost one year for no fault of theirs.

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* Borrowed from DEC Journal, 2061

Case II

In one examination centre of Lalitpur District, nearly 200 students took the examination. Because of the doubtful nature of the papers carried by students, an investigation was conducted. It was found out that some schools have been registered in the Districts Education Office (DEO). These schools do not exist physically. But, they sent-up hundreds of students for SLC examination without teaching and/or without sent-up examination and collect good amount of money from the students for doing the favour of sending them for SLC examination. These students who sat in SLC examination without sent-up examination are not penalized because their school was registered in the District Education Office.

Case III

There was a news that one District Education Officer and one of the junior staff of the DEO were arrested on corruption charges. It was charged that the DEO and his assistant took bribes from the students and allowed these students to sit in the SLC examination without being sent-up for SLC by any recognized secondary school.

All the three stated cases are related to the government rule that students must be sent-up by a recognized secondary school. This rule must have been made to ensure that only capable students would sit for the final SLC examination. But, this rule has lost its justification because only about 30% of the school sent-up students have been passing the SLC examination for decades. The government has not penalized the schools which pass less than 50% of their sent-up students. If one examines the case of sent-up students and the pass percentage, one would wonder how this crazy rule has been observed by the government. Take the case of SLC pass percentage of Kathmandu schools of the 2003 SLC batch. Fifty schools out of the 125 community schools have less than 40 percent pass in the SLC examination. There is one interesting case. One Manakamana secondary school sent 233 students for SLC and only 7 students passed which would mean 3 percent result in the examination. In such situation, how one justifies the sent-up system.

The analysis of the three cases indicates: (i) The rule does not serve the purpose, (ii) It is academically unfair, (iii) It generates corruption in the system. And lastly and the most important thing is that it discourages the process of free and open learning at the secondary level.

The Rules and Practices that Close the Open Learning System

Nepal, and many other countries for this matter, has been promoting closed education system as a part of their mission to provide formal education to the largest number of their children and adults. They have failed to realise how these closed system have been restricting the natural and open learning process available in the society. They have also failed to understand the injustice meted out to the children in the closed system. Some examples related to the examination system are cited.

- There was a news item some months back that the government has decided to give "5" marks as "GRACE" mark to the SLC appearing students. Students, who would otherwise fail, will be given 5 marks upto two subjects to help them pass the SLC examination. The question arises, why 5 marks only, why not 10 marks, and why should it be restricted to two subjects, why not in three subjects. Those who are responsible to take decision to give "5" marks in two subjects cannot present any moral, ethical and academic justification. The need of providing the grace mark arose because the government had made a rule for SLC pass, "Students must score at least 32 marks in all the subjects (8 now) to pass the SLC examination."

If the SLC examination regulation is made little open, the government officials would not need to assure the role of a "God" by providing "grace" marks. Is it illogical, irrational on unacademic if the following liberal rules are followed:

- After completing ten years of schooling or equivalent, any one can take the SLC examination directly filling up forms either in District Education Office or in schools.
- A student can take SLC examination partially or fully and take examination in the failed subjects, may be for five times or ten times.

Bureaucrats, holding decision making position, would not support the change to open the system. Such opening would make the administration of examination more difficult, and the record keeping more complex. However, the bureaucrats have to realise the fast growing communication system, private sectors activities and modern management. Managing education by government bureaucracy is getting outdated.

Education today has to be managed by private and community agencies through competitive basis. The government should learn the lesson from other sectors of human activities in the country. Government would be regressive if it continues to think that only government agencies can ensure quality of education. In the case of SLC examination, conducting examination at the regional level or allowing SLC examination conducted by semi-government or private academic agencies will help make their examination more student and learning friendly.

The Nepalese education system is a very closed system. It is a bureaucratic friendly system. It is a ritual-based system. Thus, it does not adequately consider the learner and the teacher who are the main partners of the system.

Some of the Examples of the Rule-based Closed System

- The existing SLC rule restricts, any student, however, brilliant, to take SLC examination before completing 15 years of age. In other words, the door of SLC examination is closed for students who have not completed 15 years. What is the justification? In the USA there is an example of a student completing Ph.D. at the age of 16. If a student is brilliant and has ability to take SLC at the age of 14, what is the justification to close the door to take SLC examination?
- Students from the first few grades of primary school (age 6, 7 and 8) are declared failed because the child has failed in one or two subjects. Is there any justification to fail a student in the grades 1, 2 or 3 when the child hardly understands what the examination is really about. Failing children in lower grades can have devastating effects on the psychology of the child. Is there any justification of such a malpractice?
- The existing system or rule of assigning students in grades 1-12 or so and conducting annual examination and promoting or detaining students every year is created in favour of educational managers. In addition, adopting a system of evaluating the primary education system on the basis of dropout rate, repeaters rate is more than ridiculous in a country like Nepal where the government has not been able to provide adequate teachers to school as per the rule of student-teacher ratio of 1:40. To substantiate the statement, the following is the news item published in Kantipur on June 2, 2004 (Bagnas, Palpa).

"Five grades, one teacher and two hundred students". The teacher himself rings the bell. He supervises the PT activity. He cannot take attendance of students of five classes. So, he asks students of grades four and five to take attendance of junior classes. He attends all five classes."

This is the Nepali version of a closed education system, where ritual rather than instruction dominates the system.

- In the name of a uniform national education system, the government dictates the subjects to be learned by student in each grade of the school. People in the government, (politicians and so-called experts) add some subjects or delete other subject on the basis of their whims or on flimsy ground. By performing such activities, the government closes the opportunities of the students of what they want to learn or the capacity they have to learn. For example, all students must pass all the prescribed subjects to get a SLC certificate. If some students do not have the aptitude or ability to learn the prescribed mathematics course, they can never get the SLC certificate no matter these students had excellent abilities to learn subjects related to humanities and social sciences.

Nepal can be a good example of a closed education system. Hundreds of doors of education system are closed, and some can be opened by administrative decisions. In general, it is illegal to open schools and certify students on their academic achievement without being duly recognized by the government. Teachers or school managers can be punished if they use books that are not approved by the government. The physical requirement of a school is fixed by the government rules. The days of opening and closing are determined by the school regulations. The number and constitution of public school management committee also are fixed by the Act of Parliament.

Justification for Establishing an Open School System

Nepal's existing school education has to be more open to meet the challenges that the country is facing as a result of the changes that have taken place in the social economic and political life of the people. There are two alternatives to face this challenge: one is to bring about revolutionary change in the existing system; the second one is to establish a new schooling system based on the principles and practices of the open education system that is in successful practice in other countries of the world. The writer has focused this article in terms of considering the second alternative i.e. open school system and basically addressing the immediate challenges of it.

- The national primary education has grown tremendously and will further grow to provide primary education for all. This will create problems for those who had failed to use the available opportunity at the primary level. An open primary education system would address the problems of such students who had failed to complete the primary level in the regular primary school system. Further an open primary education system would help such students to complete, their primary education even into grade 8 once it is extended.
- The expansion of primary education system would require a similar level of expansion at the lower-secondary and secondary levels. The economy of the country would not allow the government to provide the lower-secondary or secondary schools within the walking distance of all the primary school completers. An open secondary school system would help thousands of children who cannot attend the regular schools and who aspire to complete the secondary education on the basis of self-study.
- The regular secondary education curriculum has limitations in providing large variety of study areas in the regular school. An open school system has the advantage to offer a variety of courses on self-study basis. This would mean that students opting for open school system can be provided a wider variety of choices in their subjects of study.
- The number of Nepalese working in foreign countries has tremendously increased during this decade. This number will increase significantly during the coming years. An open school system would provide the opportunity to such Nepalese to provide Nepal's course of study through distance mode of open learning.
- An open school system is a cost-effective system which can be made available at a far cheaper cost than the regular schooling.

Having stated the justification for the establishment of open school system, a proposal for open school system is given.

Proposals for the Establishment of Open School System

The existing Education Act has the provision to make rules and regulations on the establishment and operation of open education system. Accordingly, the Distance Education / Open Learning division has developed a detailed open Education Operation Directives (2003). The Directives, if followed, would generate another

closed education system, eventually thwarting the very purpose of the Open system. Following are some suggestions to initiate the open system:

Policy

- The open school system will have the regular secondary and higher secondary levels as its scope of coverage and delivery. It will not offer courses on science and technology for about five years at the higher secondary or +2 levels.
- The open school system will be governed by an autonomous Board created by an Act of Parliament.
- Except for an initial expense at the earlier stages, of the government, the Open School Board will be an institution with in-built financial sustainability mechanism.
- The Open School Board will provide certificates for SLC and Higher Secondary (HS) levels.
- The open school system will follow the curriculum prescribed by the SLC and the Higher Secondary Education Boards (HSEB). It may make some modification in the SLC and HSEB curriculum in areas which need internal practical examination.

Management

- The Open School System will be governed by a Board created by an Act of Parliament. At the central level, there will be Policy and Planning Board headed by the Minister with Education and Sports, Secretary as its Vice-Chairman and Controller of Examinations as the Member Secretary. This Board will have representation from universities, HSEB, HMG/CDC, schools and educationists.
- There will be two other committees at the central level: (i) Examination Committee headed by the Controller of Examinations and (ii) Academic Committee headed by a reputed educationist.
- The Open School Education Board will directly report to the Minister of Education or the State Minister as appropriate.
- There will be an office of the Open School Education Board (OSEB) at the centre with three Divisions: (i) Examination (ii) Administration and (iii)

Academic except Examination Division, other divisions will have skeleton staff.

- There will be an Open Education Section in the Regional Directorates and District Education Offices. Most of the tasks will be delegated to the Regional Education Directorates RED's and DEO's.
- Except the registration of open schools, there will be no other obligations for the open schools. The RED's will be responsible to conduct the examination and get the answer books examined. The result of the examination will be published centrally. All the cost of examination will be borne by the OSEB out of its earnings.

Academic

- The main academic task of the OSEB is to publish ungraded sequenced self-learning materials for those people who use them.
- The Academic Division will prepare an academic guide for the open schools on the use of these self-learning packages which will be available for buying.
- The Academic Division will create a rich question-bank, some of which will be borrowed from SLC Board.
- A wide variety of self-learning material in the print, cassettes, CD's and other forms should be made widely available to facilitate learning for self-learners.
- Private groups should be encouraged to establish self-learning centres through training and the supply of examplar materials.

Examination

- The OSEB should have a professionally strong team of assessment experts who would be constantly working to develop valid, reliable and efficient tools of evaluation (question papers).
- The open school system should organize the national examination at least twice a year to help the learners to take examination in their convenience.
- The RED's and DEO's should be delegated with the responsibility of conducting the examinations

Conclusions

An Open School System is a less - expensive, more democratic and highly liberal system of education, particularly useful for a country like Nepal where formal school system is inefficient and do not cater to the need of economically disadvantaged children. Open education system starts on the basis of positive thinking and intends to help the learning problems of learners of all sorts. The system can be flexible enough to encourage private initiative to operate the system. The only responsibility of government would be to support the system in the initial stage. After the system gains credibility, government expenditure will not be required. In fact, Nepal has lagged far behind in the area of open education system. Let it at least start with the secondary education level, now.

Open School Within Framework of Open and Distance Learning System*

- A.B. Bhandari*

Introduction

The term ' Open and Distance Learning' (ODL) has been gaining popularity around the world as an alternate mode of instruction with wider access in education maintaining quality. The term, 'distance learning', is a synonym for more comprehensive and precise term for distance education which advocates open opportunity for learners regardless of geographic, socio-economic or other constraints. The use of the term 'open' has intended to highlight the key features of theory and practice of distance education.

Distance education is an educational process in which all or most of the teachings are conducted by someone removed in space and / or time from learner, with the effect that all or the most of communication between teacher and learner through artificial medium either electronic or media. The evolution of distance education can be divided into four phases – correspondence system, educational television and radio system, multimedia system and internet-based system.

Distance learning system, like conventional learning system includes all the components of teaching learning system. Firstly, the mission of distance learning system confines within the content of national policy, which may be directed towards particular purposes and programmes driven by particular values and philosophy of learning and education. Secondly, courses and curricula are related to mission and defined market needs with focus on preparation for certification, which are equivalent of conventional system in terms of content, admission and assessment. Thirdly, teaching strategies techniques even though depend on the types of programmes and needs, are designed to meet educational values and philosophy of the system along with an appropriate connection between teaching strategies, economy and choice of technology.

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* Revised version borrowed from DEC Journal, 2061

Well-designed materials focusing on stimulated self-directed learning with an assurance of quality control, is the feature of learning materials and resources. The communication technology, in the form of text, stills and moving images, and sound has been regarded as necessary components in distance education system which, serve with two purposes in terms of distribution of information and interaction between tutors and learner as well as wherever possible between learners too.

Open and Distance Learning covers wide range of areas of studies from school education to higher education in the form of supporting programme (in school) and certification programme (out school). There are two types of operating model with regard to open school. One model is to be operated within framework of Open University System and another model is within school education system, itself as a second mode of instruction.

This paper focuses on school education programme with review of International practices and explores possibilities of open school system in the country. It also identifies some issues of open school and suggests an implementation scheme for wider discussion.

International Practices

UNESCO, Paris, (2001) has published a report on Distance Education in E–9 countries which is divided basically into 3 parts: overview, country reports and general conclusions. The nine high population countries (Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Nigeria and Pakistan), popularly E-9, are home to more than half of the world's population. The E-9 countries have been utilizing distance education for three different purposes in order to work towards their EFA goals. Firstly, distance education was utilized either to mainstreaming non-formal schooling or supporting schooling. In Brazil and Mexico, for instance, distance education was utilized with broadcast based alternative primary schooling. Secondly, there were countries (Brazil, Mexico, India and Indonesia) perceived long-standing and successful examples in using distance education for junior secondary schools in order to address unmet demands at this level. Thirdly, distance education was widely implemented in the area of teacher training with the purpose of meeting the need of teacher shortage and upgrading teacher's qualification.

Bangladesh Open University (BOU) was the upgraded form of Bangladesh Institute of Distance Education in 1983, which is perceived as distance education dominant with the provision of responsibility for non-formal education, secondary education

and teacher education along with its tertiary level degree and diploma courses. Since 1995, BOU has launched open school programme and offers secondary school certificate for those who are out of school.

In China, with the establishment of Radio and TV University (RTV) in 1960 open and distance learning has significantly contributed to broadening access and opportunities to socio-economic development of the country. The Liaoyun television and broadcasting school provided vocational and technical education to rural communities to 1,50,000 rurally based adults of which 137,000 became qualified agriculture workers with green certificate (UNESCO, 2001). This programme consisted of 2000 hours of training materials on practical rural vocational and technical skills.

India in the field of Distance Education (DE) has emerged with the concept of National Open School (NOS), which provides an alternative route to schooling targeted to disadvantaged groups, urban poor and unemployed. This school has designed and implemented four different types of self-instructional programmes in English and Hindi for secondary higher secondary bridge (around grade 8) and vocational courses (free-standing or combined with academic course). The learning resources are made available in the form of printed materials and magazines, personal contact programmes, audio and video programmes and some television programmes. When compared to 68 million in formal secondary schools in 1996 the enrollment in open school for the same the level of education seems insubstantial (0.6 percent of learners) which attracts the mission of open school set in 1995 to getting 40 million students in sixteen languages within ten years (UNESCO, 2001).

Indonesia has been implementing three programmes on ODL, namely Pocket A (primary equivalency), Pocket B (junior secondary equivalency) and Open Junior Secondary School (OJSS) for out-of-school and marginalized children and adolescents. The pocket A programme aims at providing education services to out-of-school children between 6-12 years with the provision of dual mode of instruction – self-instructional materials and face-to-face interactions in three times a week. Pocket B, has targeted to 12-15 years old with the provision of print-centred module followed by tutorial programme. The OJSS programme has been designed to individual learning with the provision of centrally produced self-instructional materials with the combination of cassettes, broadcasts and different types of student support system. A comparative study on academic achievement reported that there is

no difference in academic achievement between OJSS and regular students (Visser, 1994).

Mexico launched a new nine-month secondary distance education programme for adults with the name Telesecundria school (outside school hour) in the work place as per demand of companies which included text-based self-study guides at two levels and in five subject areas. This country also has been implementing distance education on adult basic education (equivalence lower-secondary education) through self-study text materials, advisors and TV programme at 2 levels (beginners and advanced) in 5 subjects. Further, Mexican government has planned to open 4,500 new telesecundria schools to address the dearth of secondary schools in rural areas which will make access of 25,000 additional students with an introduction of three-year television high school programme for grades 10 - 12.

