

ADVANCED QUESTION AND ANSWERING SYSTEMS FOR COMMUNITY DEVELOPMENT

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1. INTRODUCTION

- Overview (Section 2)
- Ontologies (Section 3)

2. OVERVIEW

- Community Development Definitions
- Community Development Workforce
- Community Development Stovepiping

2.1. COMMUNITY DEVELOPMENT DEFINITIONS

Community development comprises

- programs,
- processes, and
- policies

to help residents build and sustain strong, healthy community environments.

Strong, healthy community environments can be identified by

- employment rates,
- prevailing wages,
- educational system,
- home ownership / property taxes,
- public services (water / sewer, roads, transportation),
- business ownership,
- pollution,
- retail presence,
- mortality rates,
- age stratified population, and
- leadership.

2.2. COMMUNITY DEVELOPMENT WORKFORCE

The community development workforce comprises

- program officers,
- practitioners, and
- policy makers.

We focus on practitioners and their struggle to cope with the very long preceding list.

2.3. COMMUNITY DEVELOPMENT STOVEPIPING

Community development initiatives typically can't integrate projects designed to improve one of the healthy environment characteristics. Specialists can only talk to each other and only work productively with others within their *stovepipe*.

2.4. SOLUTION

We propose a question and answering system to accomplish the following.

- reduce training burden by offering on-demand training
- improve training outcomes by increasing learner involvement due to the illusion of presence of respected teachers
- increase training applicability through flexibility of training for different requirements

3. ONTOLOGIES

- Challenges: State of the art
- Rapid Knowledge Formation initiative

- TREC question answering tasks
- CYC and Wordnet

3.1. CHALLENGES: STATE OF THE ART

- Information Retrieval limitations
- Serendipity or “Everything is related to everything”
- Einut Amitay’s approach

3.2. LESSONS LEARNED

- Kinds of Holonyms
- Clues from conjunction and disjunction
- Structural clues in word order

3.3. OUR SYSTEM

- Suffix Tree Clustering
- Quick and Dirty Ontology
- Symbology (only for communities of practice)