



# **ACTION RESEARCH PROPOSAL**

## **ENHANCING NUMERACY SKILLS OF GRADE V-AQUINO PUPILS IN MATHEMATICS THROUGH THE USE OF AUDIO-VISUAL AIDS**

### **I. SITUATION**

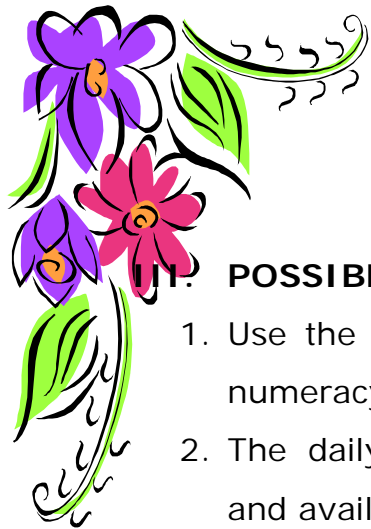
The researcher decided to conduct an action research because she noticed that the Grade V-Aquino pupils are not aware in computing numbers to get the correct answers. This was based on the result of their Pre-Assessment (Appendix A) given by the teacher-researcher to all Grade V- Aquino last June 9, 2014. In addition with this, the records of the daily exercises given by the teacher during the first month of the first grading period revealed that the pupils could not easily catch up. So the researcher decided to use audio-visual aids in teaching Mathematics to enhance the numeracy skills of the pupils.

### **II. STATEMENT OF PROBLEMS**

The poor performance of Grade V – Aquino in Mathematics prompted the teacher-researcher to find ways in enhancing their numeracy skills.

#### **Possible Causes:**

1. Low numeracy level of the pupils
2. Apathy towards Mathematics
3. Poor self-esteem

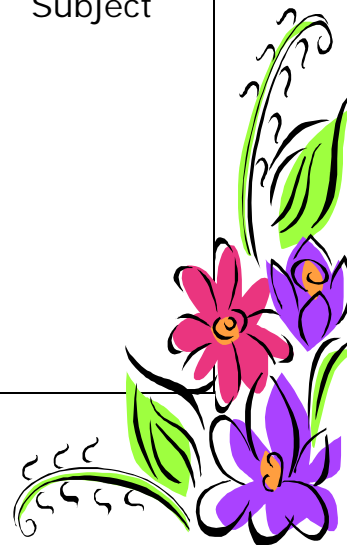



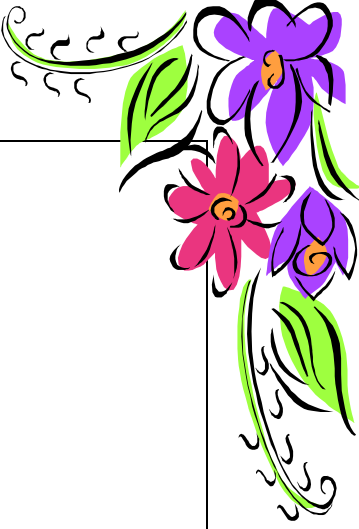
### III. POSSIBLE SOLUTIONS

1. Use the audio-visual materials in remedial teaching to enhance the numeracy level of the pupils.
2. The daily audio-visual presentation materials should be accessible and available during class hours.
3. Allow the pupils to interact among themselves.
4. Provide more exercises constantly.

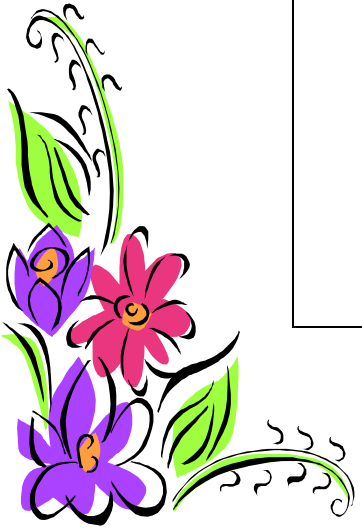
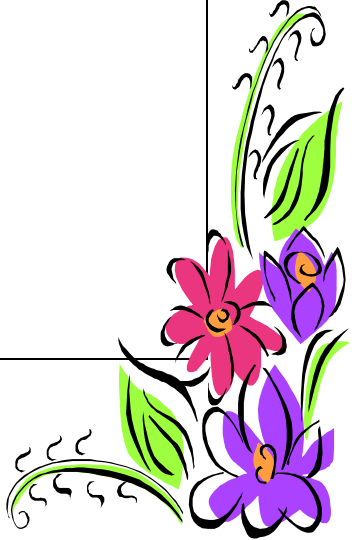
### IV. PLAN OF ACTION