Pakistan, with implementation of the functional education project (FEPRA, 1995) was able to implement ODL programmes on adult basic education (equivalency to primary to secondary) with technical support from Allama Iqbal Open University (AIOU). Moreover, with implementation of women's secondary education project 1993, Pakistan mobilized AIOU in developing 22 ODL courses (7 compulsory and the rest electives) in a range of subject areas for out-of-school and marginalized children and adolescents, which utilized multimedia (print, audio and video) as a mode of instruction with the purpose of creating an opportunity to enroll into other distance higher and vocational institutions. This course, at the moment, has been institutionalized with the provision of access to these who are interested.

Exploration of Possibilities

The evolution of ODL in Nepal can be traced back to 1978 when Radio Education Teacher Training Project (RETTP, 1980–86) was initiated with objectives of upgrading professional capacity of under-qualified primary teachers. Nepal could be considered a pioneer in SAARC region in the area of teacher training through distance mode. Because, Sri Lanka started teacher education through DE mode with an establishment of the Open University of Sri-Lanka in 1980 and Bangladesh implemented DE mode teacher training (secondary level) with an establishment of Bangladesh Institute of Distance Education (BIDE) in 1983. Similarly, Pakistan executed DE on elementary teacher education only in 1997 even though AIOU was in operation since 1974. On the other hand, India has a long history in DE which dates back to 1960s but they included DE programme on teacher education lately in 1990s. India, at the moment, has more than thirty Open Universities offering variety

of programmes. Indira Gandhi National Open University, (IGNOU) has an amazing intake capacity being enrolled nearly one million students per year.

Nepal's efforts in initiating DE system in the country remained to limit in teacher training till to the date. However, efforts made to institutionalize project based activities into a mainstream of the education system was remarkable in 1994 through creating Distance Education / Open Learning Division (DE/OL), an institution at national level under the Ministry of Education and Sports (MOES) system. DE/OL, established at the central level, has very good institutional base with physical facilities, equipments and buildings. However, professional capacity of DE/OL division has remained critical because of unavailability and non-retention of professionals due to lack of clear visions and programmes. Even though, DE/OL division has an in-built system where some information, skills and experiences on distance education have been collected and utilized from almost three decades ago.

The possibilities of establishment of open schools in country can be explored in a number of ways. Firstly, Educational Management Information System (EMIS) documented by Department of Education (DOE, 2004) has clearly stated that access in school education has been a matter of serious concerns which calls to have an another mode of institution. Secondly, education policy reflected in 10^{th} plan, which advocates the need of Open University, has not been materialized. Thirdly, developmental partner like UNESCO encourages and assists its member states to make greater use of open and distance learning for expanding access to education and enhancing effectiveness in all forms, types and levels of education including education delivery using Information Communication Technology (UNESCO, 2001). Fourthly, National Curriculum Assessment Council (NCAC) is in the process of approving National Curriculum Frameworks for grades I - 12. This process can be helpful in indicating the stage where ODL is to be introduced in order to create wider access in school education.

Fifthly, there is a very good opportunity to utilize international forum like Asian Association of Open Universities (AAOU) and SAARC Consortium of Open and Distance Learning (SACODiL) in sharing of learning materials and expertise, developing joint programmes / courses, sharing of IT (hardware and software) and accrediting the programme. Moreover, DE/OL division has recently set a formal institutional linkage with the Open University (OU, U.K.) for 3 years under Higher Education Linkage programme through British Council, which could be utilized in developing and establishing open education system in the country. Finally, MOES

has already approved directives for operationalizing open schools, which could be good instrumental to start with.

Open Schools

As per Distance Education Directives, 2003, four types of institutions - secondary and higher secondary schools, technical schools and academic/research institutions can apply for open schools along with their own programmes in an authorized institution DE/OL division. The process of affiliation for open schools has set procedures like field visit report, recommendations from Academic Committee and approval from Distance Education Committee (DEC), chaired by Secretary of Education and Sports. This directives give clear mandate to run open schooling as a alternative route to formal schooling including technical and vocation education. However, provision is made to get no objection from Higher Secondary Education Board and Council for Technical Education and Vocational Training (CTEVT) for implementing DE programme on higher secondary level and vocational / technical level respectively with their commitment for allowing students to sit in their regular examinations.

Curriculum & Learning Materials

The government's prescribed curriculum and learning materials are considered to be the main curriculum and learning materials, which are easily available in the market. However, DE/OL division can develop distance learning materials (print, audio, video) based on approved curriculum, with the concept of public-private partnership in such a way that the total cost for development and production to be borne by private enterprise. And they will be given sole authority to sell the materials in turn. Moreover, DE/OL division has to manage audio / video conferencing as students support programmes. There is also a provision of subject committee, and academic committee with representation of experts and technical institutions in the process of developing self-learning materials.

Certification

The types of certification programmes envisaged in the document are Lower-secondary-level Examination, Secondary Level Examination, and Higher Secondary Level Examination, which are to be considered by concerned Board of Examinations as provisioned in existing education regulations.

Admission

The candidates with qualification of grades 5, 8 and 10 (SLC) can be admitted for lower-secondary level, secondary level (SLC) and higher secondary level (+2) examinations in a registered open school respectively. The duration of a course has been envisaged of one year in secondary level education and of 2 years in higher secondary as Higher Secondary Education Board has a provision of yearly examination for grade 11 and 12 separately. The age factor of a student also has given due consideration with provision of 15 years, 16 years and 17 years for admitting in lower-secondary, secondary, and higher secondary level education in an open school.

Student Support Services

The open school, as provisioned in directives, has to organize contact sessions for a group of students enrolled in their schools. The main components of a contact sessions are considered to be lecture, home assignment, exercise, presentation and report writing. These schools are also expected to manage library of printed materials and audio / video cassettes with the system of issuing materials for students in addition to appropriate communication technology, suitable in their context like E-mail, telephone, Internet, and correspondence. The school has to maintain student performance records like presentation, home assignment, session participation, and test score, as a part of assessment, to be entitled to sit in external certification examinations conducted at the national level. But in the case of lower-secondary level examinations, they are allowed to sit in external examinations conducted at the district level by District Examination Board, chaired by District Education Officer. The DE from the centre has to organize audio/video conferencing in support of student learning.

Issues and Suggestions

The DE/OL division even having directives for operation of open schools in a country has remained silence in terms of inviting potential institutions for expanding educational services with addition of open school. However, DE/OL division has continued its efforts in getting positive commitment from OCE and HSEB that they will permit to sit in external examination to those who come through open schooling stream. Indeed, DE/OL division has a very good start for the developments of it so far in open learning system. However, the issues and challenges faced by open

distance learning system will be pertinent and valid to mention here. They are stated below with suggestions.

- From the literature review, it is clearly understood that the Nepal has not made substantial progress in the ODL area within SAARC region, even though she was a pioneer to introduce DE on teacher education. So, there is an urgent need to have clear vision, strategic plan and programme for action in order to establish ODL system in the country.

- EMIS has informed us that there are 18 %, 59 %, and 72 % school aged children who are out of the schools in primary, lower-secondary and secondary levels respectively, which reveals that the country having only formal schooling system can fail in accomplishing national and international commitments for providing education for all by 2015. Distance learning methods have been argued having their own pedagogical merit, which can be evaluated from technical, social and economical criteria leading to different ways of conceiving knowledge generation and acquisition. Establishing and recognizing ODL system in the country in addition to formal schooling could be a possible solution to address this issue.

- Existing national curriculum and assessment system does not indicate the provision of ODL which has created the confusion in certification of the programme. Ministry of Education and Sports (MOES) is in the process of implementing Secondary Education Support Programme (SESP, 2003-2008) which consists curriculum reforms as one of programme components with financial and technical support from ADB loan and DANIDA grant. The programme document states to have 1-12 national curriculum frameworks, which creates very good opportunity to introduce distance open learning programme for school level education. The Curriculum Development Centre (CDC) being an apex body of national curriculum frameworks can be advised to include distance open learning mode along with formal education with wider consultation of stakeholders and experts.

- The former DEC which merged in National Centre for Educational Development (NCED) as DE/OL division can be utilized and mobilized to start with open school as a foundation stone for DE/OL system. The policy body created for developing Human Resources in education sector under the chairmanship of Minister of MOES can be given one additional responsibility for the policy of DE with amendment in Education regulations. Once, an open

school system is established well with a full capacity, this division of NCED can be split into an autonomous institution leading to creating an open university. In the mean time, a draft act on open university submitted by Dr. T.R. Khaniya team needs to have wider discussion for adaptation in the changing contexts.

- The discussion made in various educational forums and education policy stated in national documents much talked about Open University but not about open school, even though Open University covers from non-formal education to all levels of formal education.
- The ODL/NCED remained helpless in developing vision of ODL in spite of having supporting guidance from concerning authority, and having institutional collaboration with OU, UK so far. So, ODL/NCED an DE/OL division of NCED needs to establish institutional and professional base with financial support from SESP fund further the professional support through linkage programme in developing open distance quality materials required for open schools, needs to be explored.

References

Acharya, S. (2059) : Open education : Context and circumstances, DEC Journal, Sanothimi, Bhaktapur.

Bhattarai, H.N. (2059) : SACODIL : A Framework for regional co-operation, DEC Journal, Sanothimi, Bhaktapur.

Koirala B. N. (2058) : Dual Regularity : A Need of master's programme on distance education, DEC Journal, Sanothimi, Bhaktapur.

Bhandari, A.B. (2058) :Distance Education : Emerging mode of instruction, DEC Journal, Sanothimi, Bhaktapur.

David, M. Y. (1998) : Asian research on open and distance learning, international research foundation for open learning, Cambridge, U.K.

DEC, (2060) :Directives on distance education, Sanothimi, Bhaktapur.

T.R. Khaniya (2058) :Open University, DEC Journal, Sanothimi, Bhaktapur.

UNESCO, (2000): Open and distance learning trends, policy and strategy Considerations.

Wolfgang. V. (2001) : Distance education in E-9 countries, UNESCO, Paris.

Dual Audience Interactive Radio Instruction: An Approach To Teacher Training*

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Background

Learning is central to educational development of a person. Teaching should, therefore, emphasize on the facilitation of learning. In the past, oral exchange of information, or to provide chances of practicing the knowledge and the skills acquired from teacher constituted core of teaching and learning. The contexts have now changed much. Today, educational technology permits alternative mode of learning. Students now have better choices. Nevertheless, the role of teacher remains important. Students need teacher for guidance through curriculum and learning activities and for setting and achieving the goals, suitable to their age, aptitude and contexts. So, the best approach to provide effective environment for learning is to enhance the capacity of the teachers with educational technology.

Today, educational technology is increasingly being used in self-learning mode and distance learning mode. These modes have proven to be effective and efficient for teacher training, as well as for model guided learning for students. In this line, the has launched a programme called Dual Audience Interactive Radio Instruction (DA-IRI) with the support of UNICEF, Nepal. The main objective of the programme is to train the teachers in their regular classrooms by using pre-recorded audio-cassettes.

DA-IRI teacher training consists of a series of 50 audio-cassettes (25 English lessons for fifth graders and 25 in Mathematics lessons for third grade). The programme provides recurrent teacher training in new teaching methods for English and Math teaching. The pilot study also includes two introductory cassettes designed for use during the regular class, and guide to the teachers and students as they try out new teaching strategies. The programme promotes new teaching strategies such as student-to-student interaction, use of teaching materials, and linking content to real life situation.

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* Borrowed from DEC Journal, 2059

The approach taken in this training is to walk the teachers and students through pre-designed interactive classroom activities. For this, the recordings consist of students as well as teachers specific instructions for activities based on the curriculum objectives and contents. The process addresses two audiences-students and teachers, learning instruction to the students and teaching instruction to the teachers, thus the name Dual Audience Interactive Radio Instruction. The programme is designed for radio broadcasting to cover wider number of the teachers, hence the name Radio Instruction. On the average the recorded IRI Programme duration is about 30 minutes.

The programme was piloted in fifty schools, 10 schools each in 4 districts Ilam Nuwakot, Kapilwastu, Dang, and Dadeldhura. The pilot schools were paired with matching non-pilot schools for the purpose of impact assessments. This pilot was conducted with the help of a team of consisting of field formative evaluators, DE/OL division personnel, (formar DEC) teachers and the experts. The school supervisors from the office of District Education Office (DEO) were designated as the formative evaluators. Formative evaluators were engaged to facilitate use of the programme in the classroom as well as identify problems and issues and make suggestions for improvement. A study was conducted in 2001 to assess the effectiveness of the piloting. This article is based on the study outcomes.

The main objective of this article is to reflect on the potential of DA-IRI method as an approach to teacher training, **recurrent training in particular**. the article is focuses on the following aspects:

- Nature of IRI Programme and its impact on classroom.
- Impact of IRI Programme on student learning and achievement.
- Transfer of teaching skills from IRI to non-IRI classes.
- Views of head teachers, teachers, teachers, formative evaluators and DEOs regarding IRI approach and method.

Nature of IRI Programme And Its Impact On Classroom

DA-IRI is an approach to teacher training. Like in any other teacher training approach it has potential for incorporating interesting and useful features. The experiences of the piloting showed that this approach has better prospects in the following aspects.

Modelling Good Teaching Practice

The IRI Programme has been designed to provide model classroom activities. The Programme walks the students and the teachers through interesting activities helping

the teachers to have comprehensive experience of a model classroom. It emphasized on helping teachers and students to acquire the skills necessary for a good class through rigors. Because of the rigors it was also anticipated that it would develop desirable classroom habits among the teachers and students. The emphasis has been on the student -centred classroom activities.

The IRI Programmes Engaged Teachers and Students in Entertaining Activities

How to ask appropriate and stimulating questions, how to develop and use instructional materials, which can be locally constructed. The programme demonstrated both to the teachers and students the importance of listening, pausing for framing appropriate answer and providing time for the response. It helped teachers to realize that students should be provided adequate time to answer and to provide immediate reinforcement. Time management is another important aspect of modeling good teaching practice that this approach has addressed.

Involving Students for Joyful Learning

Making classroom interesting and joyful is another focus of the DA-IRI programme. For this the IRI programme format has been designed to provide opportunities for singing along with the audio play, listening story and responding to the question related to the story, and participating in guided activities. This approach provided the students ample opportunity to engage in joyful learning. The teachers, students and head teachers highly appreciated this approach. Almost all teachers and students of the IRI schools identified the use of **songs, stories, games, role-play, activities,** group work, IRI programme as joyful learning. This has attributed to high participation of the students, and their increased motivation for active learning.

Another important and useful strategy that has been demonstrated in the programme, as indicated by some of the teachers, is questioning skills. Teachers have found it very useful to spread questions throughout a lesson, providing adequate time for the students to answer the question, reframing the question when needed and providing feedback to the students. Frequent questioning practice was found to be highly motivating to the students.

Providing Opportunity for Learning Interaction Skills

IRI programme provides an opportunity for various forms of interactions such as radio-teacher, radio-teacher-student, radio-student, teacher-student, and student-

student (peer, group). Such multiple interaction opportunities are instrumental in developing students' interactive skill, concentration and keenness.

Joyful, child-centred activity in one hand and immediate responses required to answer the radio teacher seems to have increased concentration and keenness in listening on the part of students. Also the interactive activities have inspired the students to imitate and playfully pronounce words in a rhythmic way (pen/fen) thus helping develop their English speaking.

Encouraging Use of Instructional Materials: The DA-IRI programme has been developed to incorporate simple instructional materials that can be made locally. Both the teacher and students are required to collect/develop instructional materials to be used during classroom activities. For example, stones, grains, and other locally available materials have been used for teaching basic mathematical concepts. Word card, pictures, and number card, geometrical shapes are to be found hanging on the walls of IRI schools for handy use.

The important aspect of collection and use of material relate to motivation of children to connect their study to their home, environment and play. It has been a very successful aspect. Often, students took initiatives to bring materials in the class thereby, providing impetus to teacher action for the use of instructional materials.

Making Learning More Relevant To The Students

IRI programme has been found to illustrate how to develop concept in the children by relating learning to the lives of the students. Mathematical concepts are based upon the everyday problem that students are likely to encounter. Identifying particular condition, naming objects, setting based upon the given clue is also found to increase imaginative and creative aspects of the students. Similarly, English language is related to normal and frequent usage expected.

Prompting Healthy Competition

As sensed by the field researchers and as expressed by the teachers, the IRI programme is helpful in setting productive competition in the classroom. When students are selected for modeling, working in a pair or group or when they are asked to collect teaching/learning aid, students are found to compete with each other. Such a productive competition is found to be helpful to motivate students and enhance their learning. Students were also found keenly observing what classmates are doing and whether or not they are correctly following the instructions provided.

