NOT TOO DISTANT:
A Survey of Strategies for Teacher Support In Distance Education Programs

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ABSTRACT

Distance learning can be a "very lonely" experience (Brown & Early, cited by Prescott & Robinson, 1993). This isolation exacerbates all of the many issues that can occur when learners are separated from their instructor and other learners via distance. Difficulties understanding content, computer problems, uncertainty about how to employ a strategy, and disappointment when a new pedagogical approach fails are all magnified when teachers confront these issues alone. High rates of attrition in distance-based teacher training courses are in large measure due to these feelings of isolation and "anonymity" (Potashnik & Capper, 1998; Hope, 2006). Indeed, without "support, contact and confidence," distance learning is not considered by learners to be "valuable" (Brown & Early, 1990; Prescott & Robinson, 1993, p. 306).

This paper presents a recent historical and global overview of the types of supports provided to distance education programs across the globe. Because of the diversity of distance-education programs, the paper includes a range of such modalities (print-based instruction, radio, television, and online learning).

Keywords: **Supports for distance learners; follow-up support; online professional development; distance learning; help for online learners.**

OVERVIEW

Research on *all* forms distance education—indeed on all forms of teacher professional development (Dimock *et al*, 2000; National Staff Development Council, 2002; Commonwealth of Learning, 2008; Gaible & Burns, 2007)—demonstrates that the presence or absence of ongoing face-to-face support can make or break a distance education program. Where distance education programs have resulted in high rates of attrition or failure, a lack of support has been the constant theme. In the radio-based teacher training program offered by Pakistan's Allama Iqbal Open University, only 57 percent of teachers passed the course. Sulistyo-Basuki (2007) cites a lack of support for low levels of student persistence in courses and programs in Indonesia's Open University. Studies of online learning programs in the United States reveal that when facilitator support is lacking, teachers leave such programs at very high rates, especially when this lack of support is compounded by technical problems (Center for Children and Technology, 2008).

In contrast, where distance-education programs have had high rates of completion, they have been characterized by ongoing face-to-face support.

This is true in general, for all types of teacher professional development programs—whether face-to-face, distance or hybrid—and this is particularly true for all types of distance-education programs. The success of Britain's Open University, where completion rates generally reach 70 percent, is due in part to its vast network of face-to-face of support (5500 part-time tutors and 13 regional centers with roughly 40 on-site staff to support learners (Prescott & Robinson, 1993). The American online teacher upgrading program, *eMINTS*, enjoys a 95 percent completion rate, due in large measure

to 100 hours per year of contact with instructors and tutors.[1] In contrast to their radio counterparts cited in the previous paragraph, 95 percent of teachers in Pakistan's Allama Iqbal Open University's face-to-face component passed the course (Robinson, 1997). In studies of professional development in the United States, teachers consistently report that the most valuable benefits of online learning are those that relate to the social context of learning— "sharing information and knowledge" and "interacting with colleagues." And the majority of teachers in online courses indicate that the support they is "very important" to them (Zibit, 2004).For pre-service teacher candidates attempting to successfully fulfill course requirements for a distance-based teacher training course and for in-service teachers hoping to upgrade content or instructional skills, distance education programs must offer a range of human supports to help teachers with the conceptual, behavioral, attitudinal and logistical burdens that accompany new learning or change.

How much and what types of support pre-service and in-service teachers will need is determined by a number of factors—the level of self-efficacy and self-directedness of learners; the degree and skill of the facilitator (particularly in the case of online courses); the complexity of learning material, design and technology; the particular learning goals for teacher/learners; and the degree of structure offered by the distance-based course. In online courses and online learning experiences which are typically not time- or place-based, teacher-learners often need more support because they are being asked for the first time to assume responsibility for their own learning (Commonwealth of Learning, 2008).

STRATEGIES FOR SUPPORT IN DISTANCE-LEARNING PROGRAMS

Broadly, distance-education programs can make themselves "not too distant" in the words of Nielsen & Tattoo (1993) by employing the following strategies:

Ensure That The Distance-Based Course Is Integrated Into The Overall Teacher Training Program

Williams (1999) charges that for dual-mode teacher education institutions—and even for single-mode entities—distance education students have not been viewed as clients or customers. As a result, the courses, supports, range of services and instructional quality has not been as good for distance-education learners as it has been for on-campus or face-to-face learners (Hope, 2006).