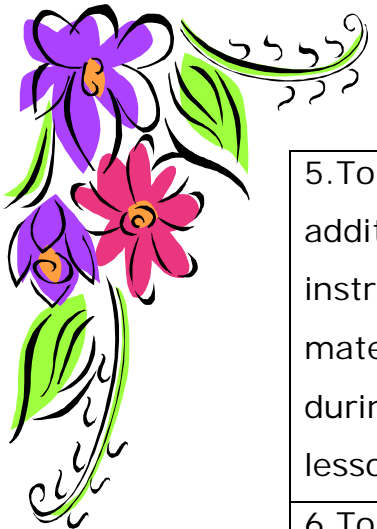
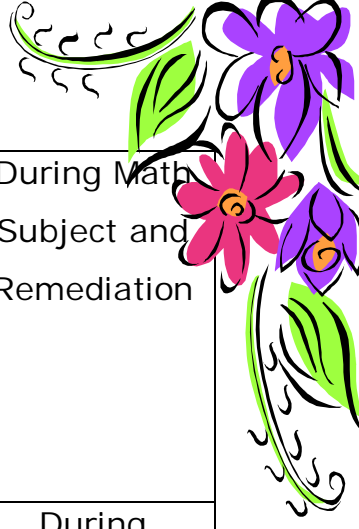
Objective	Activities	Resources Needed	Time Frame
1. Identify the strengths and weaknesses of the pupils to determine the suitability of the materials to be prepared	-Daily assessment of the lesson's outcome	Evaluation Form	During Math Subject
2. To motivate pupils in computing numbers	- Let the pupils sing Mathematical songs _ Recite Mathematical rhymes and chants	Colorful pictures, graphics, grid, illustration Music Videos	During Math Subject



	-Present a Problem-a-Day which will be answered with zest and fun. It can be through game and under time pressure		
3. To provide audio-visual presentation	-Present Mathematical concepts in AVP to the learners which enhances their numeracy	Audio-Visual Aids	During Math Subject and Remediation
4.To develop the ability of pupils in solving problems	-Use audio-visual aids that promote interest and make teaching-learning process more effective -Allow the children to watch downloaded videos in the You Tube about deriving solutions to common Mathematical problems	Projector White Board Blackboard	During Math Subject and Remediation

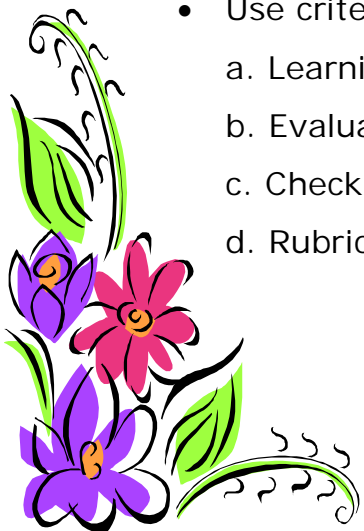



5.To provide additional instructional materials during the lesson	-Make sure that all instructional materials would be accessible and properly presented to the pupils	Audio-Visual Materials	During Math Subject and Remediation
6.To monitor the activities and improvement of learners' numeracy level	-Daily monitoring and recording should be done to identify the improvement of the respondents	Evaluation Form	During Implementation

## V. EVALUATION CRITERIA

- Administer diagnostic assessments individually to determine the pupils with difficulties to support instructional planning when standard intervention programs of increasing intensity have not been successful.
- Manage outcome assessment to know the numbers and percentages of pupils who are gaining know-how in Math subject and reaching level benchmarks.
- Use criteria in evaluating the outcome of the research.
  - a. Learning Barkada Portfolio
  - b. Evaluation Form
  - c. Checklist
  - d. Rubrics





## VI. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

The study utilized the descriptive method of research in analyzing and interpreting the data collected. The use of audio-visual aids in teaching Mathematics proved to be effective in increasing the performance of the Grade V – Aquino Pupils in Mathematics.

