A study of Creativity Support tool (Rita) for Computational Literature: Unique Opportunities for Computer Aided Language Learning

Zarna Padia Co-Author: Darshan Modi Co-Author: Kartik Patel

Abstract:

Creative Support tool: Creativity support tools are set an especially difficult task when they are applied to art/science collaboration.

Computational Literature: Computation Literature is a suite of open-source components, tutorials, and examples, providing support for a range of tasks related to the practice of creative writing in programmable media. Designed both as a toolkit for practicing writers and as an end-to-end solution for digital writing courses. RiTa covers a range of computational tasks related to literary practice, including text analysis, generation, display and animation, text-to-speech, text-mining, and access to external resources such as WordNet.

Computer Aided Language Learning: the search for and study of applications of the computer in language teaching and learning (CALL) embraces a wide range of ICT applications and approaches to teaching and learning foreign languages. CALL embraces virtual learning environment and Web-based distance learning.

Introduction:

Computer-assisted language learning (CALL) is a form of computer-based learning which carries two important features: bidirectional learning and individualized learning. It is not a method. CALL materials are tools for learning. The focus of CALL is learning, and not teaching. CALL materials are used in teaching to facilitate the language learning process. It is a student-centered learning material, which promotes self-paced learning.

RiTa is an easy-to-use natural language library that provides simple tools for experimenting with generative literature. The philosophy behind the API is to be as simple and intuitive as possible, while still providing adequate flexibility for more advanced users. The download comes in two flavors: 1) the 'core' package, containing the jar files and documentation, and 2) the 'TTS' package that adds text-to-speech support. Additionally, statistical models for tagging, chunking, and parsing are available for more advanced users (see 'Stat-Models'). RiTa optionally integrates with Processing and is both free and open-source.

Teaching artistic skills to children presents a unique challenge: high-level creative and social elements the artistic discipline are often the most engaging. Similarly, creative digital media practice has proven a valuable pedagogical strategy for teaching core computational ideas. Neither strain of research has focused on the domain of literary art.

To address this situation, this topic presents a software toolkit created specifically to support creativity in computational literature. Two primary hypotheses direct the bulk of the research presented: first, that it is possible to implement effective creativity support tools for literary art given current resource constraints; and second, that such tools, in addition to facilitating new forms of literary creativity, provide unique opportunities for computer science education.

Using RiTa tools, the research expose the title that it generates the computational literature which is being used to enhance the computer science education.

Research Problems:

As the English language is not the first language of those pursuing their graduation in commerce or management, Students studying commerce and management reportedly find quite hard to cope with the linguistic complexities of commerce English. Even after the successful completion of their graduation, the graduates continue to face difficulty in coping with tasks of practical nature in their field, which covers the basic skills like reading, writing, speaking and listening, in addition to acquiring proficiency in supplementary skills like giving presentation, participation in meeting, business correspondence, preparing reports,
conducting seminars and workshops etc. The situation as such makes a strong case for ESP in the context of English for commerce and management (ECM). So the researcher aims at implementing and experimenting ICT in teaching English to remedy their problems.

- How far is ICT useful to student community?
- What is the role of ICT in teaching English language and literature?
- What kind of methods can be used to overcome students’ problems?
- Can it empower student community? Can it improve their proficiency of learning?

The Objectives:
- To facilitate the learning and teaching process using Rita tool kit.
- To develop spoken proficiency in the context of Pronunciation.
- To develop their language proficiency with special reference to four skills- LSRW.
- To enable them to use target language communicatively effectively.
- To teach them various expressions to perform their day to day job tasks.
- To make them use the language confidently.
- To enhance their appropriacy level by teaching them certain technical terms.
- To enhance their grammar proficiency through grammar based activities and exercise.
- To experiment Rita in the class room.
- To make them generate the language.

1. The Research Questions:

   The purpose of this research project is to design and try out an ECM course for learners of commerce and management in Bhavnagar University to remedy their linguistic problems. Therefore, the major research question under investigation is:

   What level of linguistic competency do the learners of commerce and management in Bhavnagar University have for performing tasks related to their academic and occupational roles?

