

LIST OF APPENDICES

	Page
Appendix 1. The Questionnaire of Biology Education Student as Pre-service Teachers' Perception about TPACK Framework	78
Appendix 2. Multiple Choice Test About Biology Education Student as Pre-Service Teachers' Understanding of TPACK Framework	84
Appendix 3. Key Answer of Written (Multiple Choice) Test	94
Appendix 4. Table Analysis for Document Study for Lesson Plan	95
Appendix 5. Instrument Validation Sheet by the Validator	99
Appendix 6. Result of TPACK Perception Questionnaire	107
Appendix 7. Result of TPACK Understanding Test	110
Appendix 8. Result of Lesson-plan analysis	113
Appendix 9. Thesis Supervisor Approval	116
Appendix 10. Research Permit	117
Appendix 11. Research Completion Letter	118
Appendix 12. Documentation	119