Distance education programs must be well integrated within the whole structure of teacher education and not serve simply as an adjunct/supplement to a face-to-face teacher training program (Perraton, Creed & Robinson, 2002). By integrating distance education programs into an overall university-based teacher training system or an overall national teacher upgrading system, policymakers can work to ensure that there is consideration for students, instructors and professional staff across all modes of delivery and foster parity in quality, resources and supports between the two modes of teacher education.

To ensure that a distance-education program is well integrated into the overall teacher education program, policymakers and designers should develop appropriate academic provisions and guidelines for all learners in every course and program (Hope, 2006). Hope (2006) suggests that these provisions include:

- **Ensuring that the quality of outcomes of the educational experience is consistent between modes;**
- **Effective student support in the form of systematic interaction between teacher and learner should be a requirement of all courses and be built in to the design of course materials;**
- **Making tutors accessible to individual and groups of learners through synchronous and asynchronous technologies;**

- **Feedback on assessment provided to all learners on a timely basis so as to inform their ongoing learning;**
- **Providing access for distance mode learners to the physical facilities (e.g. libraries, study space) and equipment that are necessary for their successful learning and appropriate training in their use;**
- **Opportunities provided for peer interaction at both the course and institutional level to promote a sense of belonging and encourage the development of learning and social communities within and across modes;**
- **All learners having access to academic counseling before and during their course or program;**
- **Precise, accurate and current information readily available for each course and program and well publicized to all students concerning learning outcomes; program structures and requirements; cost and financial support; admission requirements assessment requirements and processes; rules and regulations; appeals procedures;**
- **Systematic collection and analysis of student feedback as a core component of academic quality assurance mechanisms (p. 18)**

In Australia, where dual mode universities have operated successfully for more than 30 years, the quality and reputation of distance provision has been assured by the development of an integrated structure in which courses are planned, developed and taught by the same academic staff to students who are able to receive an identical qualification whether they are located on or off campus. Special resources are provided for distance study and systematic forms of support are provided for all aspects of the distance student's engagement with the institution. In such a system, students are able to move between study modes at their convenience (Hope, 2006).

Organize Learners into Site-Based Learning Communities

Research suggests that the most successful distance education models are those based on learners as part of a community. For example, the online professional development program, *EdTech Leaders Online (ETLO)* organizes teachers into cohorts of 25 and each cohort works together over the life of the nine-week course to create a project plan. For the most part, member of ETLO "cohorts" are physically proximate. ETLO has a higher completion rate —averaging between 78 and 87 percent in many of its courses[2]— than many of its online counterparts which do not organize participants into learning communities. In Indonesia, USAID's spring 2009 Decentralizing Basic Education's online course for teacher trainers reported a 100 percent completion rate, in part because learners take the course together with an on-site partner.[3]

Burns & Dimock (2007) suggest that such communities share several tangible attributes that have a direct impact on teacher education programs (both distance and face-to-face). For example, they reinforce many of the skills, concepts and strategies promoted in teacher training or professional development sessions. Within a community, isolation is replaced by an ethos of collegiality, sharing and collaboration, all of which makes teachers feel more successful both individually and collectively. And by working together with colleagues—either online or preferably face-to-face— teachers can customize, personalize and adapt new skills and concepts to their particular setting enlisting colleagues to help them critique and improve implementation of a particular idea or strategy.

Develop Blended Distance Courses

Some aspects of teacher education need closer interaction with tutors or instructors (e.g., microteaching) and others do not. But helping teachers integrate new ideas and strategies in their classrooms requires the presence of an actual, in-person supervisor. For these reasons, distance programs that utilize face-to-face instruction, supervision, tutoring and modeling have a greater chance of success than those that combine a single approach (Perraton, Creed & Robinson, 2002). Studies of professional development

