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Translating Research Findings into Practice:

Initiating and Sustaining Improvements in Educational Quality

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Forward

The purpose of this brief paper is to continue communication with, and hopefully contribute to, discussions within the CRIQPEG "Feedback" Committee as its work evolves and as it develops action plans. This paper includes some of our ideas and some findings from international research about the characteristics of interventions at the classroom and school levels. Basically we try to conceptualize and account for some of the main activities which may take place during the initiating and sustaining phases of translating research into practice. We raise a few illustrative questions about those conditions and behaviors which constrain and those which support the feedback, intervention and change processes. The specific content — statements and questions — may or may not be relevant to the Ghanain schools where your research and feedback are being carried out. Any value the paper has lies in contributing new ideas or provoking new questions in the discussions of the Committee. We look forward to a frequent exchange with the Committee.

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As has become painfully apparent to educators all over the world, improvements in educational quality at the classroom and school levels do not automatically result from the discovery of new knowledge through research. The standard operating procedure of researchers is to forward the report of their findings to a few educational officials, policy makers, and teachers. This procedure ignores the evidence that acquisition of information by itself is often insufficient to generate change. Even discussion of research findings directly with teachers may or may not result in new teacher and pupil behavior, depending on many individual, organizational and environmental factors.

The nonutilization of research findings and the difficulty in introducing lasting improvements has at times led frustrated policy makers to criticize researchers for the irrelevance of their methods and to chide teachers and administrators for their incompetence or lack of "will" and "vision."

Such interpretations may be accurate but, without elaboration, are not very helpful. The easy focus of blame on those who conduct the research or on those who implement change at the classroom levels reflects an oversimplification of the complex process of initiating and sustaining feedback and utilization of new knowledge. The reluctance of teachers and administrators to alter current practice may be based on many reasons, including the careful and accurate assessment of the difficulties involved and anticipated undesirable consequences. Successful integration of research into practice requires a carefully planned, effective process of feedback, monitoring and implementation which recognizes the professional capabilities and predispositions of involved teachers and administrators, the interests and roles of other stakeholders, and the human and fiscal resources available.

This paper describes a few common characteristics and some key conditions often associated with of the complex process of initiating and sustaining new practices in classrooms and schools. Based on international research and professional experience sample questions are suggested which can help generate the information needed to assess the potential for successful change and help develop strategies to support the intervention.

1.0 Initiating Change in Classrooms and Schools

This stage involves assessment of readiness of the teachers, program. school or system for change and examination of the organizational and environmental contexts. The process of initiating change in classroom practice may include: anticipating the available supports and obstacles; mobilizing supports; creating necessary organizational adaptations; identifying and involving stakeholders; and developing a process of communication and understanding among key actors in order to achieve a working level of consensus about the new intervention or practice.

Innovations are more likely to be implemented by schools and teachers when the new initiatives appear advantageous, represent only a small change in conventional practice, do not violate folk beliefs, take place in a school with a history of innovation, are not costly to adopt, and produce readily available observable benefits. Acquiring the information upon which to base such assessments may not be easy.

1.1 Readiness

Identifying the readiness of teachers and administrators to adopt an intervention, new practice, or different technology is critical for subsequent success. However, readiness may be difficult to determine and conditions of readiness may vary significantly across schools and over time. Assessing readiness to initiate an intervention may be as simple as asking a teacher a few pertinent questions or may be as complex as evaluating relevant information at the school, system and environmental levels based on analysis of observations, discussions and written documents.

BOX A

Some Key Conditions of Readiness

(1) Dissatisfaction with existing practice.
(2) Availability of fiscal, moral and technical support for the change.
(3) Experience of teachers and school in undertaking new initiatives.

Examples of Questions Pertaining to Readiness for the Intervention

1. Are the teachers and administrators dissatisfied with the present practice? Is there pressure for change from the parents, community, the district or government?
2. Do the teachers have experience in trying new approaches? Does the school have a history of encouraging innovations?
3. Is there parental and community support for the intervention? Is there a working level of consensus on the value of the intervention by all involved?

1.2 Context

The context of translating research into new practice focuses on relevant human and environmental conditions. Contextual data can be used to help illuminate blind spots and answer the question, "In what ways can this work?" For the sake of analysis

a division may be made between internal context (classroom and school) and external context (the educational system within which the school is located and the broader economic, cultural, and political environment). Certain research-based innovations may require only minor adjustments in teacher or pupil behavior, or modest revisions in instructional materials. However, major changes in curriculum, teacher roles, and pupil behavior, if such are required, take place within complex organizational and socio-cultural contexts. Schools and administrative personnel may have to adapt to new patterns of work behavior, and new relationships may have to be established with the environment. Decision processes may require modification. The stakeholders at the school, district and other levels who are involved (See Appendix) may need to be identified, the nature of the transactions among them may need to be examined and their relation to the intervention understood.

For each kind of intervention being considered (e.g., revision of language materials, adjustment of instructional methods), the size and scale of the intervention may pose special problems. The complexity and degree of change (e.g., the magnitude of the departure of the change from the status quo, the number of objectives, roles, actors, decision points, and the extent of interdependence of organizations involved) are inversely related to the difficulty of initiation of change. Further, it is unlikely that the process of feedback and change in one school can be precisely replicated in another school. However, regardless of variations in external demands on schools and the variations in the functioning of the schools, the centrality of teacher behavior remains constant.