Impact Of IRI Programme On Student Learning And Achievement

As observed by the teachers, formative researchers, head teachers and the students there are distinct features in IRI programme that are advantageous. In the IRI class there was higher students' motivation; more opportunity for students' involvement; joyful classroom activities; clear-cut instruction for collection and use of instructional materials and follow-up activities. IRI class helped the students and the teachers in following ways:

- Increased students' concentration on lesson.
- Enhanced students' listening and response capacity.
- Changed teachers' role from lecturing to facilitating.
- Enhanced students' motivation.
- Made learning enjoyable with interesting classroom activities such as story telling, singing, and games.
- Helped teachers to experience providing clear direction to follow in the IRI classes.
- Helped teachers and students conscious about time limits.
- Increased in students' attendance.
- Promoted planning and preparing materials for the classes in accordance with the audio instruction.

Impact On Student Learning And Achievement

The study assessed achievements score of 282 students (136 from pilot schools and 146 from non-pilot schools) in various areas of knowledge and skill related grade three mathematics. Similarly, 230 students of Grade Five (118 from pilot schools and 112 from non-pilot schools) were selected for the achievement test. Various skill areas like writing, reading, listening, and speaking in English and numeric and work problem were analysed in mathematics.

The average achievement levels of the students of the pilot schools in both subjects were found higher that those of the non-pilot schools as the following table shows:

Table1: Student's Achievement in Pilot and Non-pilot Schools

Areas	FM	Programme	N	%	Mean
Written	81	Pilot	118	52.01	42.13
		Non-Pilot	122	47.14	38.19
Oral test for speaking in English	8	Pilot	99	68.87	5.51
		Non-Pilot	93	51.25	4.10
Listening test English through radio	15	Pilot	64	84.53	12.68
		Non-Pilot	48	67.26	10.09
Mathematics	86	Pilot	136	39.65	34.10
		Non-Pilot	146	29.20	25.12

N= Number of students; SD = Standard Deviation; FM= Full Marks

Transfer of Teaching Skills From IRI To Non-IRI Classes

It was clearly observed during the study that many of the skills learned by the teachers from IRI sessions were also found used in non-IRI class. The following are some of the important aspects of the skills transferred:

Use Of Play-Way Method

Song, story, games were usually found to have been used in non-IRI classes by the participating teachers. Engaging students in activities, asking students to play role models, engaging students in physical activities were easily adopted by the teachers in their non-IRI classes.

Use Of Teaching Materials Developed In IRI Programme

Teachers and students constructed/ collected a number of useful teaching learning-materials like number card, word card, geometric shapes, counting materials, and in few cases blocks, locally made weighing machine as well. These teaching-learning materials were also used rigorously in non –IRI classes. Also, Teachers developed such instructional materials for other classes as well.

Student-Centred Learning Activities

IRI classes are modeled to provide students-centred teaching-learning programme unlike the traditional classroom teaching learning which is often dominated by teacher's lecture. Although teacher lecturing is almost normal (habitual) mode of teacher activities in the classroom requiring extra effort on the part of teacher to practice alternative mode, the IRI teachers nevertheless made consistent efforts to

use activity based classroom practice. The IRI participating teachers found the skill of operating student-centred activities useful and effective and therefore made efforts to employ in other non-IRI classes as well.

IRI participating teachers were found spending more time in students' involvement in activities. Approximately, half of classroom time was spent in student's involvement in activities in Mathematics and about 38% of the time in English classes. Students spent their time in class work activities in using instructional materials, class discussion, answering question and so on.

Motivation for Informal Learning

IRI programme, particularly specifically English subject, demonstrated that listening and practice and important to speak English better. This realization motivated the teachers and the students to listen to the news in English and English songs. Some of the students were found to have improved their spoken English by practicing rhyme in playful manner.

Student-Student Teaching/Learning (Peer)

Student-student interaction is another aspect built in the IRI programme which the participating teachers found useful and therefore made efforts to employ in non-IRI classes as well. Student paring for number card activities has become interesting classroom practice in mathematics class of the IRI schools.

Taking Classroom Activities Beyond School

Students of IRI school, it was found that they would play the games learnt in IRI programmes such as command and action game touching nose, eyes, ears of English subject programme and making various shapes by walking and identifying the shape. They enjoyed playing such games at their homes as well.

Views of Personnel Involved in DA-IRI

IRI programme has shown its positive impact upon the teaching behaviour of the teacher and greater involvement of the students in various sorts of classroom activities. As the format of IRI programme emphasizes the student activity and involvement, naturally teachers have an ample opportunity to learn child-centred techniques through practice as well. Stakeholders realized the higher value of IRI programme for better learning of the students and for enabling teacher to use better teaching techniques.

Head teachers of participating schools, participating teachers and formative evaluators considered IRI programme effective and impressive. Teachers found IRI approach helpful in making teaching easy because of

- Fewer lectures and more activities.
- Games, songs and stories increase students' motivation and concentration.
- Well-articulated model for classroom activities.
- Clear guidance and instruction: activities guided by simple audio instructions that he students could easily follow.
- Students' motivation for active participation thereby enhancing the attendance.

According to the teachers, lack of clarity in some of the audio-tape because of the speaker voice and sometimes because of the poor quality of the tape were problems in the class. Similarly, irregularity in pause time, inadequate time to interact and time for activities are other concerns of the teachers. Time provided for the teachers and students to carry out activity or to answer questions is found to be insufficient in a number of cases. Teachers as well as students complained about time off experiences while they are still half way to answering a question or doing activity or even when the teacher is still writing on the blackboard. It is particularly challenging when there is a need to introduce new song and innovative activities in an interactive way in 25 minutes time. It is more difficult when it involves lengthy questions or complicated words.

Formative evaluators and the head teachers are of the view that IRI programmes are interesting change to the traditional methods, it is helpful to monitor fulfillment of the curriculum objectives. They felt that this method made both the teacher and students active in the classroom and that is helped to make teaching learning enjoyable with stories, songs and games.

All the teacher, formative evaluators and the head teachers expressed their reservations regarding the continuity of the programme. Their concerns relate to availability of the equipment to the schools, and the fund for their maintenance and operation. They hoped for follow-up programme to come.

The IRI programme is curriculum –based. It does not deal with the textbook so that the programme does not cover all the lessons of the textbook. So it is found that teachers and students are familiar only with the IRI lessons. As most of the teachers are not familiar with the curriculum or they are not used to with the use of curriculum it would be better to make the programme textbook-based.

Beyond Pilot

Obviously, DA-IRI programme has proved its potentiality as an effective approach to providing teacher training. It could be used as a regular teacher training method (fixed programme-based training as well as short term recurrent training). This approach is desirable because it is simple, easy to handle, could be used to cover large-scale training as a radio broadcast Programme and it could be cost effective. However, there is need to further develop the technique, materials and the approach to make it more effective and free of problems. Some of the needs include:

- Making the programme textbook as well as curriculum-based instead of making it exclusively based. The programme/script should be textbook-based so that teachers could make preparation according to the lessons of the textbook.

- There is also a need for revision of teachers' guidebook that cover materials required for the particular programme so that the teacher would be able to arrange those materials in advance.

- Care should be taken that the instruction in IRI programme should be given in simple Nepali language even for conduction English subject. The script of the IRI programme should fit for everyone. Simple language and vocabulary should be used so that everybody can follow the programme. The vocabulary should not belong to a particular community. There should be use of short and simple sentences in the programme. This will help both the teacher and children to understand and grasp the programme easily.

- The Programme developers should be trained on both pedagogic as well as technical aspects in the development of such programmes.

Overall, IRI programme could be used as an effective approach to recurrent teacher training. This training could also be used effectively for supplementing/reinforcing other types of training. For Example, It could be in-built with Whole School Approach to teacher training. This programme had also being tested through radio broadcast in the same 5 pilot districts having covered larger number (700) schools. Because, the text was satisfactory it has already been decided that this mode of training will be adopted as a part of overall teacher training scheme in BPEP.

Flexible Delivery Through Distance Education: Potentials And Possibilities*

- Tanka N. Sharma, Ph. D.*

Introduction

A review of Nepal's situation regarding basic education undertaken by Ministry of Education and Sports (MOES) during past decades revealed that investment in basic education had not kept pace with population growth. As a result, absolute number of illiterate adults and number of children without access to school education has increased. Approximately, 19 per cent of primary school-age children are still outside schools. Of the total primary level enrolment, approximately 35 per cent of students leave school without reaching Grade 5. Those who enroll in and complete the lower-secondary and secondary levels are much smaller in number.

The majority of school-age children dropout of schooling before completing their high school education. A cohort analysis has indicated that out of 11 students enrolled in Grade 1, only one student will pass the School Leaving Certificate (SLC) Examination. Access to secondary and higher education is much more constraining for disadvantaged people. First, many disadvantaged children dropout from school without completing primary education. Second, many of them cannot join secondary or higher education due to lack of resources as well as their need to work for a day-to-day living. Third, completion of secondary or higher education is rather difficult for disadvantaged children due to lack of a supportive environment, the need to engage in paid work and lack of motivation due to poor job prospects.

Many people, especially residing in rural areas and disadvantaged community, cannot afford to invest in education. Although primary school education is supposed to be free, even government-supported schools need to charge some amount from each student to generate resources for logistics and maintenance as government funding is not sufficient. In addition, implicit as well explicit denial of access to education for girls and children coming from disadvantaged communities still exists, particularly in rural areas. The following sections further explain the situation that the disadvantaged groups face:

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* Revised version borrowed from DEC Journal, 2061

The Nepal Human Development Report (2001) points to large disparities in social indicators across regions and socio-economic groups. Discrepancies relate to caste, gender, ethnicity and geographic locations. Significant disparities in human development indicators are visible between the so-called 'lowest caste' groups and 'upper caste' groups, the dominant ethnic groups and the minority ethnic groups and between people from remote areas and urban areas.

Illiteracy has been a major problem among disadvantaged communities. Thus, the *Dalits* have a literacy rate of about 18 percent, compared to 47 percent for the upper caste groups; a life expectancy of only 51 years, compared to 57 years for the upper caste groups; an infant mortality rate of 118/1000, compared to 85 among the upper caste groups; and almost 15 times the national rate of absolute poverty. An analysis of the 1991 census data indicated the following strata of literacy situation by social groups (Bajracharya and Sharma, 2003).

As already noted, the extent of gender disparity in Nepal in terms of literacy is quite notable; the literacy rate for females is only 34.6 per cent as compared to 62.2 per cent for men. The situation of women belonging to the *Dalit* castes is even more critical, with a literacy rate of about 7 percent only. There are variations according to ethnic group and geographic regions.

There are also differences in net enrolment ratio (NER) as well as in other educational indicators according to the districts, ecological regions and ethnicity. Although 14 of the 75 districts have a NER close to 100 per cent, 48 districts remain far below this level. In terms of regional difference, the literacy rates in the far-west and mid-west are significantly lower than those in the west and east.

The issue of educational disparity is also significant and persistent between poor and non-poor groups and between rural and urban groups, in terms of both school enrolment and literacy.

The scenario described above indicates that existing system of educating people is not being able to meet the diversified needs of different age groups, caste groups, ethnic groups and economically and geographically disadvantaged groups. The rigid traditional structure of education is not being able to serve educational needs of diversified groups. There appears to be a need for a system of education that allows flexibility and choices to the potential learners (children, youths and adults) to translate the "Education for All" into reality. This calls for several alternatives modes of education available to general public so that learners from diverse needs and

background utilize available options of education in their own time, pace and location. Distance education is one of the powerful options for educating masses with adequate options and flexibility in order to improve quality, access and equity in education. In this article, role of distance education in flexibility, multiple options and lifelong learning opportunity of educational process will be discussed.

National Educational Policy

The Tenth Five Year Plan (2002–07), poverty reduction strategy paper and the Dakar Framework of Action for EFA agreed on 2000 are the main policy documents that are guiding Nepal's National Educational Policies. The national educational policy is also directed toward the overarching national goal of poverty reduction. The Tenth Plan's poverty reduction strategy is built on closely interlinking with four pillars (i) broad-based economic growth (ii) social sector development including human development; (iii) targeted programmes including social inclusion and (iv) good governance. Within the broad spectrum of *education for poverty alleviation*, the national educational goals are to contribute towards knowledge building; human resource development for sustained human productivity; promoting equity: inclusion and empowerment; and economic growth. The Tenth Plan has clearly emphasized that the development of education sector will continue to receive priority and the role of the government will continue to remain important in the development of the sector.

As the government has expressed its commitment to the Dakar framework of action to provide Education for All (EFA), the government has already prepared national plan of action for EFA to address the following six goals:

- Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children
- Ensuring that by 2015, all children particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality
- Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes
- Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults

- Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality
- Improving all aspects of the quality of education, and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeric and essential life-skills.

Need for Flexibility and Appropriateness in Educational Delivery

The above goals clearly indicate the need for alternate delivery mechanism and flexibility in educational structure and process. Teachers should have an access to enhance their capability without leaving the school, children and youths should have access to quality teaching even if, they reside in rural and remote areas, youths and adults should have access to meaningful and useful education in their convenient time and location. Education system should assist in helping children to become literate and employable adults. It should also help in accomplishing toward achieving the goal of helping children to develop emotional maturity, understanding, and acceptance of self and others, and the ability to form satisfying relationship. This also calls for various learning experiences through multiple means.

Educating is the social events of sharing meanings. The fact that meaning can be shared between individual person or persons and situations that make the events of educating possible. Making educative events occur is a consequence of human choice, invention, and inauguration. Since the students are free to choose to learn, the efficient cause of learning is the provisions for multiple options for learners to choose from. Provided with options and flexibility to the learners, the responsibility of learning is also the learner's not the teacher's.

If learning depends on the learners' choice and responsibility, learners should have various options to choose, suitable to their needs, circumstances and contexts. Education provided with fixed curricula, within the four walls of a school, in a fixed time frame and fixed entry and exibits into the programme, may not serve the needs of all the children, youths and adults. For example, children from the poor family are bound to work to make their living during the daytime. They are not able to attend the traditional schools to receive education even if they are interested in attending schools. Mornings and evenings may be the convenient time for their schooling. The existing curricula may not serve the needs of the children and youths who want to

utilize their education to earn their living. If educational opportunities are not available in those free hours, they are forced to remain uneducated. Properly designed distance education can offer flexibility for learners whereby learners may choose their own time, place and pace for their learning.

Education for All will not be achieving simply from documenting the problems of schools; however, until we properly understand the phenomena of educating, we will never understand how to reform education. Until and unless we offer educational opportunities outside the normal hours of traditional schools, many children from the deprived segments of the population remain to be outside the existing mainstream education despite of various incentive programmes to attract them to traditional school programmes.

According to Gowin, the social milieu is a powerful set of forces governing education. To take account of these conditions, he suggests using concepts from ethics and social philosophy - equality, freedom, authority, mutuality, and social justice. The centre of the problem lies in governance (social control) in making educative events happen at the convenient time and location. The question is how to offer desired flexibility in education through distance mode.

Flexible Delivery Modes Through Distance Education

In order to understand the concept, let us review some of the terminologies used in the flexible delivery modes.

Delivery modes refer to the means whereby teaching methods are implemented, focusing on the forms of communication used. In addition to the traditional delivery modes of lectures and seminars, delivery modes available through technology include audiovisual media (eg: print, audio- and video-tape), computer-based media (eg: hypertext, interactive multimedia and the internet) and teleconferencing media (eg: audio-teleconferencing, audio-graphics).

Distance education mode refers to delivery off-campus where the student undertaking a programme of study is not required to attend an educational institution regularly. Distance education offerings are usually accredited in accordance with standard procedures.

Flexible delivery refers to the use of a range of strategies and technologies to meet the diverse needs of learners regarding the location and time of study. Flexible delivery is applicable to both internal and external students.

A *flexibly delivered unit* is one in which the options for delivery include alternatives to the traditional ways of on-campus in-classroom lectures, seminars, tutorials and practical classes. Such a unit will be designed with the aim of meeting students' diverse learning needs by incorporating one or more aspects of flexibility in time, place and/or technology, such as:

- Delivery in the workplace or remote from the educational institution
- Delivery in block mode, other intensive mode, or other non-standard delivery time format either on-or-off campus
- Delivery with non-standard beginning and completion dates for the units
- The use of technology and resources for learning support to provide options for any individual to access and use materials at his or her own time and place (eg: self-learning materials, web-based teaching materials and exercises), or to be assessed without having to attend examinations at a specific place and time

The above aspects of flexibility will form the majority of the delivery mechanisms used in any flexibly delivered unit. Alternate schooling and alternate delivery modes provide flexibility to the students with diversified needs. Distance education may help in providing adequate alternatives and in making educational programmes more flexible. Some of the examples of alternate schools are as follows:

- **Distance learning centres:** Programme that provides provincial distance learning services for home-educated students, students who cannot attend regular classrooms, and adults who wish to continue their education.
- **Home education:** Children learn under the guidance of the parents at home. Institutions offering distance education provide interested parents with information about home schooling.
- **Virtual education:** Programmes offered by schools and delivered electronically at school or off-campus, under the instruction. Web-based learning is a popular means these days.
- **Open learning centres:** Learners come to the centre and learn the structured materials of their interest in their convenience.
- **Outreach programmes:** Alternatives for students who find that the traditional school setting does not meet their need. These programmes are provided with opportunity to continue their education at their location through distance learning.