   The Subsidiary questions are:

   (1) What level of linguistic competency do the learners of commerce and management have in performing tasks related to speaking skills in academic and occupational settings?
   (2) What level of linguistic competency do the learners of commerce and management have in performing tasks related to listening skills in academic and occupational settings?
   (3) What level of linguistic competency do the learners of commerce and management have in performing tasks related to writing skills in academic and occupational settings?
   (4) How far their English is technically sound?

2. Research Design:

   The researcher will conduct a test to analyze their needs and will prepare software based material with the help of Rita which can meet their requirement. The material will be authenticated by the consent of the scholars. Then the pre-test will be conducted before the execution of the course material. The post-test will be piloted for the analyses purpose and to find findings.

   The selection of the students will be on random ground. The group of twenty students will be formed from each stream that is management and commerce.

3. Tentative Outline of the Thesis:

   Chapter 1 will be an introduction. The chapter, after briefly discussing language situation in Bhavnagar with reference to English for commerce and management, states the problem, highlights the objectives and
introduces the present research. It then moves towards a detailed description of commerce and management profession and education in India. Next, it will explain the reasons for undertaking this research project along with its benefits and poses the basic research questions. This will be followed by a brief description of research methodology. The chapter will end with an outline of the thesis.

Chapter 2: Review of related literature

Chapter 3: Introduction about Rita tool kit.

Chapter 4: Reports the findings related to listening skill.

Chapter 5: Presents the analysis of speaking skills in four areas of speaking: Organizing thoughts, appropriate formatting, and appropriate use of business terminology and mechanics of speaking.

Chapter 6: Presents the findings of speaking skills, presenting four areas of speaking i.e., asking questions to teachers, giving presentation, conducting workshop and giving speech.

Chapter 7: Presents the findings related to listening skills with reference to four areas of listening i.e., listening to lectures, understanding short speeches, listening to group and listening in occupational settings.

Chapter 8: Presents the analysis of writing skills in four areas of writing: Organizing thoughts, appropriate formatting, and appropriate use of business terminology and mechanics of writing. Perceptions of three groups have been reported: teachers of commerce and management, commerce and management students and employees of companies.

Chapter 9: Presents analysis of the questionnaire.

Chapter 10: is a conclusion. The purpose of this chapter is to design and try out a course for commerce and management students of Bhavnagar University.

4. **The Benefits of the Research:**

The research has the following benefits of Practical nature.

**First,** the ICT based on teaching will help the students to cope with the situations of the practical nature.

**Second,** the companies can schedule sessions for functional English for Commerce and Management employees.

**Third,** the recommended syllabus encourages the students to actively participate in English class rooms as English language is not their core subject.

**Four,** It invites further research on material development, material evaluation, assessment, discourse analysis through the use of ICT etc.

5. **Hypothesis**

If ICT based course material for commerce and management is provided, It would enhance the proficiency and appropriacy level of the students and workers at colleges and workplace respectively.

- **Null Hypothesis**

Even if ICT based course material for commerce and management is provided, It would not enhance the proficiency and appropriacy level of the students and workers at colleges and workplace respectively.

6. **Tools to be used**

- RiTa tool kit
- Java Language
- Eclipse Editor
- Java Documentation
- Computer
- Internet Resources
- Windows XP Operating System
- Questionnaire
- Interviews
- Research Papers
- Magazines
7. **Limitations of the Research Project**
   - Heterogeneous Class
   - Rural students and their problems
   - As this is a self learning module, the grasping power of students may vary.
   - Although valuable lessons may be learned from best practices around the world, there is no one formula for determining the optimal level of ICT integration in the educational system. Significant challenges that policymakers and planners, educators, education administrators, and other stakeholders need to consider include educational policy and planning, infrastructure, language and content, capacity building, and financing.
   - Teacher who is going to use this tool kit must be well equipped with technology.