BOX B

Some Key Classroom and School Conditions

(1) A sense of ownership by teachers of the new practice.
(2) Understanding by teachers and administrators of the meaning of intervention and its impact.
(3) A high level of communication, collaboration and consensus among those involved.

Examples of Classroom and School Questions

1. Is the initiated change supported by adequate local research? Is the information provided by the research interpretable by teachers? Is the choice of intervention assumed to be valid by the teachers involved? by respected local stakeholders? Do research findings agree with practitioner knowledge?
2. Were teachers involved in the design on the intervention? Do teachers support the change? Is the change perceived as having advantage over prior approaches? What incentives do teachers have to adopt the change? What disincentives? Are teachers involved in monitoring and appraising the intervention?
3. Are the objectives of the intervention clear and specific? Have the actions and conditions which should be avoided been identified? Who is seen as benefitting from the intervention?
4. What classroom and school level decisions (pertaining to objectives, funding, classroom management, teaching-learning conditions, teaching schedule, in-service training research, facilities, etc.) are necessary in initiating the intervention? Who makes these decisions?
5. Are the size and scale of the intervention manageable by the school? Does the intervention ask teachers to give up their usual ways of behaving and understanding? Are major organizational changes required (e.g., international research suggests that reformers should "Begin small and think big").
6. What demands does the translation of research into practice make on personnel and facilities? Are these judged to be reasonable by school personnel? Do the teachers have the skills to adopt the new practice? Are new instructional or learning materials needed? Has the necessary staff training taken place? Can the involved teachers acquire continuing technical assistance if necessary?
7. Does the intervention allow flexibility in the process for carrying it out? Is there a conflict between what is needed and what is wanted?

BOX C

Some Key Conditions of the Educational System

(1) Approval by officials of objectives and other design features and tasks related to intervention.
(2) Continued familiarity with the intervention as it evolves.
(3) Allocation of resources for needed training and materials.

Examples of Questions related to Larger Educational System

1. Is support of the larger system needed? What type of support? Will the new practice require reallocation of resources? Is there evidence that the educational bureaucracy is supportive? the circuit supervisors? at the district level? at higher levels?
2. How many administrative levels are involved? Are existing information networks sufficient for exchange of information vertically and horizontally within the larger system?
3. Does the intervention require additional or different supervisory and control processes? Are new official regulations needed to carry out the intervention? Can any needed adjustments in teacher behavior be brought about through existing control and regulatory processes?

BOX D

Some Key Conditions in the External Environment

(1) Compatibility of new practices with parental educational objectives.
(2) Willingness of parents to reinforce in the home the skills taught in the school.

Examples of Questions on the External Environment

1. Are parental and community involvement in the intervention needed? What are the possibilities for community involvement in reinforcing the objectives of the intervention? Are additional resources from the community needed? Are they available?
2. Does the new practice have community validation? Are there important underlying values in the immediate community or society which may be obstructive to the change being initiated? Can external opposition be forecast?

1.3 Strategies for Initiating Change

There are several strategies which may assist in initiating classroom changes, many of which are evident from the conditions for initiating change and the sample questions identified above. The core strategies involve: developing the capacity of teachers by providing new knowledge and skills through inservice training, supervision, and technical assistance; developing the local management and leadership capabilities of administrators through periodic inservice seminars and workshops; and building both organizational and administrative capacity in the larger educational system by clarifying goals, improving communication , collecting and disseminating more useful information, generating more resources, and improving planning.

2.0 Continuing and Sustaining Improvement in Quality

Sustaining qualitative changes in classrooms and schools depends on the ability to generate, understand and utilize information on evolving intervention, performance, and contextual conditions. The information, arguments and incentives useful to initiate change may not be those which are effective in ensuring its continuation. A few influential and committed individuals may have been sufficient to introduce the new practices; however, sufficient resources, sound planning and development activities,

efficient information networks, strong individual commitment, and continually improving technical skills are likely to be necessary during the continuation phase.

Observers of attempts to implement innovations, for example, note that early enthusiasm may rapidly give way to despair as the difficulties and risks become known. The challenge is how to maintain high performance and high morale on the part of those involved. This "dip" in the curve of implementation may be temporary and, with further understanding and confidence, commitment may reemerge. However, the decline in the intervention support may continue and result in the termination of the innovation.

The instability of changes in quality over time may, of course, reflect a healthy process of naturally occurring school improvement. Irrespective of shifts in motivation and morale, there may be good reasons why innovations which are satisfactory at a particular time may not be appropriate or acceptable at a later time. (Educators in the U.S. are now beginning to observe that effective schools for the 1980s may not be adequate to be effective schools for the 1990s). New research or experience based knowledge may suggest foci on different classroom variables. A shift in national, local, and school priorities may require consideration of altered teacher and administrator roles and of new output measures.