- **School twining:** Matches local schools with other schools (foreign schools) for cultural interaction through correspondence exchange of students' works, and possible visits.
- **Correspondence course:** This is the oldest scheme of distance education. Self-learning materials are sent to the learner and the learner demonstrates competency under the guidance of an instructor at distance.

Different environments for teaching and learning may be created through exploring different ways of delivering education. When 'delivery' or 'learning' is coupled with the word flexible, the intention to increase for learners both their access to, and their control over, particular teaching and learning environments are implied.

Flexibility is a characteristic, which satisfies many stakeholders in education. It can serve the interests of managers and politicians who focus on effectiveness and efficiency and cut-price solutions to the delivery of a service. For students and teachers it can suggest a student-centred approach to learning and the democratization of processes of learning and teaching. For curriculum developers it may mean the availability of a range of approaches to suit student diversity. For those marketing educational services it can mean the production of commodities, which can be used competitively in a global educational market. And for those students who cannot, or choose not to, attend an educational institution it can spell the end of campus bound teaching, with education being delivered to home and workplace in ways and times to suit their circumstances (Nunan, 1994). Flexibility can therefore mean different things to different stakeholders within education. It is a solution, which can be paraded as a philosophy - but, at the same time, if this runs the risk of challenging existing beliefs and values, it can be cast as technique to be used in the service of an educational philosophy or ideology. In short, the solution of flexible delivery and flexible learning has the virtue that it provides something for everybody! Flexible delivery.

The term flexible learning can also be a synonym for open learning. The same two features - of increasing access and increasing learner control over learning - are often included in definitions of both terms. The reduction of factors, which have 'closed' or 'restricted' educational choices can, by definition, make learning more flexible. It is this double-sided nature of access and learner control, and technique and philosophy, that gives the term scope and, often, a lack of precision in the way that it is used. Achieving openness or high levels of flexibility present difficulties because both the notions convert current educational assumptions upside down. Openness and

flexibility challenge, existing power relationships between teachers and learners, and the technologies which often give effect to increasing openness or flexibility challenge the 'borders' of each educational institution by producing a new market where there is competition and choices.

Distance Education as a Means of Flexible Delivery

Distance education is a method of education in which the learner is physically separated from the teacher and the institution sponsoring the instruction. It may be used on its own, or in conjunction with other forms of education, including face-to-face instruction. In any distance education process there must be a teacher, one or more students, and a course or curriculum that the teacher is capable of teaching and the student is trying to learn. The contract between teacher and learner, whether in a traditional classroom or distance education, requires that the student be taught, assessed, given guidance and, where appropriate, prepared for examinations that may or may not be conducted by the institution. This must be accomplished by two-way communication. Learning may be undertaken individually or in groups; in either case, it is accomplished in the physical absence of the teacher in distance education. Where distance-teaching materials are provided to learners, they are structured in ways that facilitate learning at a distance.

Forms of Distance Education

In its original form, teachers using distance education traveled to remote sites and taught a class, or corresponded with students through mail, telephone, or fax machine. Individualized study has been a method of reaching the remote student for some time. Detailed course instructions are sent to the learner who performs the assigned tasks and returns the completed work to the teacher for evaluation and reassignment if necessary.

Technology has raised the quality of individualized distance instruction. The use of various forms of electronic media increases time effectiveness and improves the delivery of information. Video, audio, and computer-based applications may enhance the product received by the independent learner. Electronic delivery can occur using synchronous communication, in which class members participate at the same time, or asynchronous communication where participants are separated by time (Romiszowski, 1993).

Audio /video models of distance education include television broadcast, cable television, satellite, microwave, fiber optics, and audio graphics. The most widely

used format is broadcast and cable television (Parrott, 1995). However, developments in satellite and fiber optic systems have produced other successful programmes. The interactive capability of many of these networks has produced a distance classroom that is nearly identical to a regular classroom. Teachers and students can interact through both two-way video and one-way video with two-way audio systems. The recent development of Desktop Video Conferencing (DVC) which brings interactive video capability to the desktop computer, further enhances learning opportunities.

The linking of computer technology through the use of the Internet or CD-ROM with television transmission provides a potentially new dimension to distance education. This technique can link university professors to high school teachers, or to physically disabled students, in a distance setting (McLean, 1996).

Another form of interaction is the use of computer conferencing. This method utilizes a synchronous communication in such forms as an e-mail list group, an internet discussion group, or other types of conferencing software. Asynchronous methods of communication are especially appealing to the learner who has difficulty in scheduling specific time- and place-bound course work.

Traditional programmes that are heavily based in skill development and demonstration or require laboratory work can be offered in a distance education framework using interactive video interfaced with computers to facilitate a hands-on learning approach at a distance. Classes that use lecture and laboratory experiences are easily adapted to a distance education situation. Course materials, including animals for dissection, are sent to class participants with video and written instructions and assignments.

Effective Teaching and Learning with Distance Education

Distance education dictates changes in behavior for both the teacher and the learner. The successful student develops persistence and skills in self-directing work. The successful distance education teacher becomes conversant with new technology and develops new instructional styles, moving from creating instruction to managing resources and students and disseminating views (Strain, 1987). Administrative and faculty support for distance education are critical to the success of this instructional method. Administrators should take note that the implementation of a distance education programme may allow access to a greater number of students. However,

the time and work associated with teaching at a distance exceeds the normal requirements of campus-based instruction.

Students in distance education settings perform as well or better on assignments, class activities, and exams when compared to campus-based students (St. Pierre, 1998). Nevertheless, students must maintain persistence and a clear focus to succeed in a distance-learning situation. Self-direction, a passion for learning, and strong individual responsibility are important influences for achievement. There are indications that distance education works best for more mature, motivated, well-organized, and already accomplished learners (Rintala, 1998).

Garrels (1997) describes five critical elements for successful teaching at a distance:

1. *Instructor's enthusiasm:* This requires animation and comfort in front of the camera, or with the technology utilized. Faculty support and interest are critical to the success of distance learning endeavors.

2. *Organization*: Teaching materials must be prepared in advance; timing, variation, and smooth transitions must be planned. Instructors should allocate from 3 to 5 hours of preparation for each hour of distance instruction. Great attention to detail is required long before the actual classroom activity occurs (Summers, 1997).

3. *Strong commitment to student's interaction:* Whatever the modality used to teach at a distance, the instructor must encourage and facilitate ongoing communication between the students and the instructor.

4. *Familiarity with the technology used in the class format:* Faculty development is important before beginning any distance activities, and instructors should be trained in video use, computer use, or other forms of instructional technology used.

5. *Critical support personnel:* Production staff, graphic designers, and technical staff members will help the instructional setting produce successful teaching at a distance.

Issues Affecting the Consideration of Flexible Delivery

Some students thrive in traditional schools, easily achieving academic success and social glory. Other students - like round pegs in square holes - find that school is not a good fit. Sometimes, they fall so far behind in school credits that graduation seems

impossible. Or they fall in with the wrong crowd and stop caring about school. Still others find they need to focus on surviving rather than learning.

When it comes to education, one size doesn't fit all. For many students, alternative education provides an answer - or at least a second chance. In alternative settings, say teachers, students may go from struggling to thriving because they receive individual attention, the opportunity to work independently, emotional support, a small school setting with a family atmosphere, and behavior modification to help overcome social and behavioral problems. The following issues have been identified for consideration when determining the use of flexible delivery modes:

- In unit and course design the inclusion of flexible delivery modes should depend on the approaches to learning, which they support.
- Issues of student access and equity should be considered when contemplating changed modes of delivery.
- Flexible delivery options should seek to achieve student focused learning opportunities, which add to existing traditional delivery methods.
- Technology supports rather than determines teaching methods.
- The inclusion of flexible delivery options demands good cooperative design processes.
- Staff development support is important in the expansion of the repertoire of delivery modes.
- The mix of delivery modes should be chosen according to available resources, including support from central support service areas.
- A consideration of flexible delivery modes does not mean the abandonment of traditional delivery modes or provide an option for a student to elect to receive delivery via traditional methods or via alternate methods under flexible options.
- Teaching methods, including those covered by flexible delivery, should include a consideration of staff/student and student/student interaction.
- Consideration of flexible delivery should take account of the fact that it may not reduce expenditure on teaching and learning or reduce teaching loads.

Conclusions and Recommendations

The potential use of distance education within all disciplines is expanding extensively on this encourages to educate masses quite effectively. Distance education is not a panacea for the difficulties and barriers encountered in traditional educational settings, but it does provide the potential for greater service to more individuals seeking learning opportunities. In the current polarized political environment, quick, easy solutions to the challenge of making education more accessible, more affordable, and more effective is not that easy but distance education opens up a powerful option to educating youths and adults having no access to traditional schooling by providing flexible choices.

Reliable telecommunication and electricity is a prerequisite of distance learning in utilizing internet. Lack of internet access to the broader segments of the population results in information poverty for several classes of individuals and restrains the use of recently developed technologies of distance learning.

Distance education is unlikely to effect institutional cost savings over the short or middle term programmes. It can be cost effective after the system is developed and if the distance learning opportunity is accessible to wider segments of the population. The proposed Telecasters that are being developed during the Tenth Plan Period, if linked with community learning centres, could provide basic education and continuous learning opportunities to the large number of youths and adults in terms of utilizing distance learning, alternate schooling and open learning schemes.

The following recommendations address the burning issues of access, cost, and quality:

1. Prepare to lobby more aggressively for national policy reform of distance education and open learning issues.

2. Promote universal internet access to schools and communities by standardizing hardware and software configurations.

3. Promote universal access to the national information infrastructure as a vital social utility.

4. Rural communities in particular have different needs and resources from those found in urban settings. Many observers believe that the features of modern mass education, which evolved in response to urban needs, make it difficult to

address the educational needs of rural people. Non-traditional education programmes have been one response of educators and citizens to the growing consensus that alternatives to the urban model are needed in rural areas.

5. For most rural populations, educational problems arise primarily from the sparsity of rural population. Alternatives--that is, choices in available services--are few, and in many rural areas even traditional schools experience financial problems. These problems make it difficult to meet local needs in rural areas.

6. Motivating minority students toward higher achievement has been an issue confronted by many rural schools. Poor and disadvantaged students in the rural communities have been plagued by low grades, high dropout rates, and high rates of illiteracy. Distance learning should be directed to cater their learning needs and interests.

7. Special populations in rural areas-the handicapped, the gifted, and juvenile offenders, for example - have specific educational needs, as do students who have faced frustration and difficulty in typical rural school settings. Often, the low incidence of such students strains both the human and financial resources of rural schools. Flexibility in educational delivery could be one of the options to serve the special population.

8. Successful distance education programmes usually begin slowly, with well-defined needs, and then more on to address other needs. The most effective and lasting rural educational programmes are created when government/ nongovernmental agencies and communities work actively and purposefully together.

9. Distance education programmes are good recent examples of the cooperative interaction of rural educators with district, regional and national organizations to provide nontraditional solutions for unmet rural needs. Distance education entails programmes that deliver instruction through correspondence courses, interactive satellite broadcasts, or electronic networks among rural schools, but the most recent work has focused on the latter with two alternatives i.e., correspondence courses and interactive satellite broadcasts.

   Such alternatives require cooperation among rural schools, regional service providers, and departments of education. In successful implementations, rural educators define the needs of their students clearly and work with service

originators and state department personnel to work out technical problems. The effectiveness of distance education is not, however, based on technical solutions. Obviously independent, self-starting learners are an essential part of the formula so as to meet with the local needs.

References

Garrels, M. (1997): Dynamic relationships: Five critical elements for training at distance, Faculty development papers available online at Indiana Higher Education Telecommunication System (http://www.l.hets.org/distance_ed).

Milelke, Dan. (1999): Effective teaching in distance education. ERIC Digest 99-12, Washington DC.ERIC Clearing House on Teacher Education ED 436 528.

Parrotte, S. (1995): Future learning: Distance learning in the community colleges. ERIC Digest 95 - 2. Losangles, CA: ERIC Clearing House on community colleges. ED 385311.

Strain, J. (1987): Distance learning physical education teacher tducation. Guest, 50 (4), 344-356.

Possibilities of E-Learning in Education

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Abstract

E-learning refers to the delivery of individualized, comprehensive, dynamic learning content in real time, aiding the development of communities and linking learners and practitioners with experts by the aid of network technologies. The implementation of E-learning can be done in any level ranging from knowledge database to synchronous training, and by different mediums like CDs, online materials and live synchronous virtual classrooms. By effective implementation of e-learning to suite the need of particular sector and audience, and by preparing the learning media in an interactive fashion to provide the proper delivery of the study materials, a cost-effective and cross territorial teaching-learning platform can be implemented. The focus should be on the learning part rather than the electronic part, and e-learning should be implemented as a supplement to tradition learning rather than its alternate.

Introduction

With the advent of communications and information technology in the second half of the 20th century, significant shift has occurred in the teaching and learning paradigm. Newly developed electronic means have been applied to extend the process of knowledge sharing from classroom boundaries to areas far and wide, resulting in the popular technology of e-learning. E-learning has been around for many decades -- although it wasn't always called e-learning. In its earliest form, information was stored on huge mainframe computers attached to terminals that could only display green text. But with the invention first of the personal computer, and more recently with the advent of Web browsers, there have been great advances in the field of educational technology.

To be short and simple, e-learning can be defined as the delivery of a learning, training or education Programme by electronic means. E-learning involves the use of a computer or electronic device (e.g., a mobile phone) in some way to provide

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training, educational or learning material. Distance education provided the base for e-learning's development. E-learning can be "on demand". It overcomes timing, attendance and travel difficulties. Because distance learning is less expensive to support and is not constrained by geographic considerations, it offers opportunities in situations where traditional education has difficulty operating. Students with scheduling or distance problems can benefit, so can employees, because distance education can be more flexible in terms of time and can be delivered virtually anywhere.

Studies indicate that distance learning can be as effective as the traditional mode of learning when the methods are appropriate to the teaching tasks, there is student-teacher interaction, and the teachers provide students with appropriate and timely feedback. The real challenge in E-learning is keeping the people it's designed for in mind. How do people learn? How do people acquire and retain skills? How do people access information to help their development? Only after these questions are addressed should the "e" in E-learning become a factor. Only then can the technical side the electronic delivery be adapted to the learner.

Levels of E-learning

E-learning falls into four categories, from the very basic to the very advanced. The categories are:

- **Knowledge databases**: While not necessarily seen as actual training, these databases are the most basic form of e-learning. Software sites offering indexed explanations and guidance for software questions, along with step-by-step instructions for performing specific tasks are typical examples of knowledge databases. These are usually *moderately* interactive, meaning that you can either type in a key word or phrase to search the database, or make a selection from an alphabetical list. Google is currently providing remarkable knowledge based support across the web.

- **Online support**: Online support is also a form of e-learning and functions in a similar manner to knowledge databases. Online support comes in the form of forums, chat rooms, online bulletin boards, e-mail, or live instant-messaging support. Slightly more interactive than knowledge databases, online support offers the opportunity for more specific questions and answers, as well as more immediate answers.

- **Asynchronous training** - This is e-learning in the more traditional sense of the word. It involves self-paced learning, CD-ROM-based, Network-based, Intranet-based or Internet-based. It may include access to instructors through online bulletin boards, online discussion groups and e-mail. Or, it may be totally self-contained with links to reference materials in place of a live instructor.

- **Synchronous training** - Synchronous training is done in real-time with a live instructor facilitating the training. Everyone logs in at a set time and can communicate directly with the instructor and with each other. You can raise your cyber hand and even view the cyber whiteboard. It lasts for a set amount of time -- from a single session to several weeks, months or even years. This type of training usually takes place via Internet Web sites, audio- or video-conferencing, Internet telephony, or even two-way live broadcasts to students in a classroom. Synchronous training is most popular in academic type programmes, such as continuing education programmes or college distance learning programmes.