In the data collection phase, the researcher recorded the scores of the pupils in their daily formative tests and in their weekly summative tests. She also observed the attitudes being shown by the pupils while studying Mathematics with the use of audio-visual materials as shown in Appendix E.

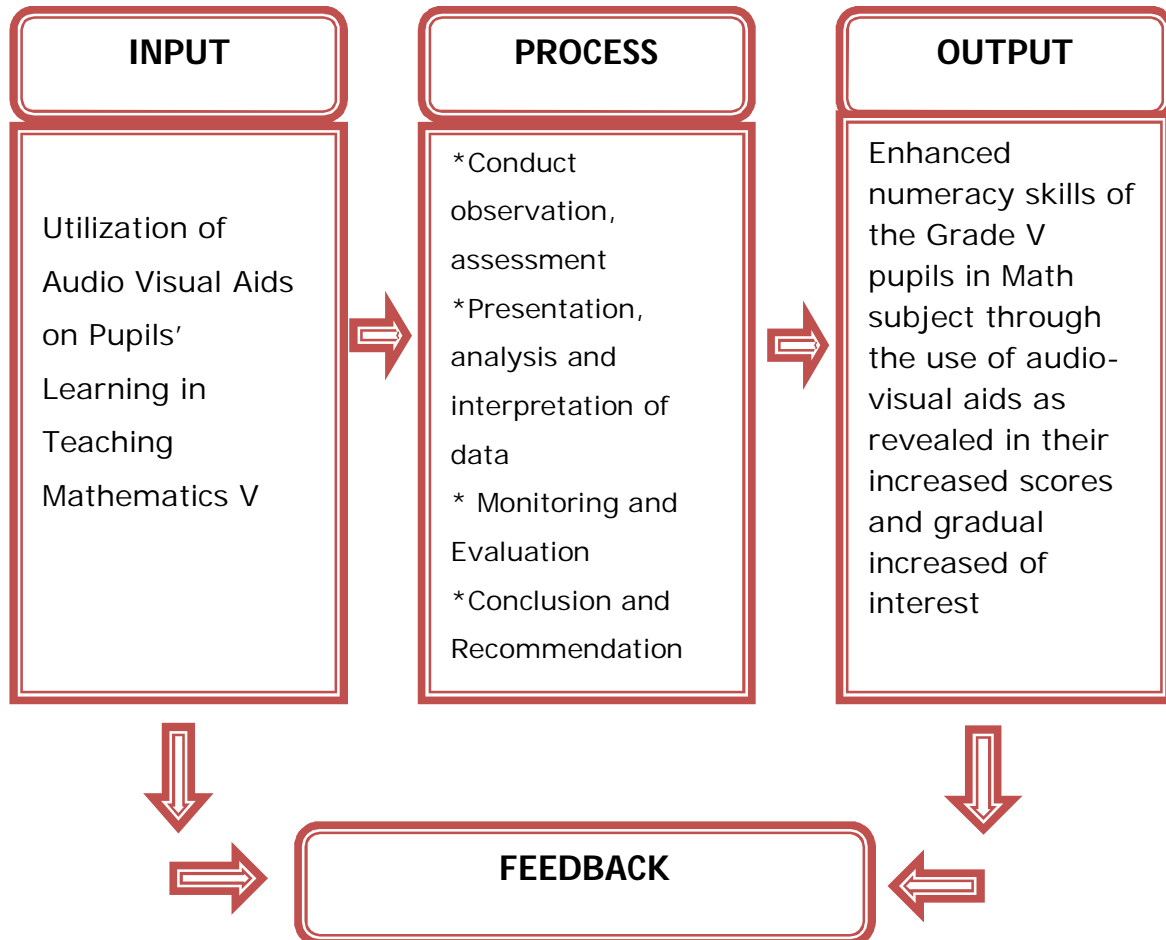
After 82 days, the researcher gave her post test. The table of comparison of scores of Pre-Test and Post-Test revealed that the pupils' mean performance in numeracy skills increased by 79.87%.