Continuation of new classroom practices implies that a school assimilates an innovation into the roles and relationships of the teachers and administrators. The modifications are stabilized and the school effectively establishes an institutionalized process of monitoring and feedback which includes continued assessments of the classroom changes and their effects. The culture of the school and classroom has been altered. The definition of continued change requires the insights and reflections of practitioners and reliance on the linking of ongoing classroom research to practice.

BOX E

Some Key Conditions for Sustainability

(1) Continued acceptance by teachers of the validity of the new practice.
(2) Adequate response by teachers, administrators and key officials to monitoring and evaluative feedback.
(3) Provision of resources by local community and educational bureau-cracy for capacity building and accountability efforts.

Examples of Questions on Sustainability

1. What has been learned about the intervention? Has the intervention proved successful? Is the change still considered valid in light of continued research and experience? by teachers? by administrators? by other stakeholders?
2. Has agreement regarding the intervention translated into a flow of resources? Is there a long term commitment to funding? Has fiscal resource support continued? Has community support been main-tained? Are the monetary and nonmonetary costs of the intervention acceptable to teachers, parents and the various levels of administrators?
3. Has the school become more focussed on improvement of quality? Does classroom and school level planning include setting targets, monitoring and evaluating progress? Is the leadership actively focusing the direction of change? Has the leadership fostered proactive problem solving? Have "action" indicators drawing from the teachers' experiences been developed to gauge impact? Have teachers taken on expanded responsibilities and new roles? Have administrators taken on new roles? Does the culture and climate of the schools and the professional educational system support professional growth of teachers and administrators? Have any necessary school changes become closely linked to core school activities, e.g., curriculum and practice, the organization of learning environments?
4. Have there been many adaptations to the intervention? Have the basic elements been maintained? Has the new practice been incorporated into ongoing instructional or curriculum planning?
5. Do teachers continue to see a relative advantage in the changes? Has perceived teacher ownership of the new practice persisted?
6. To what extent does there continue to be mastery over the new skills or knowledge required in the new practice? Have the teachers and other educational personnel learned to use information and research to continue the improvement of educational quality? Have there been improvements in the working conditions of teachers?
7. What aspects of the intervention have been evaluated? Has the monitoring process been satisfactory? Are the results of the intervention readily observable? Were there favorable but unexpected consequences from the new practice? Unfavorable consequences? Are teachers participating in the monitoring and evaluation? Who interprets the findings of monitoring and evaluation? Who is responsible for taking action?
8. Are the policies, processes, and inputs linked satisfactorily to the output of the new practice?

2.1 Strategies for Continuation

The strategies pertinent to initiating change generally remain valid during the continuation phases. Required are planned activities in capacity building for teachers and other personnel and the strengthening of schools as organizations. Increasingly, the refinement of accountability processes and technology is necessary. Strategies of accountability may include: further development of information systems at all levels; development of a strong testing, monitoring and evaluation system; development of informal evaluation technology to be used by teachers; and development of community committees to assist in implementing the ongoing improvements.

3.0 Summary

Initiating and sustaining improvement of educational quality may be viewed as a never ending linking of research and practice, practice and research, reflection and practice, practice and reflection, inquiry and change, change and inquiry. A continuing process of initiating and sustaining new practices includes collaborative efforts by a variety of groups and individual stakeholders in identifying facilitating conditions, collecting and analyzing monitoring information, and building effective strategies and operational plans. mproving educational quality in classrooms depends strongly on what teachers know and do. It is as complex and as simple as that.

APPENDIX

A Few of the Roles and Interactions of Stakeholders*

Education	Roles	Information/Interactions
CRIQPEQ	Leadership in research design and analysis; participation in the design, initiation, continuation, and evaluation of the intervention.	Interacts through official channels with all stakeholders using a variety of media; ongoing written and face to face feedback to teachers and lead teachers.
School Teachers Headteachers	Participation in research design and definition of intervention; basic responsibility for carrying out intervention.	Ongoing face to face and written communication of individual teachers and groups of teachers with CRIQPEQ; ongoing face to face interaction with circuit supervisors.
Community Parents	Participation in discussions about intervention and other plans to improve educational quality; assistance in physical repairs of school.	Frequent face to face discussions with teachers; periodic face to face discussion with CRIQPEQ.
Circuit Supervisors	Participation in definition and development of intervention; provision of resources for needed technical assistance; provision of resources for staff development.	Receive from CRIQPEQ and schools information on research and intervention results and work in progress; communicate to teachers in writing and through face to face meetings; plans and schedules for seminars and workshops.
District and Regional Officials	Review of research and intervention. Participation in organizing staff development, provision of needed resources; dissemination of information on research.	Communication of relevant information and requests to districts; receives periodical reports on research and intervention from circuit supervisor; periodic on-site visits; communicates relevant information and interpretations to MOE and GES.
MOE/GES	Coordination of CRIQPEQ research with national reform efforts; provision of resources and oversight on dissemination and implementation of innovations into larger educational system.	Receive from district periodic reports on results of research and intervention; communication of policies and advice to districts; periodic face to face communication with officials, teachers, and CRIQPEQ.

*IEQ/USAID will offer support to all of these roles and interactive processes.