Learning Mediums

The quality of the electronic-based training, as in every form of training, is in its content and its delivery. E-learning can suffer from many of the same pitfalls as classroom training, such as boring slides, monotonous speech, and little opportunity for interaction. The beauty of e-learning, however, is that new software allows the creation of very effective learning environments that can engulf you in the material. Popular distance learning technologies include:

- Voice-centred technology, such as CD or MP3 recordings or Webcasts
- Video technology, such as instructional videos, DVDs, and interactive videoconferencing
- Computer-centred technology delivered over the Internet or corporate intranet

Floppy Disks

Training Programmes were primarily delivered on floppy diskettes in the late 1980's and early 1990's. 3.5 inch floppy diskettes hold 1.44 megabytes of information, which is the equivalent of about 1.5 million text characters, or 700 pages of straight text. Compression software can increase the amount a floppy disk holds by approximately five-fold, but the software must then be installed onto a computer's hard drive before the disk's data can be run. This storage amount is relatively small,

given the large file size of audio and video files. Using uncompressed files, one floppy disk can hold only six seconds of low-quality video. Because of this, computer-based training delivered via floppy disk is usually text-based, with some limited graphics. It isn't that multimedia can't be delivered via floppies; the issue is that it takes an impracticably large number of floppy disks to hold even a relatively small multimedia programme.

CD-I

CD-I, which stands for Compact Disc Interactive, is a multimedia system developed in the late 1980's that was designed to be used at home, in schools, and in business. A CD-I player is a relatively inexpensive device that connects to any TV, much like a VCR. CD-I disks hold text, computer animation, and digital audio, along with video that can be displayed full-screen.

The CD-I format gained popularity initially because it was easier and cheaper to implement than purchasing a complete multimedia CD-ROM-equipped computer system, and the quality of the multimedia was much higher. However, a major limitation was that there was no hard drive or floppy disk system attached to CD-I and data, such as student test scores or book-marking features, could not be saved. As multimedia computers rapidly came down in price, the popularity of CD-I technology declined.

CD-ROM

CD-ROM, which stands for Compact Disk - Read Only Memory, is a system for delivering multimedia to a personal computer. These circular, 5-inch discs look identical to audio CDs that are played in a home or car stereo. They require a CD-ROM drive, which has come as standard equipment with all new computers for several years.

Each CD-ROM has a storage capacity of 650 megabytes. In other words, one CD-ROM can hold as much as 450 floppy diskettes, or approximately one hour of low-quality video. Because of this vast storage capability, CD-ROMS are a relatively easy and inexpensive way to distribute large files and programmes, including audio, video, and complex animations. Through the mid-1990's, e-learning was primarily delivered using CD-ROM.

DVD-ROM

DVD-ROM, which stands for Digital Video Disc - Read Only Memory is essentially a bigger, faster CD-ROM. It is a new standard that is being embraced for training and business information, as well for home entertainment. DVD-ROMs look identical to standard CD-ROMs, but can hold 4.7 gigabytes of information, or 2 hours and 13 minutes of full-screen digital video.

DVD-ROMs are already quickly replacing CD-ROM technology. New computers are being equipped with DVD drives as standard equipment, and these drives are compatible with the older CD-ROM technology. In other words, consumers and employees can switch to the new DVD technology but still access all of their old CD-ROMs using the DVD drive.

Internet/Intranet

The Internet started in 1969 as a Department of Defense research project to create a secure means of communication in the event of war. Originally it was called ARPAnet, and consisted of computers dispersed around the globe that would pass messages to each other using a new technical standard called TCP/IP.

Initially, the Internet was difficult to use by non-technical people, but the invention of Web-browser software changed all that. A Web-browser is simply a piece of software that sits on the user's computer and provides a point-and-click graphical interface to the World Wide Web. The Web is a global network of millions of "pages" of information that contain text, graphics, and links to other pages or pieces of information. Now, with advances in browser technology Web pages often contain multimedia elements, too. Browsers made it easy for everyone, regardless of their level of computer expertise, to "surf the net" and gain access to a vast worldwide library of information.

The modern form of E-learning didn't take off until 1996. Initially, the more common term was "Internet-based training" (IBT), and then "web-based training" or "online learning", but the reality was that most corporations never put their private training programmes and internal information on the Internet, which is open to the public. Instead, Web pages were held on organizations' private internal networks, called Intranets. Intranets are just smaller, private networks that work on the same TCP/IP technology as the Internet. Because a Web browser provides the interface to both Internet and Intranet education, the term Web-based training is more dominant today.

Mobile Technology

By the year 2000, wireless mobile devices (e.g., cell phones and personal digital assistants PDAs) became fairly ubiquitous in the business and government environment. There is now an emerging interest in developing e-learning applications for these devices, which is now called "m-learning" for "mobile" learning. Whether or not this form of delivery will really ever take off remains to be seen.

Tools for Building E-learning

Because of the fast pace of changing technology, e-learning tools should be reviewed continuously to ensure that they are the most efficient and appropriate available. Below is the list of typical requirements for e-learning implementation.

Computers

Basically, the computing power of the machines necessary to create e-learning exceeds the technical specification of those systems used to distribute it. The common platform for personal and professional computers, the MS-Windows-based personal computer, is supplemented in creative fields such as e-learning production by the use of Apple's Macintosh computer. The figure below presents a ballpark *minimum* of the specifications of the computers used today to create e-learning.

Feature	**PC**
Processor	Pentium III; 800 MHZ (Min)
RAM	128 MB
Operating System	Windows 98, 2000, NT or XP
Media cards	32 MB video; 16 bit sound
Drives	52x speed CD-ROM
Monitor	17 inch; preferably high-resolution
Accessories	Speakers; pointing and input devices
	(mouse, keyboard, writing tablet, etc.)

In addition to these computers, peripherals not necessarily tied to one user are necessary. The two most notable are at least a CD-Burner and a color scanner.

Audio/Video Equipment and Software

To independently produce audio and video for multimedia projects, here are some basic requirements. For audio, which in most cases will be voice-over narration, suitable environment to record sound is needed with a quality microphone and some variety of supporting hardware to interface with PC. The audio product can then be recorded straight to digital audio tape and digitized afterwards or recorded directly into a computer using applications such as Pro Tools, Sound Forge, Sound Edit, or a nonlinear video system such as : Media 100 or Avid. These applications can also be used to edit the content and most can add any specific effects that might be needed.

To record video for multimedia, a camera with optimized image quality is need to produce image in digital format. Additional items ranging from production lights and backgrounds to a teleprompter may be required. All of these can be rented, or, if more cost effective, purchased. Video recording is followed by editing and transmission over suitable media.

Instructional Design and Writing

Not many equipment costs are associated with instructional design, as most personnel will use common word processors with project-specific script templates. Design products such as *Designers Edge* from Allen Communications, a step-by-step product for creating CBT scripts, do exist and are frequently used at a relatively low-cost.

Graphic Arts

The software needed by graphic artists range wildly with productivity needs and designer preference. There is an overlap of products used to create multimedia and Web products, but specialized Web tools are required for optimal performance.

Tool	Specialty
Adobe *Photoshop*	Pixel -based graphics
Adobe *Illustrator*	Vector-based graphics
Autodesk *Studio 3D Max*	Three-dimensional graphics
Silicon Graphics *Maya*	Three-dimensional graphics
Macromedia *Flash*	Animation
Macromedia *Fireworks*	Optimizing graphics
Equilibrium *Debabilizer*	Optimizing graphics

Authoring

Authoring applications typically use a metaphor, such as: an icon-based or slide-based interface, to make the structuring of content and combining of media elements into a cohesive programme possible by the non-programmer. The term authoring system commonly refers to both multimedia production applications generally and those intended for training creation specifically. Deciding between the more than 100 different authoring systems entails a serious undertaking, shaped by costs, needs, specialties, and preferences. The icons and flowline systems produced by Macromedia (i.e., *Authorware*) and those that rely on scripted statements produced by Macromedia and Asymetrix (*Director* and *Toolbook* respectively) are those most commonly used in creating training applications. WBT creation requires a different tool set, as the tools function as filters creating the languages HTML, DHTML, Java Script, and Java, which make up Web environments.

Benefits of E-learning

E-learning has definite benefits over traditional classroom training. While the most obvious are the flexibility and the cost savings from not having to travel or spend excess time away from work, there are also others that might not be so obvious. For example:

- **Less expensive** to produce - E-training is virtually free once the break-even point is reached. Synchronous Programmes will have continued costs associated with the instructor managing the class, but will still be lower than traditional courses.

- **Self-paced** - Most E-learning Programmes can be taken when needed. The "books" that are set up create a module-based design allowing the learner to go through smaller chunks of training that can be used and absorbed for a while before moving on.

- **Faster** - E-learning courses progress up to 50 percent faster than traditional courses. This is partly because the individualized approach allows learners to skip material they already know and understand and move onto the issues they need training on.

- **Consistent message** - E-learning eliminates the problems associated with different instructors teaching slightly different material on the same subject. For company-based training, this is often critical.

- **Location and time free** - E-learners can go through training sessions from anywhere, usually at anytime. This Just-In-Time (JIT) benefit can make learning possible for people who never would have been able to work it into their schedules prior to the development of e-learning.
- **Easily and quickly updated** - Online e-learning sessions are especially easy to keep up-to-date because the updated materials are simply uploaded to a server. CD-ROM-based programmes may be slightly more expensive to update and distribute, but still come out cheaper than reprinting manuals and retraining instructors.
- **Increased retention and stronger grasp** - This is because of the many elements that are combined in e-learning to reinforce the message, such as video, audio, quizzes, interaction, etc. There is also the ability to revisit or replay sections of the training that might not have been clear the first time around.
- **Easily managed** – Students and learners are allowed to keep track of the course offerings, schedule or assign training for employees and track their progress and results. Managers can review a student's scores and identify any areas that need additional training.

These are the advantages to e-learning, and even the potential disadvantages (i.e. boring text-based courses, technophobia, and loneliness) can be alleviated with a properly designed course.

E-learning for Nepal

Nepal is one of world's economically unadvanced country. The statistics puts GDP per capita (2004) at around $260, ranking on the bottom quarter of the countries around the globe in terms of economic return and human development. Overcoming the income and human poverty is the country's biggest challenge. There is also imbalance on the prevalence of poverty amongst the country's 75 districts. Poverty is greater in rural areas as compared to urban areas. Geographical divergence also provides for irregular distribution of poverty, with the mid and far western regions and the mountainous areas far poorer than the eastern region.

In terms of education, significant percentage of the population lack awareness regarding education and child care. Due to poverty, there is significant rate of dropouts from the fifth class onwards even in areas where there is provision of

primary education. Due to inadequate infrastructure and connectivity, there is very poor access to schools for educational materials. A significant percent of women and girls do not go to schools because of the socio-economic framework, leading to a gender divide in the literacy rate.

Before analyzing any prospects of e-learning and distant education in the context of Nepal, it is essential to establish a digital link thereby enabling total connectivity for access to propagation of information and education for the whole of Nepal. Owing to the geographically diverse structure of the country, a satellite based wireless link may be the viable and feasible solution for setting up a national digital link. A merger of satellite links in remote areas with the existing optical and copper network of telecom and power authorities to establish a multipurpose national information superhighway may also be a cost effective alternative to address the needs of remotely residing citizens.

The phasewise completion of the Nepal Telecom's Nepal East West Optical Fiber SDH Project provides a fertile ground for the implementation of e-learning as a pilot project in the areas surrounding the East West Mahendra Highway. The availability of the physical media isn't sufficient, though. considerable planning and design is required for the proper selection and structuring of the teaching materials, mode of teaching and the student-tutor interaction medium provided. Social, economical, traditional and ethnical parameters are to be taken into consideration in addition to the technical aspect. Teaching materials should be tailor-designed, and varied according to the area of implementation. Emphasis should also be provided for the understandability and usability of the lessons availed.

Conclusions

E-learning is a supplementary educational platform to the traditional approach of classroom-based learning that applies the recent innovations and advancements in information and communication technologies for efficient and interactive teaching-learning process. The need for e-learning is especially alarming for under-developed countries like Nepal with widely dispersed geographical and socio-economic framework across the boundary. By a properly planned implementation of e-learning as an integrated feature of the national information highway, e-learning may well be the tool to effective education in the present scenario where provision for basic education to the mass is increasingly becoming acerbic.

References

Stockley, D : E-journey on E-learning

European Commission Consultation Workshops: E-learning: Designing tomorrow's education:

Kanchanasut, Kanchana : Distributed Learning System

Kruse, Kevin, www.e-learningguru.com:

Information Technology Policy in Nepal in the Context of Education

- Hari Khadka*

"IT is a powerful tool with diverse applications. Our challenge is to put that power at the service of all humankind." Kofi Annan, UN Secretary General

The kingdom of Nepal is situated in south Asia, on the southern slopes of the Himalayan mountain range. Geographically, the country is landlocked, lying between the two Asian big countries India and China, which are emerging as the super-powers in Information Technology (IT), hardware and software. Though, the key economic sectors are agriculture, tourism and the remittance through foreign employment, at present, agriculture is the main stay of Nepal. The problems of unemployment, underemployment, illiteracy, poverty, political instability, violence etc. are prominently faced by the country and these problems are further deteriorating the conditions of Nepal.

Nepal is classified as a least developed country (LDC) with a per-capita income measured in purchasing price parity of US$ 1180 in 1998. This naturally beautiful Himalayan kingdom missed the opportunities brought about by technology and industrial revolution in the past. Hence, Nepal remained poor and backward in the world scenario. But, after the invention of computer technology and specially the recent advances in computer and telecommunication technologies, have opened the new directions and the door of opportunities for a country like Nepal to develop and progress rapidly by boosting up the economy. The convergence of computer technology and telecommunication technology has given birth of Information and Communications Technology (ICT). This advancement in ICT has brought new dimensions of economical, political, social progress and all round development and up-lifting of the country. This could be possible, if and only if we honestly and carefully implement the ICT related plans, policies and programmes in time.

What is Information and Communication Technology (ICT) ?

ICT is the combination of computer technology and telecommunication technology. It encompasses all kinds of radio transmission, television, computer, telephone, tele-fax, videoconferencing, teleconferencing etc. It seems relevant to quote ***ESSENTIALS*** (No. 5, Sept 2001, UNDP Evaluation Office) in order to define ICTs;

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"Few would disagree that technology underpins the unprecedented level of prosperity enjoyed by developed countries. The world entered the 20th century without planes, radios or televisions. It enters the 21st with nuclear power, space travel, computers, cell phones and the wireless Internet. Within the span of hundred years, entirely new fields of science and technology came into existence and the fundamental political and economic structure of the world changed not once, but several times."

The scope and pace of recent change is a function of revolutionary advances in Information Communications Technologies (ICTs). ICTs are basically information handling tools – a varied set of goods, applications and services that are used to produce, store, process, distribute and exchange information. They include the "new" ICTs of computers, satellite and wireless technology and the Internet. These different tools are now able to work together, and combine to our "networked world" – a massive infrastructure of interconnected telephone services, standardized computing hardware, the internet, radio and television, which reaches into every corner of the globe.

The revolutionary potential of new ICTs lies in their capacities to instantaneously connect vast networks of individuals and organizations across great geographic distances at very little cost. As such, ICTs have been key enablers of globalization, facilitating world-wide flows of information, capital, ideas, people and products. They have transformed business, markets and organizations, revolutionalized learning and knowledge-sharing, empowered citizens and communities, and created significant economic growth in many countries. ICTs have amplified brain power in much the same way that the 19th century industrial revolution amplified muscle power.

ICTs and Nepal

The widely accepted fact of 21st century is that the ICT can accelerate the socio-economic progress of any country within a short span of time. Information related activities and industries are being mushroomed worldwide. ICT has emerged as a big opportunity, especially for the poor and underdeveloped countries as a means to generate employment opportunities, develop the nation and boost up their economy. The world is moving towards the knowledge based information society and the economy is being driven by knowledge based industries. But literacy and strong ICT infrastructure is a pre-requisite for information based industries. The countries with strong IT infrastructure could progress rapidly while other can be lagging far behind.

The problem of have and have nots; called "Digital Divide", created by access to IT is already alarming and this problem is much more serious and deep-rooted in the countries like Nepal due to their inability to catch up the opportunity in time. Digital divide can intensify more in the near future, between Nepal and the developed countries; and within the country between urban and rural areas; and between educated and uneducated peoples as well; if we could not take rationale actions for the planned development and implementation of ICTs today.

The following data indicates the poor and sluggish condition of Nepal in ICT:

S.N.	Type of Service	Number	S.N.	Type of Service	Number
1.	Fixed Telephone service Provide	2	2.	Mobile Telephone Service Providers	2
3.	Rural Telephone Service Providers	1	4.	Internet Service Providers (ISPs)	23
5.	Broadband Service Providers	3	6.	Wi-Fi Service Providers	1
7.	Radio Paging Service Providers	8	8.	Fax Mail Service Providers	6
9.	Video Conferencing	1	10.	VSAT Service Providers	10
11.	VSAT Service Users	53	12.	GMPCS (Sat. Phones) Service Providers	2
13.	National Radio Broadcast (AM) Service	1	14.	National TV Broadcast (Terrestrial and Satellite)	3
15.	Private TV Channels	5	16.	Private Radio Broadcast (FM):	56
17.	Cable TV Service Providers	333	18.	IT Related University	4
19.	High Level Professionals	1500(around)	20.	Proposed IT Focused University	2
21.	Cable Internet	2	22.	Consultancy Services	81+
23.	Software Companies	74+ (Around 5 – export-oriented)	24.	Training Institutes	200+ (app.)
25.	Telephone Penetration	0.4(rural)/1.6(urban)	26.	Production of IT Professionals	500+ every year

Note: Compiled from different sources

Though the computer was first introduced in Nepal during the early 1970s, commercially started during early 80s and the internet wave hit the country during 1995. There are only around 40,000 registered internet subscribers, around 5,00,000 computer users and 1,50,000 internet users, computer literacy is 5 percent, the total

bandwidth available is around 18Mbps downlink and 8 Mbps uplink, and the Internet penetration is around 0.25 percent. Similarly, the Television and radio service is available to only 62 percent and 90 percent of the population respectively.

