# Table 1) Self-efficacy Indices of Teaching Sciences as Inquiry

## **Engaging the Learner with Scientific Issues**

- 1. The ability to present meaningful examples
- 2. The ability to guide the students to design scientific questions
- 3. The ability to answer the students' scientific questions
- 4. Allowing the learners to present their own issues
- 5. The ability to provide useful clues at the beginning of the debates
- 6. The ability to present engaging content
- 7. The ability to guide the students to focus on the main arguments

## **Giving Priority to the Scientific Evidences**

- 8. The ability to choose the best method to show the facts
- 9. Guiding students toward opportunities to find the answer of questions
- 10. The ability to encourage students to provide the required information
- 11. The ability to lead the students to cooperation in discussions
- 12. The ability to help students to analyze data
- 13. The ability to provide criteria for content analysis
- 14. The ability to provide the required information to facilitate students` research
- 15. The ability to provide needed information to help students in shaping their own experience

### Formulating the Explanations

- 16. The ability to offer different suggestions and examples
- 17. The ability to provide opportunities for students to coordinate the course description with their own observations
- 18. The ability to help students to become critical decision makers
- 19. The ability to direct students toward experiment-based debates
- 20. The ability to present different scientific views
- 21. The ability to explain teacher's own experiences to students

### **Connecting Explanations to Scientific Knowledge**

- 22. The ability to encourage the student to be an independent examiner
- 23. The ability to enter students into discussions
- 24. The ability to push students toward acceptable scientific theories
- 25. The ability to link the students' description with scientific findings
- 26. Allowing communication and exchange among students
- 27. The ability to guide students to build scientific structure of contents

# Communication and Justification of Explanation

- 28. Allowing students to exchange and modify the findings
- 29. The ability to encourage students to review and ask questions about the results
- 30. The ability to help students to express their explanation clearly
- 31. The ability to mature the students` participatory explanation
- 32. The ability to help students to make a connection between scientific facts and class content
- 33. The ability to help students to revise their previous experiences
- 34. The ability to help students to develop a systematic framework to exchange the results