throughout the globe—in the US, in Asia, in the Caribbean, in Africa—all demonstrate the superiority of blended versus purely distance approaches in terms of learner success within a distance program—and in terms of the success of the program itself (Perraton, Creed & Robinson, 2002; Perraton, 1993; Robinson, 1997; Potashnik & Capper, 1998; Wang, 2000; Center for Children and Technology, 2008; UNESCO Bangkok, 2007; Commonwealth of Learning, 2008). This is particularly true in areas where there is a vast geographical distance between learners and instructor; where modes of distance education are less interactive (for example, print, audio or television); and where there is a lack of sufficient communications infrastructure and material support. Africa is a case in point, and in an attempt to mitigate the impact of these conditions on its distance-based teacher training program, the Africa Virtual University (AVU) has established 30 learning centers through partnerships with higher education institutions in 11 countries. These centers offer face-to-face courses complementing AVU's distance-based upgrading for primary school teachers (Farrell & Isaacs, 2007).

Even when the above conditions are *not* true—where distances are not so great, where the mode of distance-education is more interactive (as in web-based learning or audio- or video-conferencing) and where sufficient communications infrastructure is in place—distance-based course designers recognize that face-to-face interactions and the personal connections that can develop between instructors and learners are a vital part of the learning experience. For example, the American state of Alabama's virtual school requires in-class face time between learners and their instructors two days per week so instructors can tutor, meet with, and provide additional support and instruction to learners.[4] The *Teachers' Telecollaborative Network*—a 2001 videoconference-based teacher professional development program between the Southwest Educational Development Laboratory, the College of Education at the University of Texas (US) and teachers in El Paso (Texas) School District—built in two face-to-face visits to El Paso by the course instructors to supplement monthly videoconferencing professional development sessions. Though teachers enjoyed the videoconferencing, they reported that it did not allow for the breadth and depth of instructor-teacher discussions and the degree of learning that face-to-face sessions did.[5] In many cases, because of a lack of personnel, capacity or financial resources, provisions for such on-site or face-based support may not be possible. In such cases, distance-education programs or entities can employ the following support strategies.

If Offering Hybrid Courses Is Not an Option, Partner with Existing Local Agencies In cases where geography, political disturbances, cultural norms, expense, or logistics prevent instructors from traveling to meet teachers, distance-program designers should explore other human network support options of which global distance-education programs provide an array of models. First, they can investigate where there are *people and institutions* who can help manage and supervise classroom practice as occurred in Brazil's distance teacher-upgrading program, *Logos II* (Oliveira & Orivel, 1993). Guinea's *Fundamental Quality in Education Level* Interactive Radio Instruction (IRI) program (1998-2005) developed monthly *cercles de renseignement* (teaching circles) between teachers (receiving IRI in their classroom) and local circuit inspectors provided with print-based manuals and audiotapes so they provide face-to-face instruction and time for teacher discussion to supplement IRI-based instruction.

Next, many teacher training programs—China's Educational TV program and the UK's Open University are but two—establish *regional study centers* where teachers can meet with a staff member or tutor—who, though not the instructor—has some level of expertise or some knowledge in the subjects teachers are studying. Both China and the UK's study centers are widely established and offer face-to-face and media supports for teachers. Centers are also used to fulfill course completion requirements (e.g., viewing educational programs, teacher self study via computer aided instruction, participating in a web-based course, conducting research, etc.).Third, they can build on existing teacher support centers (such as Indonesia's network of cluster resource centers) and provide

"drop in" hours where teachers stop by to get additional help in some area from a master teacher, distance-education program person, a certified teacher, etc.

This has been done throughout the globe from Educational Service Centers (ESCs) in Texas to Teaching and Learning Centers (TLCs) in Namibia. Where these centers contain technology and Internet access, teachers use them for productivity purposes and for participating in their web-based courses (as in the case of Namibian teachers' participation in Harvard University's online program, *WIDEWorld*.) In the author's experience, these centers have greater value if staff can go to teachers in their schools (in which case money for transportation should be allotted) and when centers offer regularly scheduled courses or activities that are highly valuable to teacher and unavailable somewhere else (such as computer training). Otherwise, these centers are often underutilized.