Although Nepal is lagging far behind in exploiting the Computer-based ICTs for national development, community radios and televisions are mushrooming and emerging as the strong and successful ICT media that has a deep influence in the rural communities. These media have successfully transmitted the "everyday life" information. Some of the successful communities' radios that are quoted mostly are; Radio Sagarmatha, Radio Lumbini, Radio Madan Pokhara, Radio Swargadwari, Digital Broadcast Initiative(Equal Access-supported by UNDP), Ratna Cable Television (Srinagar-Palpa). Community radios are turning as a strong media for creating awareness among peoples; transmit the innovative and useful information to remote and backward communities as well, but they are all one way only. The most important technological tool of today that has become the talk of town, that can accelerate the development activities and generate employment and income, link the peoples worldwide within a second, is computer based ICT. The extensive application of ICT would engender economic consolidation, development and strengthening of democratic norms and values, proportional distribution of economic and physical resources, and enhancement of public awareness, thereby raising living standards and eventually contribute significantly towards poverty reduction.

ICT could turn out to be a strong infrastructure for mitigating Nepal's geographical adversaries. Realizing this fact, the Government of Nepal has formulated a IT policy, ***"Information Technology Policy - 2000",*** to tap the opportunities brought about by IT to rapidly develop education, health, governance, agriculture, tourism, trade, international relations and various other sectors and boost the national economy.

Legal and Institutional Frameworks

His Majesty's Government has been working towards the formulation of legal provisions and development of institutional framework in the area of ICT in order to develop and utilize the world class ICT opportunities in Nepal. To extend the breadth and reach of ICT to peoples and sectors that stand to benefit most and boost the socio-economic condition of the country through ICT. The government has made different efforts for the development of ICT and education in Nepal. In this regard, it has formulated different plans, policies and approved different acts and laws related to ICT.

Tenth Five Year Plan

The Tenth Five Year Plan has approved ICT as the means of socio-economic development. It has the objective of making ICT accessible to general public and providing good governance through ICT, generating employment and working towards the establishment of knowledge-based industries and knowledge-based society. In order to fulfill this objective, the Tenth Plan has adopted the policy of encouraging private sector, establishment of community tele-centres, providing services through ICT and providing education and training in ICT. The Tenth plan, under its physical infrastructure development objective, proposes to provide telephone services to VDCs, telephone lines to 40 peoples (per thousand) and computer networks to 1500 VDCs. It has strategy and policy of incorporating computer education from school level, providing internet facilities to schools and universities, providing training at national and international level, exploring the areas of services that can be provided to general public by means of ICT.

Based on the long term objectives and periodic plans government has established different institutions and commissions to strengthen the development of ICT to full extent.

ICT Policy in Nepal in the Context of Education : With Special Reference to IT Policy 2000

The IT policy 2000 was the first step towards the planned development of IT and the other sectors through the extensive application of IT. The vision statement was ***"To place Nepal on the global map of Information Technology within the next five years"***. In view of the prevailing condition of Nepal, literacy rate, English language proficiency of the educated peoples, access to electricity and telecommunication facilities, the IT Policy 2000 seemed more ambitious rather than realistic and practical. Hence, if we look at the current scenario, Nepal is not able to meet its vision and is still lagging far behind. But, though the Government couldn't review the IT policy 2000 within the stipulated time frame, a draft policy has been prepared by High Level Commission for Information Technology (HLCIT) in 2004 to amendment the IT policy 2000 to incorporate the rapid changes occurring in technological front. Because the IT policy 2000 could not succeed in line with expectation, some modifications have been made in 2004 in the vision statement. According to the revised policy(draft) the vision is;

"By the year 2015, Nepal will have transformed itself into a knowledge-based society by becoming fully capable of harnessing information and communication

technologies and through this means, achieving the goals of good governance, poverty reduction and social and economic development"

The objectives set out by these policies are;

- making information technology accessible to the general public and increase employment through this means,
- building knowledge-based industries, and
- building a knowledge-based society

The IT policy 2004 has pointed out some key strategic areas of ICT like; strategic focus, legal and regulatory framework, infrastructures, content and applications, private sector participation and human resource development in which HMG would act as a facilitator, promoter and regulator to create the enabling environment.

Though there are different strategic areas to accomplish the formulated objectives, the following strategies seem more or less relevant to education sector as well;

- High priority should be accorded to research, development and extension of information technology with participation of private sector
- Competent manpower should be developed with the participation of both the public and private sectors for the sustainable development and extension of information technology
- Domestic and foreign investment should be encouraged for the development of IT and related infrastructure
- Promoting IT industries and extending IT networks to rural areas
- Nepal should be placed on global map of IT
- IT should be used to assist e-governance
- But the most important strategies included in the policy that are most relevant with education and educational professionals are;
- Computer education should be incorporated in academic curriculum starting from the school level
- Professional efficiency should be enhanced through the use of IT

To implement the aforesaid strategies; some policies have been formulated. These policies are;

- Declaring IT sector a priority sector, prioritizing research and development in the field of IT and encouraging individuals, public sector institutions, academia and the private sector
- Providing Internet facility gradually to all village development committees (VDCs), assisting educational institutions and encouraging domestic and foreign training to fulfill the requirement of appropriate manpower at various levels pertaining to IT
- Computerizing the system in all government offices and building websites for the flow of information, using IT to promote e-commerce, e-education, e-health, among others and transfer technology to rural areas, and including computer education in the curriculum starting from the school level and broadening its scope
- Enacting necessary laws for providing legal sanctions to the use of IT and using it gradually in all government activities and providing legal sanctions to them, encouraging efforts in the area of mainstreaming IT into government plans, and projects as a means of ensuring effectiveness in programme delivery, transparency and carrying out evaluation and monitoring process, ensuring that ICT policies are integrated in the development policies of other relevant sector

The IT policy 2000 has also formulated an action plan in five key areas to implement it and fulfill its objectives.

1. **Participation of private sectors in infrastructure development**: Infrastructure is a key to success and development and it can not be accomplished solely by the government. Hence, the IT policy aims to attract private sector and the foreign investment in the areas like IT park development, R & D, technology transfer and human resource development.
2. **Infrastructure development**: It includes the development of info-super highway and north-south info-highway and linking Nepal with rest of the world through broadband information network. Establishment of IT park at Banepa and at other parts, Leving 1% custom duty to IT equipments for companies wishing to establish IT park and establishing IT nodes in all development regions by 2001/2002 and in district headquarters by 2003/2004 in participation with private sectors.

3. **Human resource development:** Skilled and qualified human resource is another key in the development of a country. Therefore, the IT policy proposes to use IT both as "IT in education" and "IT on education" by adopting the following measures;

   - Providing necessary facilities to universities within the country and offering graduate and post-graduate level classes of international standards in compute science and engineering subjects
   - It proposes to formulate a long-term programme with a slogan ***"Computer education to all by 2010 AD"*** and offer computer education in public schools in phases starting initially as optional paper and gradually making it compulsory starting from 2001
   - Improving the quality of education through IT
   - Encouraging private sector to prepare middle level manpower and assisting to establishing institutions for education, research and development in the field of IT
   - Gradually making computer knowledge compulsory to all newly recruited teachers and providing computer education to all in-service teachers in phases using various means including distance education
   - Providing computer education from school level, providing internet facility to free of cost to universities and public schools during the IT policy 200 period
   - Providing scholarship by His Majesty's Government to public and private sector technologist, and to poor and meritorious students from remote areas for higher study in IT

4. **Dissemination of information technology:** ICT is emerging as a very strong technological tool for the progress and prosperity. Extensive application of ICT can boost up the development process and economy. Therefore, the IT policy has made provision of the following measures for the extensive dissemination of IT;

   - Encouraging to use the IT enabled services to educational institutions in the areas where telecommunication and electricity services are available and using solar power in the places where electricity is not available

- Introducing distant learning system through Internet and Intranet apart from radio and television; and developing networking systems like school-net, research-net, commerce-net, and multilingual computing
- Extending the use of computer in government offices; and linking ministries, departments and offices to the Internet, creating their websites; and making legal provisions to reduce the use of papers in all kinds of government activities by using IT
- Devising and introducing computer education as a compulsory subject for the examination in recruitment process and prescribing basic computer training as a requirement for promotion of employees
- Preparing contents to enhance Nepali materials on the Internet to preserve Nepali arts and culture
- Launching campaign through electronic media to enhance public awareness on the utility of IT

5. **Promotion of e-commerce, etc.:** The action plan proposes to create necessary legal infrastructure for the promotion of telemedicine, distance learning, tele-processing and e-commerce etc.

IT is more significant in comparison with the other infrastructures in the context of difficult geographical structure of Nepal. The technological development rapidly taking place in the IT sector and dynamic changes occurring in its structure has opened up new opportunities in this sector. Hence, to cope with such rapidly changing but useful technology and tap the opportunities, the government has set up an autonomous telecommunication regulatory body Nepal Telecommunication Authority (NTA), formulated the Telecommunication Act 1997, The telecommunication Regulations 1997, Consumer Protection Act, Electronic Transaction Ordinance 2004, which provides legality to electronic transactions, e-commerce, e-governance and digital signatures. Similarly, the government formulated a Telecommunication Policy, 2060 with the strategies of universal access to telecommunication services to provide the telecommunication service throughout the Kingdom by the fiscal year 2063/64 (2006/2007), development of corporate services, to enter into information society, appropriate ICT for the users of the rural areas, persons who have engaged in the development activities shall be caused to use ICT fully. Similarly, government has formulated a Long Term Policy of Information and Communication Sector (2002) incorporating broadcast, postal,

journalism, printing, telecommunication, information transfer etc. to boost up the economy, strengthen the democracy and good governance.

Government has set up a National Information Technology Centre and High Level Commission for Information Technology to work towards the overall development of ICT in Nepal. Similarly, the Windows Operating System (OS) is being prepared in Nepali font and it is hoped that this OS could be a milestone in spreading the ICT opportunities to the remote areas as well.

Tele-centres

Recently, the concept of Tele-centres has been introduced in Nepal. Tele-centres are public access points for ICT resources and hence are physical places or work locations where people can access to the world of information, technology and communication that helps people to get information about the world market and technology. Tele-centres are established with a view of providing Communication Technology to the people of urban and rural areas. Its main objective is to provide computer, Internet, and email technology facilities to the people of under privileged society. The Tenth Five Year Plan has a target of establishing 1500 rural Tele-centres within the kingdom; and HLCIT has developed a ***"Rural Tele-centre Manual -2061"*** to regulate and facilitate the operation of Tele-centres. Around 20 tele-centres have already been established by HLCIT (five centres), NITC (six centres), and UNDP (nine centres); and most of these tele-centres are proving very much attractive and useful for rural communities. Therefore, for a country like Nepal with a difficult geographic topology, the government and other educational institutions should think and plan to use such centres for delivering formal as well as informal educational opportunities to remote areas.

Constraints in the Application of ICT in Education

Though the government is developing and adopting different strategies and policies to create facilitative and enabling environment for the development and application of ICT, it is not realized and used to fuller extent. The private sector is slowly emerging as a strong force in the development of ICT. But, the functioning of public sector does not look so inspiring in implementing the government policies. The implication of ICT can not be felt, until and unless the general public access and grab the opportunity of ICT. The constraints in the applicability of ICT can be viewed from different aspects. Few of them are:

1. Lack of awareness among people, planners and implementers on the usefulness and applicability of ICT and traditional way of working style among managers. Therefore, they are reluctant to introduce and exploit the new technology.

2. Though, many organizations are introducing ICT in their day-to-day transactions, ICTs are not used properly for which they are meant. Computer is misused only as a typing machine. The networks (LAN, Internet) has become fashion, but not used for the flow or access of information and resource sharing.

3. The skilled manpower are engaged in foreign employment or are settled in metro-cities. They are not properly employed. The rural areas are without opportunities and access to ICT. Most of the people are illiterate. Even the educated peoples are also having problems with English language proficiency and operational skills of ICT to handle it efficiently. So, there is a huge gap between Nepal and the rest of the world; and between rural and urban areas within the country, resulting in "digital divide."

4. Computer literacy in Nepal is only around 5%. Many are literate in simple office package, especially in MS Word and mostly, this is being used for typing purpose only. Many are unable to access and use the Internet/world wide web (WWW) and other networks properly for retrieving the information. In view of the number and location of the teachers in public schools, we can say that most of the teachers are illiterate in ICT and as such, it is very difficult to introduce computer education in schools and colleges.

5. There is a huge gap in coordination and relationship between different organizations; and hence, most of the concerned authorities and stakeholders are not aware of the formulated plans, policies and the provisions made on them resulting in duplication and failure of the programmes.

6. IT professional are not hired or employed by many organizations. The IT related plans and programmes are developed by non-IT peoples. But they themselves are unaware and unconscious about the actual use, applicability, functioning of the programmes and the purpose of procuring the equipments. They do not have any organized plan and vision for the development and implementation of ICT.

7. Many organizations are extensively equipped with ICT, but they are unable to reduce the paper work in their day-to-day activities and realize the ICT in real sense by increasing their efficiency in service delivery.

8. The cost of ICT in rural areas is still very high and beyond the access of general public.

9. The political instability and insurgency are other main constraints in the proper development of ICT infrastructure in Nepal.

Suggestions and Conclusions

It is not possible to uplift the country until the people become conscious and aware. Therefore, the concerned authorities should run awareness raising campaigns for general public, students, teachers, concerned authorities and other stakeholders separately, through print and electronics media; conduct seminars and workshops in a regular basis to disseminate the plans and policies, encourage and assist the private and public sector training and educational institutions to develop skilled ICT human resources.

Similarly, the authorities working in the field of education should work together to develop and implement a long term vision to automate the offices, explore the areas and ways of developing and routing the local educational contents to rural people, provide services through ICT and incorporate ICT in education. Distance learning can be facilitated by the introduction of internet in the mountainous country like Nepal. Therefore, government should create and promote conducive environment for e-learning and distance learning. Department of Education should encourage and assist the public schools to incorporate computer education in schools and recruit a computer literate teachers etc.

Distances are shrinking rapidly and information is spreading faster than ever before and one can instantly access the useful information through ICT. ICT has emerged as most suitable and important sector to develop Nepal considering its geographical terrains and barriers. But, the necessary condition for this to happen is that the objective of ICT programmes should be targeted towards ensuring peoples universal access to information, good governance, making social services easily available to general public and boosting the national economy. While formulating and implementing policies and programmes, we should not forget about the need of the general people and look for an alternative as well. Moreover, to develop and implement ICT we must provide training and education in IT, develop suitable and

appropriate content and look for the expansion and application aspect as well. ICT is necessary to enhance the quality of education and, literacy is a pre-requisite for the development of ICT. Therefore, education and ICT should be developed as complementary to each other.

References

NPC, (2002): Tenth Plan (2002-2007): National Planning Commission, Singhadarbar, Kathmandu.