The Summary Report of Appendix E – Attitude Evaluation Form showed that the interest of the pupils improved gradually. The pupils participated in the class actively. The researcher also found out that the pupils learned well when they saw something in the projector which prompted the researcher to constantly alter her audio-visual presentations.



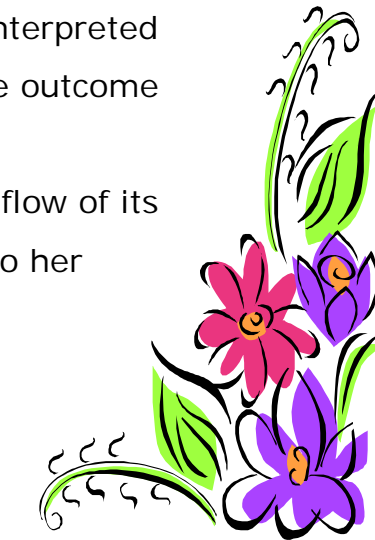
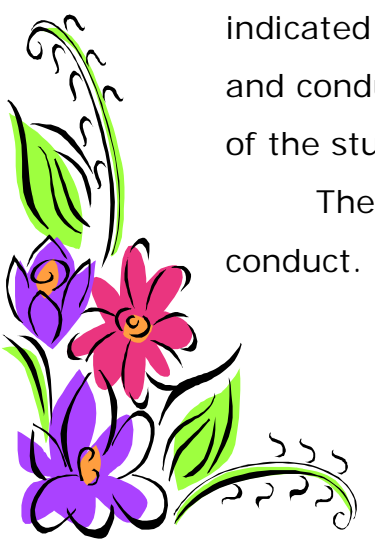


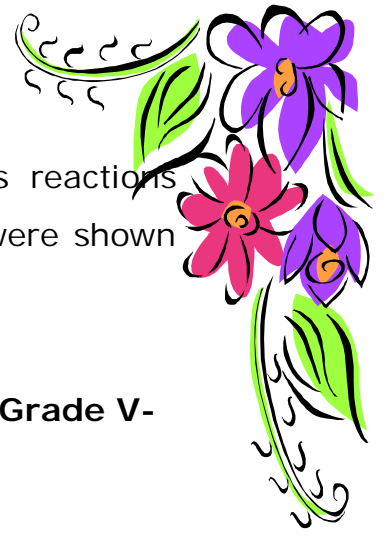
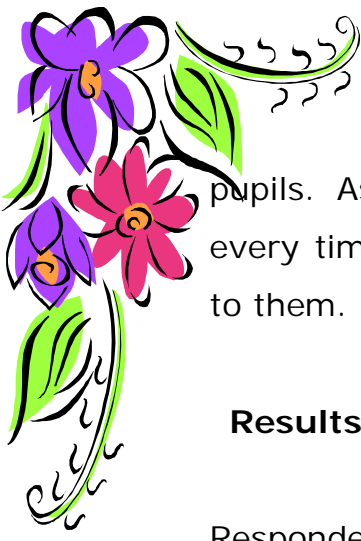
## PARADIGM OF TEACHING STRATEGY



The Input Box showed the possible solution that may address the problem found by the researcher in her class; the Process Box indicated how the researcher gathered data, analyzed, interpreted and conducted to her study and the Output Box revealed the outcome of the study.

The arrows in-between of the boxes showed the cyclic flow of its conduct. The Researcher adjusted her materials constantly to her





pupils. As a result, the respondents manifested obvious reactions every time new and different audio-visual presentations were shown to them.