Fourth, distance education programs can make provisions for facilitated *face-to-face meetings* and exchanges between teachers. Britain's Open University and Chile's *Enlaces* program have done this with great success. Brazil's *Logos II* established local teacher support groups (Oliveira & Orivel, 1993). And Nepal's distance education programs have also employed peer-teaching sessions (Holmes et al., 1993). Finally, distance-based courses, could at the very least, offer a *face-to-face orientation* of the program to help "learn the ropes" of the distance course. In a study of five online professional development sites in the US, the only site with a high completion rate was that which offered a face-to-face orientation to the online course. The orientation, covered using the World Wide Web, accessing content, composing an online post, responding to an online threaded discussion and basic troubleshooting, headed off potential pratfalls, and was conducted by a local area university student (Center for Children and Technology, 2008).

Train Instructors and Additional Staff on How to Provide Support, Coaching, Follow-Up and Mentoring

The provision of support—such as coaching, mentoring and school-based support and supervision—while necessary, taxes the distance-education system/program. Where e-learning has been introduced in both face-to-face and distance teaching institutions, it has been found to greatly increase staff workload. Institutions must either employ additional staff and increase costs, or find ways of containing demands on tutors' time.

Coaching, mentoring and face-to-face and online support may not come easy to a distance-based instructor. Research from the University of West Indies Distance Education Center (UWIDEC) teacher-training program indicates that instructors need additional professional development and instruction when attempting to provide either instruction or support through asynchronous tools (Abrioux, 2006; Brennan & Shah, 2000). In Indonesia, mindful that their teacher trainers had no idea about what face-to-face support, coaching and mentoring of teachers actually constituted, Education Development Center designed an online course to help these teacher trainers learn techniques of coaching, holding productive teachers' meetings, facilitating discussions, observing and providing feedback, and co-teaching. These may not be skills that come naturally to instructors, but if they are to mentor and coach their learners to help them become successful teachers, they will need to be taught how.

To reduce the amount of up-front and ongoing support and guidance learners may demand of their instructors, distance-study programs can employ a couple of strategies. First, they can work to help learners become successful distance-based students, helping them for example to cultivate independent study strategies and skills (McGhee, 2003) such as time management, print and electronic resources retrieval, evaluation and problem solving skills (McGhee, 2003), and, where needed, enhanced reading comprehension, writing and technology skills. Next, distance education programs should provide tutorials, tutoring (either peer-based or subcontracting tutoring to commercial ventures such as *Tutor.com*) (Hope, 2006) and advising services.

Use Digital Supports

There's no technological substitute for quality in-person, face-to-face support. But to supplement and lessen the frequency of face-to-face supports, contact strategies—the time spent in synchronous and asynchronous communication between instructor and learner-distance education programs—can and should employ interactive, communication-based technology.

The use of technology for teacher support can be ambitious— the Government of Egypt, for example, offers seven-channel satellite-based network of mobile receive centers in schools and administrative centers that provide ongoing support to teachers and students in remote schools in the areas of primary and secondary education (Farrell & Isaacs, 2007).

Or efforts can also be more modest telephone, instant messaging, email, videoconferencing, and web-based voice tools—all of which facilitate synchronous communication between instructors and learners. The use of *Web 2.0* applications (discussed below) can provide additional academic support for students including synchronous and asynchronous office hours.

And to supplement face-to-face interactions, distance-based course designers can use online meeting applications such as *Elluminate* or *Camtasia* (which creates audio and video narration, real media and podcasts) to help participants negotiate particularly nettlesome points in a course's trajectory.

This use of synchronous and visually-based technologies would serve to personalize interactions; it would provide for the "verbal immediacy" and "just in time" assistance so critical to participants' satisfaction with distance-based learning (particularly online learning); it would do much to mitigate the anonymity, mystery and impersonal context of an online environment; it would allow participants to communicate in a form that is more familiar—talking to someone, in particular someone they can *see*.

And it would lessen the "read-write" emphasis of web-based teacher training courses which are so often an impediment to learner academic success and which so often exacerbate challenges of communication (Center for Children and Technology, 2008).

Simulate Physical Proximity and Simultaneity with Web 2.0 Technologies

The use of Web 2.0 applications—the so called "read/write" Web— can add further erase the feeling of distances among learners or between instructors and learners. Utilization of Web 2.0 applications such as wikis, blogs, *Voice Thread*, *Facebook, Skype*, *DimDim* and *Ning* for sharing, dialogue, and discussion can facilitate the types of communities of learning and communities of practice which reduce isolation, make learning and experimentation less risky, and promote mutuality and reciprocity. Interviews with teacher online learners in Indonesia suggest two immediate and distinct advantages of Web 2.0—versus Web 1.0 applications.[6] First, they are easy to learn and easy to use.