MOST, (2057) : Information Technology Policy, Singhadarbar, Kathmandu.

http://www.most.gov.np

http://www.nta.gov.np

http://www.nitc.gov.np/telecenters.php

http://www.itu.int/ITU_D/ict/cs/nepal/nepal.html

http://www.itu.int/ITU-D/ict/cs/nepal/material/CountryProfileNPL.E_pdf

http://www.asiandevbank.org/Documents/Events/2004/SASEC/First_Mtg_ICT/Nepal_Country_Paper.pdf

http://unescap.org/icstd/events/wsis_2nd_phase/docs/Financial/Nepal.ppt

http://www.undp.org/eo/publication/essentials

http://www.eictj.org/report.htm

http://www.nepalit.com/ithrd_npc.htm

http://www.hlcit.gov.np/telecenters.php

http://www.apdip.net

Distance Learning: Need and Possibilities of Developing a Framework

- Ananda Paudel*

Concept and Context

Understanding the distance learning

Education can be possible through various modes. Formal, non-formal, informal, distance etc. Access, equity, relevancy, quality, effectiveness, efficiency etc, are some of the trermininologies often used in the field of education. To achieve all of them, one of the ways of providing education to the people is distance education and learning. Updating, widening, deepening of individual's knowledge, skills and attitudes are also possible through distance mode. Defining distance education and or learning is a complex task. However, from the various literatures, with reference to defining distance education and learning, can be understood through theoretical insights given a section below:

Theoretical insight

- The distance learner as one who is physically separated from the teacher (Rumble, 1986) has a planned and guided learning experience (Holmberg, 1986), and participates in a two-way structured form of distance education which is distinct from the traditional form of classroom instruction (Keegan, 1988).
- Distance education has various trends. Theories of autonomy and independence from the 1960's and 1970's, argued by Wedemeyer (1977) and Moore (1973), focused more towards the independence of the learner. Otto Peter's (1971) work on a theory of industrialization in the 1960's viewed distance education as an industrialized form of teaching and learning. The third approach integrates theories of interaction and communication formulated by Baath (1982), Sewart (1987), and Daniel & Marquis (1979).
- The distance learning system should be operated any place where there are students-even only one student; place greater responsibility for learning on the

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student; should be flexible in nature; should provide wider choice to the students, should use the variety of teaching methods and media; and should permit students to start, stop, and learn at their own pace (Wedemeyer 1981)

- The are six characteristics of distance education. They are: the student and teacher are separated; variety of medium are used; teaching is individualized; learning takes place through the student's activity; learning is made convenient for the student in the student's own environment; and the learner takes responsibility for the pace of learning, with freedom to start and stop at any time (Ibid).

- Different pedagogical approaches should be used while delivering the distance learning programmes. For example, audio teleconferencing-voice only communication (Parker1983); audio graphics conferencing-two way voice communication and transmission of graphics and written materials; Video teleconferencing-transmission of voice, graphics and images of people; compressed video teleconferencing- use of symbols and compressed data, provision of coder and decoder etc; desktop video conferencing- combination of audio, video and data, voice, video and data (Saba, 1988); Interactive Instructional Television (ITV)- transmit either two-way video and two-way audio, or one-way video and two-way audio to several distant locations; Integrated Services Digital Network (ISDN), ISDN transmitting voice, data, video, and graphics in digital form over standard telephone lines; Broadcast Television and Radio etc.

- Varieties of learning technologies have been used while delivering distance learning. Different time different places technology (print, audio cassettes, video cassettes, computer conferencing, interactive video etc.; different time same places (lab, study centres); same time same place (face-to-face); same time different places (teleconferencing, audio, audio graphics, video, TV, Radio etc); any time and any place; is the emerging technology towards distance learning (Johanson, et. al. 1991).

The theoretical insights mentioned above revealed that learner, the instructor and the technology are the most fundamental and crucial things related to distance learning. Use of appropriate theoretical framework, instructional design, implementation plan and their efficient implementation are the other potential issues that distance learning has to focus its serious attentions. Because, how the content, the learner, the instructor, the technology and the context collaborate to generate knowledge have

significant impact on distance learning and thus the planner, implementer, and even the learner also have to have clear understanding and framework while involving in the process of distance learning.

Paradigm of distance learning

Wang, 1996 has described paradigm of distance learning. He has highlighted some of the paradigm related to computer mediated communication strategies designed and adopted in distance learning. While talking about the distance learning, planning about it, and implementing it, one should overlook such paradigm. They are as follows:

1. **One-alone: Online Resources Paradigm:** Student is a self-directed learner, often only interacting with online resources. These activities will tend to be heavily structured but they require minimal interactivity on the part of the instructor.
   - Online databases
   - Online journals
   - Online interest groups
   - Interviews

2. **One-to-One: the Email Paradigm:** Individual and individualized instruction and learning. Often these techniques rely heavily on the personal relationship between the student and the teacher.
   - Learning contracts
   - Apprenticeships
   - Correspondence studies

3. **One-to-Many: the Bulletin Board Paradigm:** Students are exposed to one or more experts in a given subject area. Usually these methods imply passivily on the part of the learner.
   Lectures

4. **Many-to-Many Techniques: the Conferencing Paradigm:** All participants have the opportunity to take part in the interaction.
   - Discussion groups
   - Debates
   - Simulations
   - Case Studies
   - Role Plays
   - Brainstorming
   - Group projects

Principle of distance learning

Distance learning is possible only if it is guided by certain principles. It is learning where students will get their certificate without physically attending the traditional classes. Basically, distance learners are those who have problems of attending formal structured and physically attended class. It is thus, a variety of options are essential to them. Options related to course and uses of media are the most significant ones. Convenience, flexibility, effectiveness, and efficiency in planning, designing, implementing, evaluating, correcting, selecting technologies, and so forth are some of the key areas of distance learning. Therefore, distance learning has to guide by certain principles.

Basic features of distance education

Distance education has the following basic features:

- Distance mode
- Use of multimedia
- Learner focused, individual activity based
- Group and team work
- Self motivated and initiated
- Provides cognitive knowledge and cognitive skills, as well as affective learning and some psychomotor learning
- It is open to behaviorist, cognitive, constructivist, and other modes of learning
- Provision of tutors and counselors
- Students are encouraged to search, criticize, and identify positions of their own

Framework

Based on the discussion above about concept and context, distance learning need to be frame in a significant manner so that each and every issue concerns would be resolved and distance learning will be relevant, qualitative and practical. Although this is a very complex, sensitive, serious and crucial task which demands high level debate, discussion, interaction on the one hand and analysis of the national needs and international practice on the other. However, it is the time to raise questions as:

Do we need a framework for distance learning?
Do we felt the necessity of distance learning?
Do we think improvement of distance learning is essential?

Should we make our distance learning compatible with the international standards?

If the answer is yes, then we have to initiate interventions towards distance learning. The point of departure here would be the development of a framework for distance learning. If we realize this, then discussions on the improvement of distance learning have to initiate urgently. For this purpose the following structural frame would provide an initial ground.

1. Distance learning framework

For better quality distance learning, certain components have to be addressed properly. There are numbers of components to make distance education effective. However, more often practiced components of distance education that can be a learning framework according to UNESCO (2002) are:

- Mission
- Courses and curricula
- Teaching strategies and technique
- Learning materials and resources
- Communication
- Support system
- Student and staff management
- Effective management and administration
- Housing and equipment
- Evaluation

2. Classroom frame

Distance learning also needs some sort of classroom types of activities. While initiating distance learning and the mode of delivery, classroom should have the following characters:

- Multidisciplinary task
- Assessment of real individual task
- Interactive mode of instruction
- Collaborative works
- Formation of heterogeneous group
- Good facilitation
- Learning through exploration

3. **Learning environment framework**

One of the major factors in teaching and learning is the environment. while planning distance learning planner should be critically examine the learning environment and must focus to make it: Collaborative, Knowledge building and Empathetic.

4. **Pedagogical framework**

a) Modes

- Letter based
- Radio-based
- Television based
- PC based

b) Approach

- Self-paced learning packages
- Mixed-mode study.
- Online delivery.
- Video-conferencing
- Audio conferencing

5. Instructional framework has to be framed with compacts of content, outcomes, activities and methods.

6. Policy analysis framework consists of academic, fiscal, geographic, governance, labor-management, legal, student support services, technical, and Cultural.

Source: Gellman-Danley and Fetzner (1998), Berge (1998).

7. **Developmental framework**

Mainly five tasks are essential in developing distance education. For better, qualitative, relevant, competitive distance education, special care must be necessary towards the Analysis (issues, present problems, identified population, resources and their constraints.)

Design (preparation of detailed plan-what, how, whom, when, what cost etc)

Develop (materials, instructors, plan of delivery, support system)

Implement (plans and programs)

Evaluate (outputs, result etc)

8. **Planning framework should include:**

- Financing
- Regional and socio-economic disparities
- Provision by private or public providers
- Separate institutional framework versus integrated educational system
- Certification and accreditation
- Promoting and providing technologies for ODL
- Co-ordination between media and educational sectors
- Careful analysis of the targeted population
- Clear learning objectives
- Framework for contents, activities and assessment.
- Engagement of students in applicable activities i.e., case studies, journal writing, role playing, problem-solving, class discussions etc.
- Good communication and collaboration among the students
- A variety of communications channels-—e-mail, telephone, video, and discussion forums, online chats, etc.
- Frequent learning assessment
- Periodic course review
- Setting measurable objectives and standards
- Valid reliable assessment measures
- Planning for collection and analysis of results
- Action plan for change and development
- Systematic, constructive, frequent and timely feedback to the students

a. Strategic framework need to be considered Instructional supervision, time management, quality and productivity of teaching, communication, financial management, group work and consultation meetings, team building and collaboration and need-based information collecting and using skills.

b. Learning framework need to look at concrete experience, reflective observation, abstract conceptualization, active experimentation, self directed, goal oriented, relevancy oriented, problem oriented and life experience oriented

Learning Styles

Cooperative, imaginative, collaborative, self-reflective, constructive learning is essential for distance education. In order to achieve concretive knowledge, skills, understanding and attitude, distance learning should adopt certain learning styles. Hartman (1995) and Kolb have developed theory of learning styles. Based on their theory the following matrix is developed.

Style	Core Principle	Ways
Concrete experience	Involved in a new experience	Offer laboratories, field work, observations
Reflective observation	Watching others or observing about own experience	Analyzing others work, owns work and experiences, studying journals and reflecting one's work, brainstorming and correcting the work culture
Abstract conceptualization	Creating theories to explain observations	Lectures, papers, literatures, research and innovation
Active experimentation	Using theories to solve problems, make decisions	Offer simulations, case studies, homework, project work etc

This matrix is based on the theoretical notion developed by the Hartman (1995), and Kolb's theory of learning styles.

In our practice we did not clearly specify the style of learning. However, we have practice more on abstract conceptualization. Basically, we followed the lectures, audio and TV programmes to our students while delivering the content. We little emphasize on case studies, project work and problem solving style. Reflective and active experimentation style of learning is not practice properly. Therefore, we should define the learning style, empower our trainers and teachers towards them and initiate varieties of learning styles while delivering the distance learning.

Support Mechanism

Input: development of need driven package, training, planning, target group activities

Process: delivery, performance, feedback and evaluation

Outputs: quality assurance,

Once the instructor trained, content delivered, process adopted, learners valuated, they all need constant and frequent evaluation, feedback, correction and improvement. Improvement in the distance learning is possible only if there is a sound support mechanism. Support and counseling is essential at the input level, process level and even to the output level. Quality, efficiency, relevancy of distance learning is possible through support. In our context, we do not have strong support mechanism at the input, process and output level. We access, examine, monitor the program and activities but do not analyze the situation, reflect to the planning, managing and implementing system, and create constructive support mechanism to the concerns. Diagnostic, constructive, progressive, types of support and counseling system are lacking. Distance education largely depends on them. Therefore, we are facing various problems and challenges on distance learning such as: localized technology, decentralized administration, decentralized planning, management, monitoring and feedback system, community access and supports, sustainability and improving productivity through skills development.

In order to develop and expand the distance learning there are various possibilities. It will increase access to learning and training opportunity; opportunities for updating, retraining and personal enrichment; improve cost-effectiveness of educational resources; support the quality and variety of existing educational structures; enhance and consolidate capacity distance learning is significant (UNESCO, 2002). Therefore, localization, decentralization, community support and sustainability, improvement in the productivity and skills of the people are some possibilities that Nepal can also used with reference to distance learning. However, recent practices are not sufficient to fulfill the demands of these potentialities as its institutional capacity, expansion, quality enhancement, planning, and programming modes have limitations.

To balance geographical access, reduce educational inequalities, delivering educational campaign for national development, expanding capacity for education in a multidisciplinary aspects, combining education with the world of work, linking education with the individual and family lives, developing multiple competencies, enhancing national and international linkage and relations, improving the quality of education distance learning has to play crucial roles. Thus, it has great challenges and opportunities as well. However, our understanding, planning and programming of distance learning in various sectors such as school education, teacher training, etc are not following and challenging the very notion of distance learning.

Pre requisite for distance learning

Distance learning distinct from the traditional learning. Because of physical detachment between facilitator and pupils, distance learning needs some pre requisite for its better delivery. Some of them prerequise for distance learning to be included can be mentioned are establishment of student support mechanism, provision of resourceful library and easy assess to the students, support for faculty development, technical support to the concerned and research and development work.

Scope of distance education

The following are the areas that distance education has to consider while designing and implementing distance education:

- Content of the distance education
- Assessing the needs of the people
- Student demographics
- Course acquisition, development, and evaluation criteria and procedures
- Approval of courses
- Delivery systems
- Selection of distance education course instructors
- Distance education course teaching/management procedures
- Management of distance learners
- Budgeting
- Market
- Formative and summative evaluation of the individual courses and the entire distance education program
- Support system
- Supervision and monitoring system

Important factors of distance pedagogy

Distance education demands more initiation, motivation, devotion and commitment From all. planner, implementer, even learner have these features. Initiation from them will help in designing new modes, methods, materials, planning good instructional materials, and delivering effective and efficient ways. For this factors such as: Motivation, communication, feedback, assessment, evaluation, promotion of dialogue, assurance of students' involvement and provision of support mechanism *have to be understood and adopted in the discourse of distance learning.*

Stakeholders' role

Ownership, commitment, devotion, motivation, etc will increases when the stakeholder takes part in the total process of distance learning. The attainment of the 21st century's four pillars of knowledge as described by the UNESCO (1996) i.e. learning to know, learning to be, learning to do, learning to live together are only possible when stakeholders' roles are defined and they will involved in the process. Therefore, stakeholders' roles have to be defined. The following roles of the stakeholder's would be possible in the case of distance learning.

- Material development
- Course delivery
- Fund raising
- Policy-setting
- Decision-making
- Regulatory provisions
- Setting standards
- Monitoring and evaluation
- Maintaining and improving quality
- Facilitation

Skills necessary for distance learning

Proper delivery of distance learning is possible if the concern institution and the personnel posses some sort of skills related to distance learning. Some of the skills that could be used in designing, planning and implementing the distance learning. Such as : Computer (information technology), critical thinking, lifelong learning (including learning how to learn), planning, reading and writing, speaking (oral) and listening, teamwork, presentation, initiating and searching and use of library.

Although distance education has its significance scope, our attentions and efforts seem to be insufficient. Till now we do not introduce distance learning in school level education. Just few years back, the distance mode of learning has been initiated at the university level education. However, the modes we adopted did not provide greater emphasis towards the prerequisite for distance learning, support and counseling mechanism, supervision and monitoring and marker research. Similarly, management such as curriculum, instruction, delivery, assessment, etc. are the less

prioritized areas. Need assessment, involvement of the stakeholders, recognizing the voices of the real beneficiaries are weak area of distance education. Central modalities have domination over these potential issues. Therefore, the system has to define the scope of the distance education, role of the stakeholders, structural and organizational networking etc in order to improve the quality and coverage of distance education.

In practice, we are initiating distance learning plan and programs without enhancing the skills mentioned above among the planner, designer, implementer and the learners. The curriculum curricular materials etc are not enhancing them properly. The contents related to improve the same are not empowering the learners as they are getting them in a distance. We do not care whether our planner, implementer and learner have such capabilities or not? We assign to design and draft the curriculum that would be more critical, flexible, to such people who lack the same. We offer distance course to the learner but did not assess their real demand and capacity. There are some barriers as well. We do not have capacity development plan to the personnel for distance learning; the legal provision does not fulfill the demand of distance education.

In the context of Nepal, we do not have various paradigm of distance learning. Basically one to many paradigms is in practice. Various factors are creating obstacle in adopting variety of learning paradigm such as low level of infrastructure development, lack of electricity, lack of capable and well-educated manpower, economic hardship etc. One to one, on line modes, many to many techniques are not properly planned, managed, and implemented yet.

We've followed the distance mode, through limited use of multimedia, group and teamwork, and basic concepts of learning i.e. cognitive, skills, and attitudinal development are the features of our distance education. However, with reference to self-motivated, constructive, self-encouraged, critical learning are not properly addressed by our existing system of open learning. Still, our learner are encouraged to read the printed materials, to attend the contact session, and to work some sort of small project work these does not fulfill the potentials of self encouraged learning.

We have followed the fundamental bases of distance learning. We do have printed material, to some extent, text and research document on the net and fax, telephone and written communication methods. However, the degree of printed materials is high in comparison to others. Internet and communication tools posses very low position just a basic level. Such positions have created the condition of dependency

over the printed materials and often the printed material lack the quality, relevancy, and effectiveness as they were prepared centrally, in with a low participatory approach

In our practice, we did not clearly define the roles of stakeholders. The involvement of the students / teachers in designing, planning and developing distance learning policies, programs, materials, etc is significantly low. Centralization in them, and lack if institutionalization are the major reasons that are creating obstacles towards the involvement of stakeholders. Standards of distance learning are not set properly. Only assess the participants through paper pencil text. Stakeholders are rarely involved in decision-making process. The token involvement mechanism could not enhance the potential of learners in accomplishing the pre-determined goals and targets of distance learning. In monitoring and facilitating the activities, stakeholders' involvement is negligible. Thus, a clear roles of the stakeholder have to be defined and empower them to bear such roles are the emerging challenges of distance education.

