Tanzania Service-Learning

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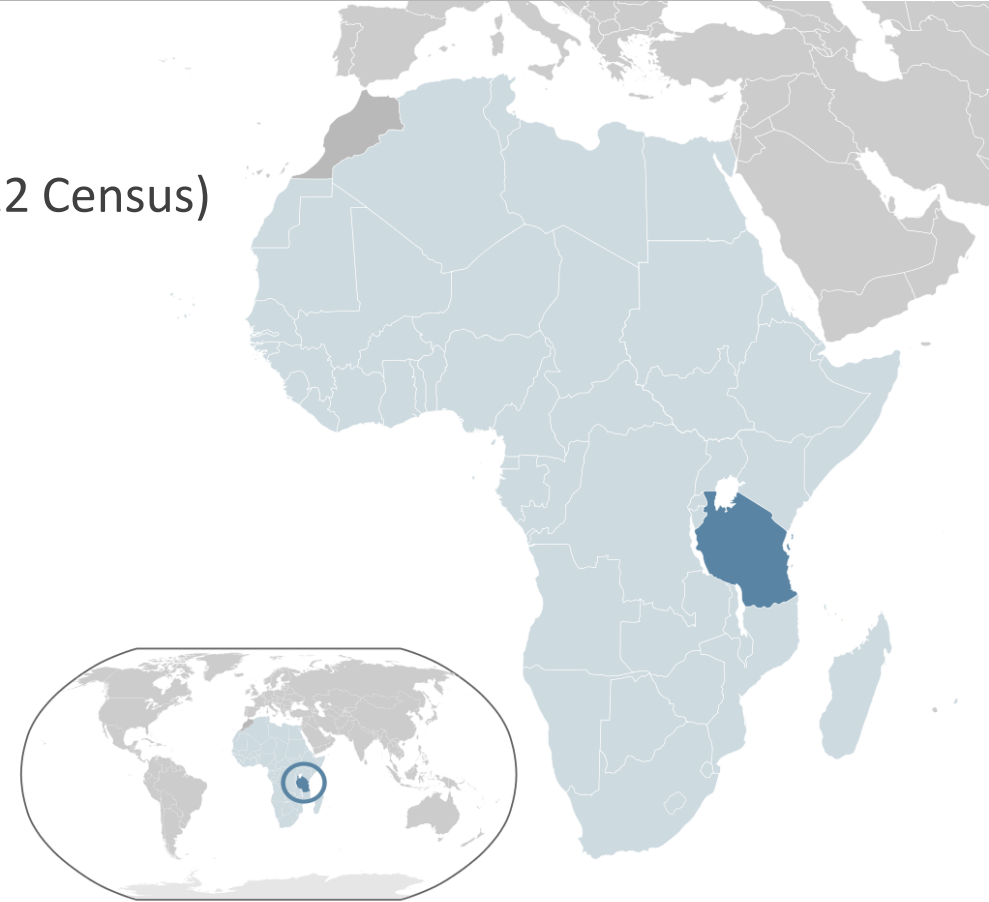
COMPUTER SCIENCE

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MATUMAINI

School for Children with disabilities — Shule ya Watoto wenye Ulemavu

THE SALVATION ARMY

About Tanzania

- 13th largest country in Africa by size (947,300 sq km)

- 6th largest country in Africa by population (44.9 million citizens – 2012 Census)

- 68% of citizens live below the poverty line (30.5 million)

About Dar es Salaam

- Largest city in East Africa (4.3 million – 2012 Census)

- Largest and most populous Swahili speaking city in the world

- 3rd fastest growing city in Africa (5.6% increase per year)

- 9th fastest growing city in the world

About Matumaini

The Matumaini Primary School is a boarding school in Dar es Salaam, Tanzania, which serves nearly 200 children with disabilities and other socially at-risk youth—particularly albino children.

Matumaini is the largest school of its kind in the country. It is located within the Salvation Army compound in Dar es Salaam and it serves children from communities all across the country.

MATUMAINI

School for Children
with disabilities

Shule ya Watoto
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THE SALVATION ARMY

May 2016 project

Overview:

Two CS Faculty/Staff members and four CS undergraduate students departed Purdue for a two-week service project to Matumaini.

10 days of instruction

18 days total (including travel)

Purdue team members lived in bungalows within the Salvation Army compound.

Class

- Matumaini Standard 6

- 24 children (ages 11 – 17)

- 11 teachers

- 4 class periods each day

- 1 teacher workshop in afternoon

- 6 lessons taught over 10 days*

*Lessons cut 3 days short due to national exam

Hardware (2016 project)

- 10 Dell laptops

- 10 Android smartphones

- Projector

- Wireless internet router and extender

- Braille keyboard

- External hard drive to save projects

- All hardware used in the project is property of Purdue University. Much of the hardware returned to campus.
- 5 laptops, 4 Androids, projector, wi-fi hardware, keyboard, and hard drive remained at Matumaini for future instruction.

Lessons

Concepts taught to children:

- Basic computer navigation

- Creating and saving files and folders

- Android phone use (camera and files)

- Microsoft Power Point

- Gmail

- Wikipedia

Lessons

Teachers

Concepts taught to teachers:

- Basic computer navigation
- Creating and saving files and folders
- Android phone use (camera and files)
- Microsoft Power Point
- Gmail
- Wikipedia
- Khan Academy

Future plans

- Continue teaching Matumaini children via virtual lessons (Fall and/or Spring semester)

- Return to Matumaini every May to resume instruction on-site

- Continue to update Matumaini computer lab on each return visit

- Increase number of Purdue undergraduate participants from 4 to 10

- Expand project to Mbagala Kwetu Girls Home for victims of human trafficking

Challenges and Needs

- Hardware
- Software licenses
- Internet connection
- Student funding
- Gmail accounts
- Swahili lessons

Goals and Outcomes

Empower disadvantaged Tanzanian children and young women by teaching marketable skillsets which will allow them to become contributing members of Tanzanian society.

Provide Purdue Computer Science students with the opportunity to engage in service, and to expand their worldview through experiencing immersion in another culture.

Questions?