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à l'Enseignement et à la Formation

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mLearning: Delivering eLearning Content Through the Mobile
Improving Child Learning in South Sudan: Addressing Teacher's Resource Needs with Tailormade Content-Management Software
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ing counterparts (Garguilo, 2003). In addition, their success or failure in educational endeavour depends largely on how best the school, parents, and teachers are responsive to their unique characteristics. Marshark, Lang and Albertini (2002) state that if there are problems in the academic performances of the hearing impaired, it is likely to be found in the way they are being taught and what is expected from the students not the student themselves.

For cognitive/academic development of the hearing impaired, various assistive technology devices are available. These devices fall into two main categories, those that amplify or provide sounds and those that supplement or replace sounds. They are all to make classroom more accessible to the hearing impaired individual (Elizabeth 2010, Bethlynne 2007). For successful application of assistive technology devices in the classroom, teachers must understand what hearing impairment is and the restrictions that the hearing impaired individuals may encounter when using the devices.

Moreover, the teachers need to have a working understanding of assistive technology devices use. Specifically the focus of the study is:

To investigate the availability of assistive technology devices in teaching and learning process for the hearing impaired; To ascertain the effectiveness of assistive devices in teaching the hearing impaired. To identify possible barriers to effective use of assistive devices in teaching the hearing impaired.

In this cross-sectional survey to assess the extent of the deployment and effectiveness of the use of assistive technology devices in education of the hearing impaired, randomly sampled teachers from four special primary schools for the hearing impaired in Oyo State participated in the study. A structured questionnaire was used in data collection. The questionnaire was divided into two sections: Section A collected demographic information of the participants, while section B elicited responses on the availability, effectiveness and usage of the devices for teaching and learning process. Descriptive statistics was used in analyzing the data collected.

Results indicated that assistive devices (Computer assisted instruction, television captioning, pocket speak and read portable VCD, visual alert signals, speech to text system, pictures, charts, & real objects, F.M Auditory System) were mostly not available and where available they are grossly inadequate. Meanwhile, in places where some of the devices are available, they are reported to be effective in enhancing learning and academic performance of the hearing impaired students. Also, the result showed that barriers to effective use of assistive devices include operation difficulty, dearth of competent professional to use the devices, perception about the effectiveness of the assistive devices, cost of the devices, and availability of the devices in the schools.

The outcome of this study reveals that assistive technological devices are grossly inadequately deployed in schools to enhance learning of the hearing impaired. They are not frequently used in teaching and learning process despite the potential and immense benefits to the education of the hearing impaired. This finding is in agreement with Imogie (2002) and Alade (2002). Considering the need to provide an all-inclusive educational platform irrespective of levels of ability it is recommended that government and other stakeholders should ensure adequate deployment of assistive learning devices to schools. In addition, teachers should be properly trained in the handling of the devices to maximize the potentials of the hearing impaired students.

References

Alade E. B. (2002). Teachers' perceptions of communication needs of deaf children in Kenya school system. Nigeria Journal of Clinical and Counselling Psychology 8 (2) 2005-218.

Bethlynne, (2007). Technology for the Hearing impaired retrieved Mach 28, 2012, http://www.brighthub.com/education/special articles/42913.

Elizabeth Wistrom (2010). Inclusion strategies for teaching hearing impaired students. Article by WritingBug.

Flippo K, F, Inge K. J. and Barcus J.M (Eds) (1995). Assistive Technology. A resource for school work and community. Baltmore: Paul H. Brooks.

Garguilo R.M (2003). Special Education in contemporary society: An introduction to exception-

ality. The University of Alabama Birmingham. Case Bound.

Heiple, G., Sweet, M., Lynch, J., Graham, L., Shadden, B., Shabo, K., and Sick R-(1998). What makes a good evaluation/assessment for assistive technology. (On-line). Available: Increasing capabilities access network.

Hourcade, J.J, Parette, H.P, Huer & M.B (2001). Family and cultural alert: Consideration in assistive technology assessment educating exceptional children. 12* edition. Dushkin,

Mcraw-Hil, Connecticut, USA.

Imogie, A.I. (2002). Improving teaching and learning: An introduction to instructional technology. Benin Joe Seg Assoc, Nigeria.

Marshark, M., Lang, H.G and Albertini, J.A (2002). Educating deaf students. Research into practice. New York, Oxford University Press, UK.

Morlet, T. (2009). Hearing Impairment. www.kidshealth.org/teen/diseases_conditions/sight/hearing_impairment.htlm

Paul, P.V and Quigley S.P (1990). Education and deafness. Longman, New York, USA.

Sparks, N.M (2000). Assistive technology assessment criteria. Paper presented at International Special Education Congress (ISEC) University of Manchester 24 - 28th July.

Zapien, C. (1998). Options in Deaf Education-History, Methodologies and Strategies for surviving the system http://www.deaflinx.com/DeafEd/Zapien.html.

Working and Learning Virtual: The Bridge to International Cooperation

Guenter Podlacha, GIZ, Germany

Focus: Learn from our case, from introducing a virtual tool to its utility and benefit

What's meant by "working and learning virtually or "life- collaboration"? Is it another piece of technology, or much more?

For our organisation, German International Cooperation, in the context of international cooperation it means:

Synchronous communication and more interaction or interactive learning via Skype, Centra, Live meeting or other tools for learners, project managers or team members worldwide. In "real time" sessions learners can present their working results and discuss these with their class mates; participants meet in order to learn from each others' work and continue to "network". It further supports our staff in the 130 offices worldwide to work more efficient on different pro-jects and in different teams. We have more and more teams, which use the technology success-fully. At least it helps to reduce travelling cost and travel time. This mixture of new technology and new patterns of work and learn is what has become known as "Virtual Working, virtual learning" or "life collaboration". But what are the preconditions and obstacles of this approach? The case of our organisation — a service provider for international cooperation for sustainable development — will give answers to this question and highlights what works best and what needs to be considered.