### **Results of Pre-Assessment and Post-Assessment of Grade V-Aquino Pupils in Mathematics V**

Respondents = 46

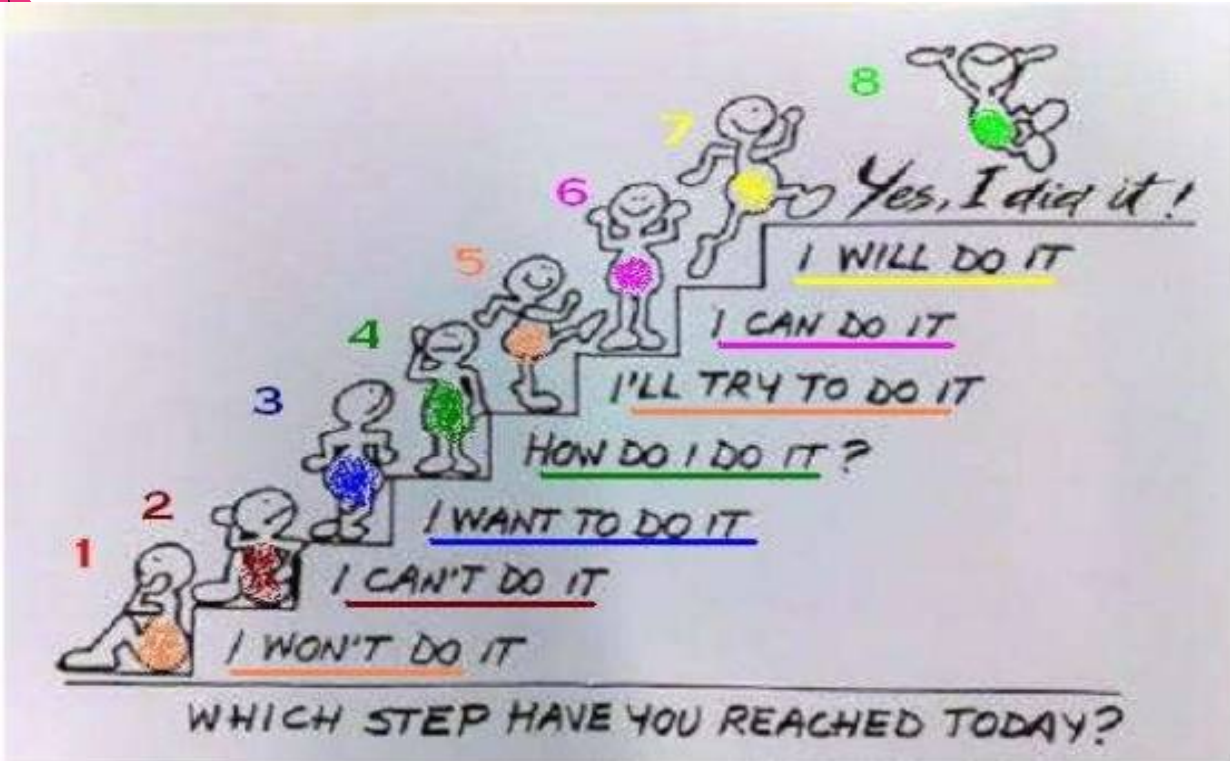
	<b>Pre-Assessment</b>	<b>Post-Assessment</b>
Number of Cases	46	46
Number of Items	50	50
Highest Score	36	47
Lowest Score	11	27
Mean	19.87	35.74
MPS	39.74	71.48

The results of the post-assessment test (Appendix B) indicated that the ability of pupils in computing numbers increased after using audio-visual presentations.





