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**IPESL Grant Application**  
(Initiative to Promote Excellence in Student Learning)  
Minnesota State University, Mankato

**PROPOSAL COVER PAGE**

Title of Project: Katoland: Living in a Simulated City

Name: Anthony Filipovitch

Are you full-time faculty in 2006-2007? Yes  
(fixed-term faculty are not eligible to apply)

Do you plan to return to MSU in 2007-2008? Yes

e-mail: Anthony.filipovitch@mnsu.edu

Campus Address: 106 Morris Hall

Campus Phone: 5035

College: Social & Behavioral Sciences

Department: URSI (Urban & Regional Studies Institute)

Spring Semester Schedule:

List times when available to participate in Learning Communities and workshops.

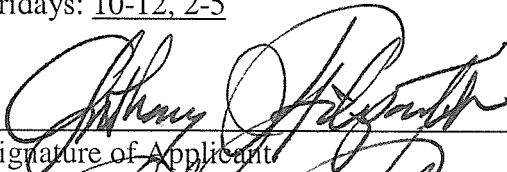
Mondays: 4-5 PM

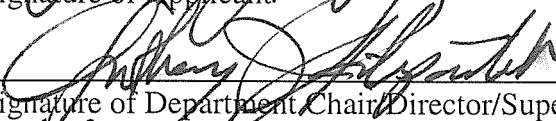
Tuesdays: 8:30-1:00

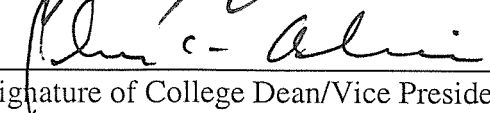
Wednesdays: 8:30-11; 3-5

Thursdays: 8:30-2:00

Fridays: 10-12, 2-5

  
\_\_\_\_\_  
Signature of Applicant

  
\_\_\_\_\_  
Signature of Department Chair/Director/Supervisor

 11/27/06  
\_\_\_\_\_  
Signature of College Dean/Vice President

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**PROPOSAL COVER PAGE**

Title of Project: Katoland: Living in a Simulated City

Name: Raymond Asomani-Boateng

Are you full-time faculty in 2006-2007? Yes  
(fixed-term faculty are not eligible to apply)

Do you plan to return to MSU in 2007-2008? Yes

e-mail: asomar@mnsu.edu

Campus Address: 106 Morris Hall

Campus Phone: 5030

College: Social & Behavioral Sciences

Department: URSI (Urban & Regional Studies Institute)

Spring Semester Schedule:

List times when available to participate in Learning Communities and workshops.


Mondays: 2-5pm

Tuesdays: 8-10am


Wednesdays: 10-12noon

Thursdays: Not available

Fridays: 9am-1pm

  
\_\_\_\_\_  
Signature of Applicant

  
\_\_\_\_\_  
Signature of Department Chair/Director/Supervisor

 05/27/06  
\_\_\_\_\_  
Signature of College Dean/Vice President



## Katoland: Living in a simulated city

**Purpose:**

The task of an introductory course is to engage students' "knowledge in action" (Schon, 1983) while simultaneously challenging their assumptions about how that knowledge works. Too often, beginning students memorize facts and theories (the level of knowledge and comprehension, in Bloom's 1956 taxonomy), but rarely rise to applying the concepts in novel settings or synthesizing new concepts. This higher level judgment, coupled with explanation of the basis for this judgment, is what defines critical thinking (Facione, 2006).

Simulation games (Duke & Greenblat, 1979) are ideal for teaching critical thinking. Urban simulations have been used for generations (Forrester, 1969; Sweet, 1972; Wynn, 1985), as have city games (Feldt, 1972; Gamson, 2000; Electronic Arts, 2006). But the modeling power of simulations and the decision-making power of gaming have rarely been combined as Duke prescribed.

Thinking critically about the community is critical to a civil society, since the local level is where most people practice the skills of democratic participation. Further, developing a tool for teaching civic engagement would enhance the reputation of URSI and the University.

The goal of this project is to prepare students in URBS 100 to engage in the civic process *where they live* (at the local rather than the national level), and to engage them at the higher levels of cognition. This project will extend to high school curriculum, through the MCMA's Educational Initiatives website ([http://www.mncma.org/ei\\_home.cfm](http://www.mncma.org/ei_home.cfm)), as well as extending internationally through the partnership between MSU and Kwame Nkrumah University of Science and Technology (KNUST) at Kumasi, Ghana.

**Description:**

A cross-cultural, multi-faceted simulation game of local government affairs using web-based technology will be developed.

- Cross-cultural: The model will be constructed using data from two cities—Mankato, MN and Kumasi, Ghana—which are similar enough that comparisons are possible, yet different enough to be instructive. American students, presuming US experience, would find the lens of their perception distorted by unfamiliar data and pictures; Ghanaian students would have a similar experience as US data is supplied.
- Multi-faceted: URSI has already developed a number of online units which could be modified for the game. A complete model will encompass land use planning, environmental protection, service provision and management, and managing the political process.
- Simulation game: The model will be data-based and will permit the student to choose different scenarios in the context of other players' decisions.

- Web-based: Computers facilitate complex modeling calculations for simulation; mounting the simulation on the web permits many students to play the game simultaneously, whether together or at a distance.

The game engages critical thinking skills by putting students in a simulated learning-by-doing context (they can risk making mistakes because the consequences are less severe). It also reinforces diversity and cross-cultural awareness in students' critical thinking. It extends URSI's online teaching into computer gaming, an area predicted to be central to future online education. Feasibility is demonstrated by current expertise in URBS 100 (where some mini-simulations and games are already in use), and the online teaching skills and cultural competency of both project applicants.

**Assessment:**

Project assessment of the implementation process will be accomplished through a checklist of key deliverables and timelines, and a checklist of contacts and rollout activities.

Project assessment of outcomes will use a pretest/posttest, control-group design. The simulation game will be rolled out in the Spring Semester to students in one section of URBS 100, with another section following the traditional course format. Students in both sections will be given a pretest at the beginning of the semester, which will measure

- Knowledge about local government affairs and how they are managed
- Skills in critical thinking and civic engagement
- Attitudes toward local government and creating change.

The same instrument will be used as a post-test.

The impact on high school and international students will not be able to be assessed within the timeframe of this grant, although implementation of the steps to accomplish this will be assessed.

**Dissemination:**

Comparison of course satisfaction and course achievement (formative and summative) will gauge student impact. The game will be available to all URSI faculty and others in the College and will be used at Parents' Day here on campus and at recruitment fairs.

The game will be announced on the MCMA Educational Initiatives website (a website for P-12 social studies teachers) and in the Department of Planning at KNUST. A case study of the project will be presented at the Urban Affairs Association and a manuscript submitted to the *Journal of Urban Affairs* or the *Journal of Planning Education and Research*.

**Support for University/Department Goals:**

This project addresses the University's strategic priorities of promoting diversity, establishing distance learning, enhancing excellence in undergraduate studies, and advancing the internationalizing of our university. It addresses department goals of reinforcing patterns of "informed action"; teaching as collaborative, experience-based,

and service-oriented; and supporting a comprehensive, problem-solving philosophy to community leadership.

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- Forrester, J. 1969. Urban Dynamics. Cambridge, MA: MIT Press.
- Gamson, W.A. 2000. SIMSOC: Simulated Society, 5<sup>th</sup> Ed. NY: Free Press.
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- Sweet, D. 1972. Models of Urban Structure. Lexington, MA: Lexington Books.
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