Finally from the concept and context it can be acknowledged that distance education must have the following features:

- Relevant
- Flexible
- Effective and efficient
- Accessible
- Compatible
- Marketable
- Learner centered
- Practical
- Multidimensional
- Inclusive
- Gender sensitized
- Global
- Decentralized
- Sustainable

Conclusions

Structure, motivation, communication, feedback, assessment, evaluation are the most crucial components of distance education. Promoting dialogue, securing involvement of all, providing supports to the students, enabling learners to make them ready for learning to learn are the most important features of distance education. Letter based, radio based, television/ video based personal computer based, telephone based distance education are some trends and technologies used in the discourse of distance learning. Role of the content, teacher, and the learners are the must determining pedagogical factors in distance learning. Printed material i.e. books and papers, internet materials i.e. text, pictures, research documents, and the communication i.e. verbal, nonverbal, written, oral etc. are some components those

make distance learning possible. Multimedia, communication, e-learning system, well-educated teachers, relevant printed materials, etc. are crucial elements of distance learning.

Access and motivation, online socialization, information exchange, knowledge construction, development are some activities of distance learning those demand setting the system, welcoming and encouraging the people, sending and receiving the message, bridging cultural, social, and learning environment, securing supportive use of materials, conferencing, facilitating etc. Role of teacher in distance education must be a lecturer, examiner, supervisor, facilitator, guide, instructor, technical supporter, designer, implementer, evaluator, researcher, risk taker etc and thus a special attention is needed in preparing teachers. A clear framework for distance education is essential which can includes: framework for planning, learning, pedagogy, instruction, learning environment, policy development, strategic planning, teacher development, material development etc as for discussion. Linkage of distance learning is essential from very beginning to the university level.

Reference

Holmberg, B. (1989): Theory and practice of distance education. London: Routledae.

Keegan, D. (1988). Problems in defining the field of distance education. The American Journal of Distance Education, 2 (2), 4-11.

UNESCO (2002): Open and distance learning: Trend policy and strategy consideration Higher Education Division, Teacher Education Section. Paris.

UNESCO (2002): Teacher education guidelines: Using open and distance learning. Higher Education Division, Teacher Education Section. France

Wedemeyer, C. (1981): Learning at the back door: Reflections on non-traditional learning in the lifespan. Madison, WI: University of Wisconsin.

An Overview of Distance Education Programme

- Hari Prasad Lamsal*

Definition

The terms "distance education" or "distance learning" have been applied interchangeably by many different researchers to a great variety of Programmes, providers, audiences, and media. The key concept of distance education is that the teachers can transmit a fixed body of information to learners via an external representation. They represent an abstract idea as a concrete image and then present the image to the learner via a medium. The learner, in turn, perceives, decodes, and stores it. The learners' context (environment, current situation, other sensory input) and mind (memories, associations, emotions, inference and reasoning, curiosity and interest) to the representation are also the additional factors of distance learning (Horton, 1994). The learners then develop their own image and use it to construct new knowledge, in context, based on their own prior knowledge and abilities.

Distance Education changes the learning relationship from the common, centralized school model to a more decentralized, flexible model. It also reverses social dynamics by bringing school to students, rather than students to school. Due to these characteristics, it is becoming popular and playing an increasingly important role in both formal as well as non-formal education. It is also seen more useful for peoples living in remote areas having geographical difficulties and inadequate access to education due to various reasons.

It is very hard to get unanimous definitions of Distance Education (or Distance Learning). Many researchers and research institutions have tried to define it more comprehensively. Some of the following definitions will help to understand the meaning of Distance Education / Distance Learning.

"Distance Learning (DL) is an instructional delivery system, which connects learners with educational resources. It provides educational access to learners not enrolled in educational institutions and can augment the learning opportunities of current students. (The California Distance Learning Project)".

"Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special

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instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements". (Michael Moore, The American Centre for the Study of Distance Education, Penn State, Greg Kearsley [California: Wadsworth Publishing Company, 1996].

Rationale

The economical and social contexts have been changed and the number of unemployed workers is increasing. All of them need to be retrained. Knowledge has become one of the most important economical forces. It is rapidly expanding and its lifetime becomes increasingly shorter. To survive in the market, companies need to change. They need to train and retrain their employed and investing in the human resources seems to be the only way for a sustainable development. As a result of these developments, the labor market is changing and the needs for training and retraining are strongly increasing. In this frame, distance education seems to be considered as one of the most adequate and attractive means to face these changes.

Similarly, teachers in the rural areas need flexible time and schedule for the training. Educational planners are thinking to reduce the investment in teacher training as well as increasing the instructional hours in the classrooms. People living in remote areas need awareness and job holders require flexible time and diverse curricula in order to be educated. Therefore, distance education became a means to fulfil the needs of them.

Objectives

The main objectives of the distance education Programmes is to provide access to education for those peoples who do not have got opportunity to enroll in the formal education. The distance education can be a means to make people aware and providing them life long education. In addition to these, this Programme is extensively used to train the teachers in order to provide them training facility at their homes instead of collecting them in training centres and reduce the investment.

Uses of Distance Education Programme

Traditionally, people think that distance learners are adults. This adult learner tradition is now changing as new programmes. Basically, it has widely been used to train teachers through distance mode and in some cases, taught courses in higher studies. It also come into existence to serve the secondary school student population in most of the countries (Sherry, 1996). At the secondary level, distance education addresses the needs of small rural school or underserved urban population. Some

secondary school students who don't have opportunity to enroll school due to various reasons may enroll in distance courses to meet graduation requirements.

It can also be used at the primary level in the form of curriculum enrichment modules and ongoing telecommunications projects. Other modules could be television-based, with the teacher as facilitator. Students work in collaborative groups, using manipulative and hands-on activities in a distance-learning environment (Pacific Mountain Network, 1994).

In the present context, a considerable number of countries are expanding distance education Programmes to meet their needs and budgetary restrictions. As already mentioned, it has been used effectively for teacher training and higher education, the application of these techniques to school education would also be possible in the Nepalese contexts. But it needs to be explored. Some of the countries have already been used these Programmes to extend access to secondary schooling in rural areas of their countries. In Mexico, Indonesia, Brazil and Jambia, number of 9,00,000, 3,75,000, 2,20,000 and 30,000 students are taught through distance education method respectively. (IIEP Newsletter April – June, 2000). The lessons from them provide rooms to expand the Programme in school education also. It can provide better chance to students, who cannot join the secondary school education in the set time due to various reasons.

Distance Education Programmes in Different Countries: Some Examples

The following table provides some interested examples of nature of the distance education Programme in different part of the world. It also shows the examples of how easily distance learning can be adapted to a variety of contexts and needs.

Country	Programme
Bhutan	Distance study Programme for in-service primary teachers. The five-year course is based on the conventional pre-service B. Ed. Course.
China	An interactive distance education system combined with satellite TV and computer networks including real time training for the urban areas. Non-real time interactive training with learning packages and assistance in the training centres for the underdeveloped areas.
Iraq	Life long education to meet both societal and educational requirements of people.
Macedonia	In-service teacher training
Nepal	In-service teacher training by using radio lessons, self-instructional materials and contact sessions through distance education.
Philippines	Continuing education for sustaining professional growth and improving teaching skills, particularly for those who cannot leave their jobs or homes. Upgrading education system of the country by developing, testing and utilizing innovative instructional materials and technologies and sharing these with other colleges and universities through co-operative Programmes
South Africa	An Internet based Master's degree in Public and Development Management. An Internet based Management Development Programmes.
Uganda	Teacher Development and Management System (TDMS) – Part of Primary Education Reform Programme, a new delivery and support system
Vietnam	The distance education Programme of the English Language Teacher Training Project (ELTTP) to train lower secondary teachers of English and to train and upgrade teachers of English at school, college and university level.

Source: IIEP Newsletter, January – March 1999

Importance of Distance Education Programme

Distance Education System is flexible, accessible, cost effective and giving life long access. It does not require set infrastructure, or necessarily a fixed timetable. In addition, the absence of set infrastructure means that these Programmes can be set up comparatively quickly, which is very useful for areas which need to accommodate large number of additional students in a short period of time. Moreover, public interest in distance education is especially high in areas facing the dilemma between widening access to education and their budgetary restriction (Sherry, 1996).

Distance education can also be a comparatively cheap because it does not need more recurrent costs. It does not require more teaching personnel as compared to the face-to-face teaching mode. Only the initial investment to produce the course materials is needed (Sherry, 1996).

Distance education technologies are also expanding at an extremely rapid rate. As a result of the expansion, people can have easy access on the use of these technologies and can be benefited.

In this Programme, students work on their own, with supplied course materials, print-based media and postal communication, some form of teleconferencing and/or electronic networking, and learner support from tutors and mentors via telephone or E-mail. Besides, learners have a chance to learn diverse curricula in their own pace with the flexible time schedules. Therefore, it is also called a dynamic system, which allows flexibility and multiple options for the learner. Self-discovery activities, using manipulative and conducting experiments under the guidance of the site facilitator, and discussion with them allow avenues for promoting self paced learning and competency based approach in learning (Kafle, et. al. 2004).

Adult learners have a wide variety of reasons for pursuing learning at a distance: constraints of time, distance, and finances (Willis, 1993). As a result, they gain not only new knowledge but also new social skills, including the ability to communicate and collaborate with widely dispersed colleagues and peers whom they may never have seen.

Limitations of Distance Education Programme

However, distance learning also raises a series of questions. Education offered through this method may not be effective as that of the formal system. The learning process can be profoundly different; as the students may not have direct contact with the teachers, there may be little or no classroom interaction, and the variety of teaching materials may be limited. It can also be argued that adolescents need socialization and some framework for motivation and guidance.

For various reasons, largely due to the profile of the students, distance-learning Programme tend to have higher drop out and repetition rates. In addition, the cost aspect is not straightforward. While overall per capita costs may be lower than in the formal system, start-up costs can be quite high. The course materials have to be commissioned and developed, certain infrastructure outlays may be necessary, and teaching, material of good quality may be quite expensive. Economies of scale can only minimum if there are sufficient students (Sherry, 1996).

Methods and Strategies Used in Distance Education Programme

The methods and strategies used in distance education programme are guided practice (Sherry and Morse, 1995; Willis, 1993), inquiry learning (US. Congress, 1988), team work (Pacific Mountain Network, 1994) and media-based challenges (Clifford, 1990).

Willis (1993) describes the strategies which are effective in distance learning: namely, developing appropriate methods of feedback and reinforcement, optimizing content and pace, adapting to different student learning styles, using case studies and examples which are relevant to the target audience, being concise, supplementing courseware with print information, and personalizing instruction.

Instructors need access to data links and E-mail, as well as video links. They need to download and upload resources and lesson plans, consult with other teachers, and try out new learning modules (Sherry, 1996).

Factors Which Influence Success

The earliest form of distance learning took place through correspondence courses. With rapid development in Information Technology (IT), different technologies are being used to make the programme more effective. These are printed materials, instructional television, radio broadcasting, e-mail, Internet, facsimile, and current interactive technologies. The interaction sessions (contact sessions) are also an integral part of the programme (Sherry, 1996).

Although technology is an integral part of distance education, any successful programme must focus on the instructional needs of the students, rather than on the technology itself. It is essential to consider their ages, cultural and socioeconomic backgrounds, interests and experiences, educational levels, and familiarity with distance education methods and delivery systems (Schamber, 1988). The most important factor for successful distance learning is a caring, concerned teacher who is confident, experienced, at ease with the equipment, uses the media creatively, and maintains a high level of interactivity with the students (Apple Classrooms of Tomorrow, 1992).

Apart from the above-mentioned factors, there are still other factors that influence the success of the distance education programme. These are:

- Learner characteristics such as: active listening and the ability to work independently in the absence of a live instructor become crucial for success (Charp, 1994).
- Climate, geography, the efficiency of the postal system, the support network, telecommunications facilities, students hearing problems, and other factors also come into play. Miscommunication between learners and teachers, and lack of course relevance to learners, may also have negative repercussions (Sponder, 1990)
- Some of the operational issues must be considered for the effective implementation of the distance education programme, which involve planning, administration, management and financial matters (Sherry, 1996).
- The effectiveness of the distance education largely depends upon the teamwork. Many people such as editors, designers, producers, technicians, media specialists, local tutors, aides, site facilitators, and service providers must collaborate along with the use of appropriate technology to produce and disseminate quality distance educational programme. Training of teachers and staff, implementation and adoption of new technology, and policy issues such as facilities, cost, and scheduling are also key factors to make it more effective (Sherry, 1996).
- Effective distance learning requires extensive preparation, as well as adapting traditional teaching strategies to a new learning environment, which often lacks visual cues. Porter (1994) speaks of the triad consisting of the student, the teacher, and the site facilitator, all of whom must function as a team. Students must quickly become aware of and comfortable with new patterns of communication, learn to manage their time, and take responsibility for their own learning. Teachers must enable students to establish contact with them, as well as interact among themselves. Site facilitators can act as the on-site "eyes" and "ears" of the teacher, stimulating interaction when distant students are hesitant to ask questions or participate in discussions.

Ways to Make Distance Education Programme More Effective

While designing effective distance instruction, one must consider not only the goals, needs, and characteristics of teachers and students, but also content requirements and technical constraints. The delivery systems must be made accessible to all participants. Revision based on feedback from instructors, content specialists, and

learners is an ongoing process. Provisions must be made for continually getting feedback to keep the subject matter current and relevant (Sherry, 1996).

Another important variable in learning effectiveness is the preference of the student for a particular mode of learning, i.e., cooperative, competitive, or individualized (Johnson & Johnson, 1974). Many current distance education projects incorporate cooperative learning, collaborative projects, and interactivity within groups of students as well as between sites.

The following points need to consider while designing the system of distance education:

a. Interactivity

Successful distance education systems invite high interactivity between teacher and students, between students and the learning environment, and among students themselves, as well as active learning in the classroom. Garrison (1990) argued that the quality and integrity of the educational process depends upon sustained, two-way communication.

b. Active learning

Learners must be both willing and able to receive instructional messages. They must have a sense of ownership of the learning goals (Savery & Duffy, 1995). To make them more active in learning, medium and message must be relevant and meaningful as per their ability.

c. Visual imagery

Researchers have consistently found that visual imaginary can motivate students and stimulate an interest in the learning process. Unintended side effects of educational television in particular as well as "edutainment" in general may appear (Ravitch, 1987). Because reliance on exciting visuals may distort the curriculum by focusing students' attention on the entertaining and provocative features of the presentation rather than encouraging thoughtful analysis of their underlying meaning.

d. Effective communication

All instructional designers must be cautious with an understanding of their intended users, and to recognize them as individuals whose outlook is different from the designer's own (Shneiderman, 1992). Horton (1994) states the golden rule for designers of instructional visuals, if you want the learner to construct an

idea which is similar to yours, then use an image for your presentation which will trigger a similar idea in the learner's mind, in the context of the learning environment and the learner's prior experiences. It is up to the designer to use advance organizers to create an appropriate context for instruction and select effective images, using appropriate objects with relevant attributes that will convey the same idea to the user as they did to the designer.

References

Horton, W. (1994, June): How we communicate? Paper presented at the meeting of the Rocky Mountain Chapter of the Society for Technical communication. Denver, CO.

IIEP News letter/January – March 1999, April – June 2000

Johnson, D.W., & Johnson, R.T. (1974): Instructional goal structures: co-operative, competitive, or individualistic. Review of Educational Research, 44, 213-240.

Kafle, B; Sinha, R; Shrestha, C. & Basnet, S. (2004) : Educational technology and non-formal education; students' Publication Pvt. Ltd. Kamalpokhari, Kathmandu.

Pacific Mountain Network (Producer). (1994): Far View I-IV [Videotape series]. (Available from PMN, 1550 Park Avenue, Denver, CO 80218-1661.)

Ravitch, D. (1987): Technology and the curriculum. In M.A. White (Ed.), What curriculum for the information age? Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Savery, J.R., & Duffy, T.M. (1995): Problem based learning: An instructional model and its constructivist framework. Educational Technology, 35(5), 31-38.

Sherry, L. (1996): Issues in distance learning. International Journal of Educational Telecommunications.

Shneiderman, B. (1992): Designing the user interface. Reading, MA: Addison-Wesley.

Willis, B. (1993): Strategies for teaching at a distance. (ERIC Document Reproduction Service No. ED 351 008).