Their duality—the fact that they can serve as both authoring and communication tools—appears to help users feel more comfortable both creating information and communicating and collaborating around that information (Burns, 2009).

If Support Is Going to Be an Issue, Select Distance-Education Interventions That Are Highly Structured and by Their Very Nature Offer-In Class Supports

Research on teacher learning and teacher change informs us that ongoing, face-to-face support is essential (Hord et al., 1987; Sparks, 2002; NSDC, 2002).

If professional development and teacher education programs cannot offer structured supports for teachers in the distance-education process, they should at least consider a highly structured in-class type of training or professional development such as highly structured dual audience Interactive Radio Instruction, instructional television, two-way

audio, virtual classes, or two-way audio-conferencing. Such distance education models don't offer the simplicity of print-based instruction or the multimodal learning potential of online professional development, but they do offer just-in-time, classroom-based, curriculum-supported, and highly scaffolded supports that "at risk" teachers—untrained teachers, struggling teachers, teachers teaching outside their content area, and teachers teaching a new grade or subject for the first time—may find most beneficial.

The supports mentioned throughout this paper are important for all teachers—but they are most critical for novice teachers who are entering the classroom for the first time. Though I am not aware of comparable data for developing countries, within the United States, 50 percent of new teachers leave teaching within their first five years (National Commission on Teaching and America's Future, 2003).

One of the major reasons cited for this attrition is "isolation" (NCTAF, 2003). Unlike their more experienced colleagues, new teachers don't have an established professional network. They can't draw on a reservoir of experience and accumulated knowledge to guide them when times get tough.

They often lack the confidence of their more experienced colleagues. And, in cultures that value age and hierarchy, they may not have the respect of their older administrators nor may they feel comfortable asking their principals for help.

SUMMARY

By accident or design, distance education programs often fail to make provisions for teacher support and follow-up. Yet this lack of support and follow-up may erode, indeed nullify, the potential impact of any distance-based intervention. By embedding multiple strategies for face-to-face and digital supports within program and course design, distance education programs can go a long way to reducing the high rates of failure and attrition that still plague many distance education programs.

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FOONOTES

[1] This information is based on personal communication with Monica Beglau, Director of eMINTS. December 1, 2008. In *eMINTS*, professional development is largely face-to-face while support is provided via online technologies.

[2] Barbara Treacy, Director EdTech Leaders Online (ETLO). Email communication July 21, 2009. For more information on ETLO, see http://edtechleaders.org
[3] The author designed this online course.
[4] Personal communication with Earlene Patton, Alabama Department of Education, July 2, 2008.
[5] Based on author's participation in this project and on her interviews with TTN teachers (2001).
[6] An example of a Web 1.0 application would be a web site, which is uneditable by a user, versus a wiki or blog.

REFERENCES

Abrioux, D.A.M.X. (2006). *Strategic issues in single- and dual-mode distance education: The organizational blending of two Canadian distance universities.* Vancouver: Commonwealth of Learning. http://www.col.org/colweb/site/pid/3974 Retrieved, July 22, 2009.

Brennan, J. & Shah, T. (Eds). (2000). *Managing quality in higher education*. (Milton Keynes, OECD, SRHE & Open University Press).

Burns, M. (Forthcoming, 2010). *Modes, models and methods of distance education: A global perspective.* Washington, DC: Education Development Center.

Burns, M. (June 2009). Threading, tagging and higher order thinking: Using Web 2.0 applications with Indonesian teacher trainers. In *eLearn Magazine*. http://www.elearnmag.org/subpage.cfm?section=case_studies&article=43-1 Retrieved, October 31, 2009.

Burns, M. & Dimock, K.V. (2007). *Technology as a catalyst for school communities: Beyond boxes and bandwidth.* Lanham, MD: Rowman & Littlefield.

Center for Children and Technology. (2008). *Online professional development formative research report—report to the Public Broadcasting Corporation* (New York, Education Development Center).

