Platform for the Development of Accessible Vocational Training

Executive Summary – January/2013
Acknowledgment

Supported by:

Platform for the Development of Accessible Vocational Training
FINEP Contract 03.11.0371.00 SEL PUB MCT/FINEP/FNDCT/SUBV ECONOMICA A INOVACAO 01/2010 – AREA: 6 DESENVOLVIMENTO SOCIAL
The Problem

Access to Work
How to facilitate the Communication and Access to Work Environment?

Vocational Education
How to promote the development of the Education Environment to prepare PwD for the Work Market?
Current Developments

Access to Work Environment
How to facilitate the Communication and Access to Work Environment?

Vocational Education
How to promote the development of the Education Environment to prepare PwD for the Work Market?

#1 Smarter Accessible Board
Solution to facilitate community interaction

#2 Smarter Citizen Sensing for Accessibility
Smarter City solution to improve accessibility to work and education sites

#3 Smarter Education Material
Solution to generate next-gen Digital Content Material for Accessibility

#4 Smarter Classroom
Solution to integrate PwD in classroom environment

#5 Smarter City Companion
Solution to guide PwD to work and education sites

#6 Smarter Compliance Checker
Solution to validate Web sites for Accessibility

#7 Media Captioner
Support to Captioning of Video Content in Smarter Education

#8 Portal Ciência Cidadã
Support Data Collection and Classification (For Ethnographic Studies and Data Integration)
#1 IBM Smarter Accessible Board

**Facilitate the communication between members of a community**

<table>
<thead>
<tr>
<th>Noticias</th>
<th>Oportunidades</th>
<th>Profissionais</th>
<th>Anúncios</th>
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<tbody>
<tr>
<td><strong>enfermeira</strong>, temos vaga para enfermeiras. pede-se referencias. Endereço: zona norte. Contato: 77778-7442</td>
<td><strong>cuidador</strong> com experiencia com crianças e idosos. Contact: 8555-1239</td>
<td><strong>cuidador</strong> com experiencia e referencias. Contact: 8555-1237</td>
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How to identify problems and improve city structure for PwD?
How to track and manage the flow of PwD citizens in a city?
How to engage PwD citizens in city affairs?
#3 IBM Smarter Education Material for Accessibility

**Before**
Students receive similar, non-digital Education Material, regardless of individual profiles

**After**
Students receive personalized Digital Content Material Running on Tablet Computing Devices

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1. **Ingest**
   Convert from different formats, including text and multimedia components

2. **Transformation**
   Convert into Digital format, through multi-phase transformation considering personalization of parts.

3. **Delivery**
   Select appropriate content format to deliver to target end-user profile.

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IBM Smarter Education Material

- Load Configuration Rules
- Decompose Elements
- Process Services
- Repackage Elements

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Material for Student Profile A

Material for Student Profile B

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Visual disability

Hearing disability

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#4 IBM Smarter Classroom for Accessibility

Towards Integrated Learning Environment
Enhance Teaching Capabilities and Foment collaboration between Teachers

Transcribe and Record Lectures
Create Repository of Quality Material
Create Social Network of Teaching Material and Experiences

Record Classes

Search for classes:

Record Students’ Interaction with Education Material

Analytics Methods
Create New Models to Analyse Student Performance

Student Performance

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#5 IBM Smarter City Companion for Accessibility

Support the navigation of PwD in the City

Before
Limited awareness of environment
difficult access of PwD to work places

He wants to know how to
get from the train station to work place.

End-user request for
information on how to
navigate in the City

1. End-user request for information on how to navigate in the City

After
Mobile application provide valuable augmented information for PwD to navigate in the city

The supporter makes any appropriate edits to the default route.

2. Systems prepares instructions customized for Accessibility

3. Instructions are delivered on-the-spot (contextualized) as guidance to PwD to navigate safely in the city.
#6 IBM Ability Lab Compliance Checker

Solution to validate Web sites for Accessibility
Make sure that Job and Education Sites are Accessible

Before
Voice Over cannot read the site properly
Blind person cannot navigate this site

After
Site adapted for Accessibility. Voice Over can read the site properly.

1. Analysis Tools
2. Report of Compliance Constrains
3. Fix the Web site format based on Provided instructions
#7 IBM Ability Lab Media Captioner and Editor

Create Accessible Media Libraries with Close Captioning

**Before**
Media Library
Lack Close Captioning

**After**
Automatically Generated Close Captioning supporting Manual Editing

1. Speech Recognition
2. Edit Captioning
3. Merged Media Creation
Support Data Collection and Classification
To be used for Ethnographic Studies

1. Create Flexible Digital Forms to Collect Data
2. Data is classified and Accessible through Dashboard and Query Portal
3. Data is available for Analytics
For more information, please contact....

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