Commonwealth of Learning. (2008). *Education for a digital world: Advice, guidelines and effective practice from around the globe*. Vancouver: Author. Retrieved, July 22, 2009 from: http://www.col.org/colweb/site/pid/5312

Dimock, K. V., Burns, M. & Heath, M. (2000). *Applying technology to restructuring and learning: How teachers use computers in technology assisted, constructivist learning environments*. (Austin, TX, Southwest Educational Development Laboratory)

Gaible, E. & Burns, M. (2007). *Using technology to train teachers: Appropriate uses of ICTs for professional development*. Washington, DC: World Bank. Retrieved, July 22, 2009 from: http://www.infodev.org/en/Publication.13.html

Holmes, D.R., Karmacharya, D.M. & Mayo, J.K. (1993). Radio education in Nepal, in H. Perraton (Ed) *Distance Education for Teacher Training* (London, Routledge Press), 136-195.

Hope, A. (2006). *Factors for success in dual mode institutions*, Vancouver, Commonwealth of Learning.

Hord, S., Rutherford, W.L., Huling-Austin, L. & Hall, G.E. (1987). *Taking charge of change*. (Austin, TX, Southwest Educational Development Laboratory).

McGhee, P. (March 2002). Web-based learning design: Planning for diversity, in *United States Distance Learning Association Journal*, (16), 3. Retrieved, July 22, 2009 from: http://www.usdla.org/html/journal/MAR02_Issue/article03.html

National Commission on Teaching and America's Future. (2003). *No dream denied: Teaching and America's future*. Washington, DC: Author.

National Staff Development Council. (2002). *Standards for professional development*. (Oxford, OH: Author).

Nielsen, H.D. & Tatto, M.T (1993). Teacher upgrading in Sri Lanka and Indonesia, in H. Perraton (Ed) *Distance Education for Teacher Training*, London, Routledge Press, 95-135.

Oliveira, J. B. & Orivel, F. (1993). Logos II in Brazil, in H. Perraton (Ed) *Distance Education for Teacher Training*, London, Routledge Press, 69-94.

Perraton, H. (Ed.). (1993). *Distance education for teacher training*, London, Routledge Press.

Perraton, H., Creed, C. & Robinson, B. (2002). *Teacher education guidelines: Using open and distance learning.* Paris: United Nations Educational, Scientific and Cultural Organization. http://unesdoc.unesco.org/images/0012/001253/125396e.pdf Retrieved, July 22, 2009.

Potashnik, M., & Capper, J. (1998). *Distance education: Growth and diversity*. Retrieved, July 22, 2009 from: http://www.worldbank.org/fandd/english/0398/articles/0110398.htm.

Prescott, W. & Robinson, B. (1993). Teacher education at the Open University, in H. Perraton (Ed) *Distance Education for Teacher Training*, London, Routledge Press, 287-315.

Sparks, D. (2002) *Designing Powerful Professional Development for Teachers and Principals.* (Oxford, OH: National Staff Development Council).

Sulistyo-Basuki, L. (2007). IT and education: The Case of E-learning in Indonesia, in *Proceedings Korea-ASEAN Academic Conference on Information Revolution and Cultural Integration in East Asia*, Ho Chi Minh City, Vietnam. Retrieved, July 22, 2009 from: http://eprints.rclis.org/archive/00008856/

UNESCO Bangkok. (2007). *ICT in education: Case studies from the Asia-Pacific region*. http://unesdoc.unesco.org/images/0015/001567/156757e.pdf Retrieved, July 22, 2009.

Wang, Y. (March 2000). *Providing teacher training through educational television: The China experience.* Washington, D.C., Educational Development Center and the Academy for Educational Development. http://pdf.dec.org/pdf_docs/PNACH453.pdf Retrieved, July 22, 2009

Williams, J.B. (1999). *Flexible Assessment for Flexible Delivery: Preliminary Results and Tentative Conclusions*. Paper presented at Effective Courses/Effective Teaching at

University Conference, University of Queensland Australia. Retrieved, July 22, 2009 from: http://www.tedi.uq.edu.au/conferences/teach_conference99/papers/Williams.html

Zibit, M. (2004). The peaks and valley of online professional development, in *eLearn Magazine*. http://www.elearnmag.org/subpage.cfm?section=research&article=3-1 Retrieved, July 22, 2009.