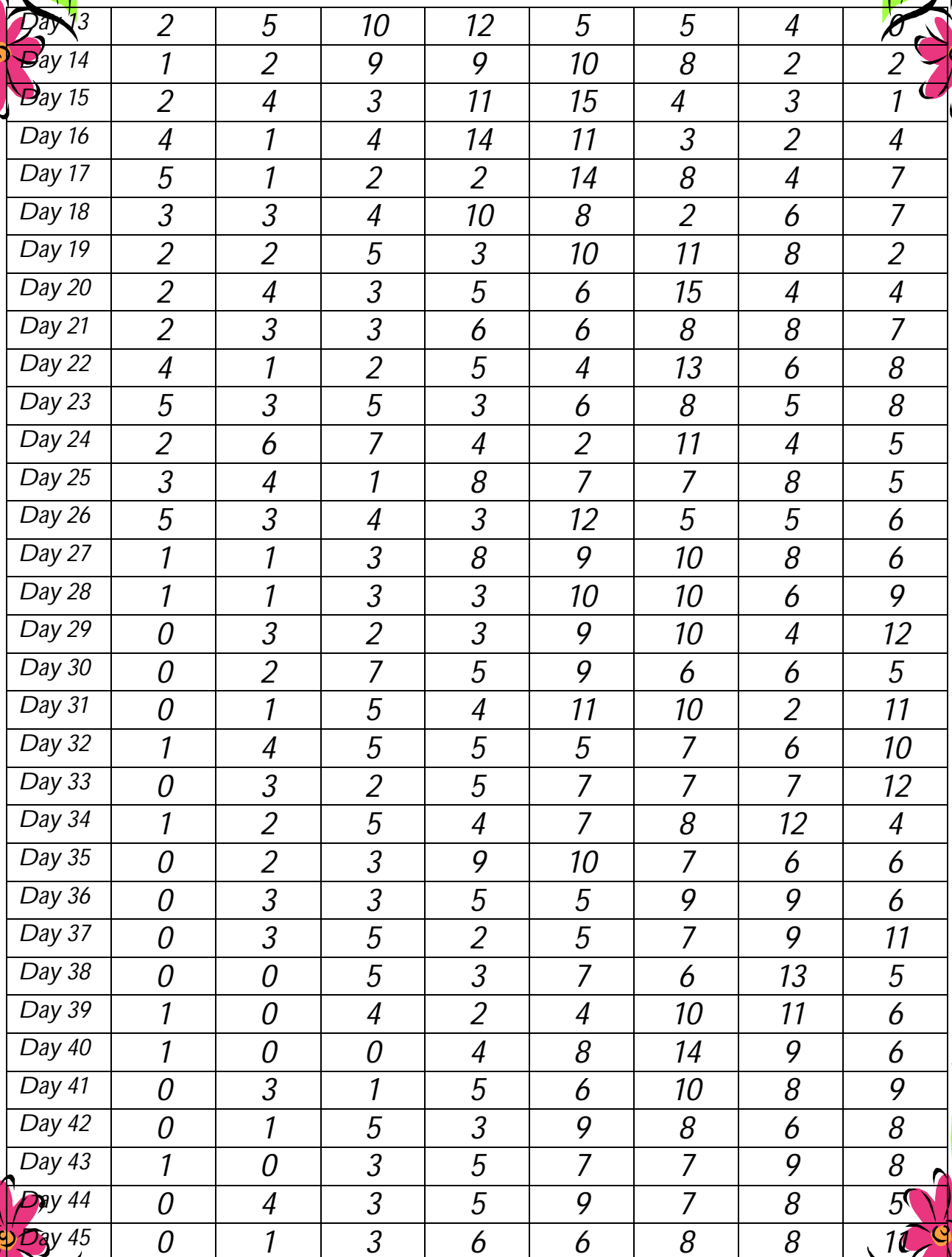
## Attitude Evaluation Form



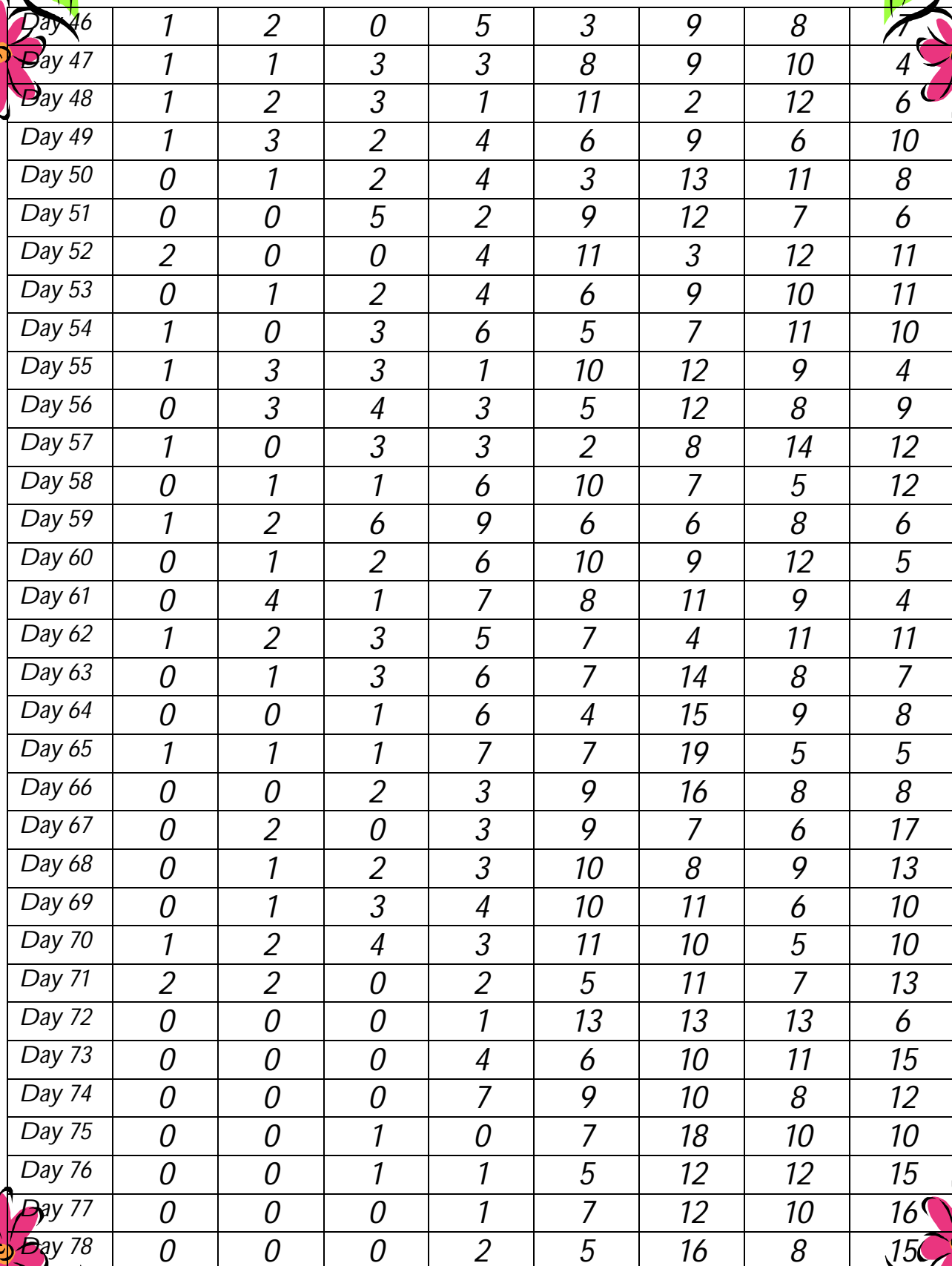
Summary report of the strengths and weaknesses of Grade V-Aquino pupils in Math subject.

	1	2	3	4	5	6	7	8
Day 1	3	2	17	8	8	5	0	0
Day 2	0	5	14	11	12	1	0	0
Day 3	1	2	10	11	14	3	2	0
Day 4	2	3	11	10	9	5	3	0
Day 5	0	3	9	13	9	2	5	2
Day 6	1	2	8	8	14	6	3	1
Day 7	4	5	7	7	13	6	1	0
Day 8	0	3	7	13	8	9	4	1
Day 9	1	3	6	13	11	5	0	4
Day 10	1	4	11	12	14	1	0	0
Day 11	2	4	12	10	13	0	0	2
Day 12	0	2	7	9	14	3	6	2

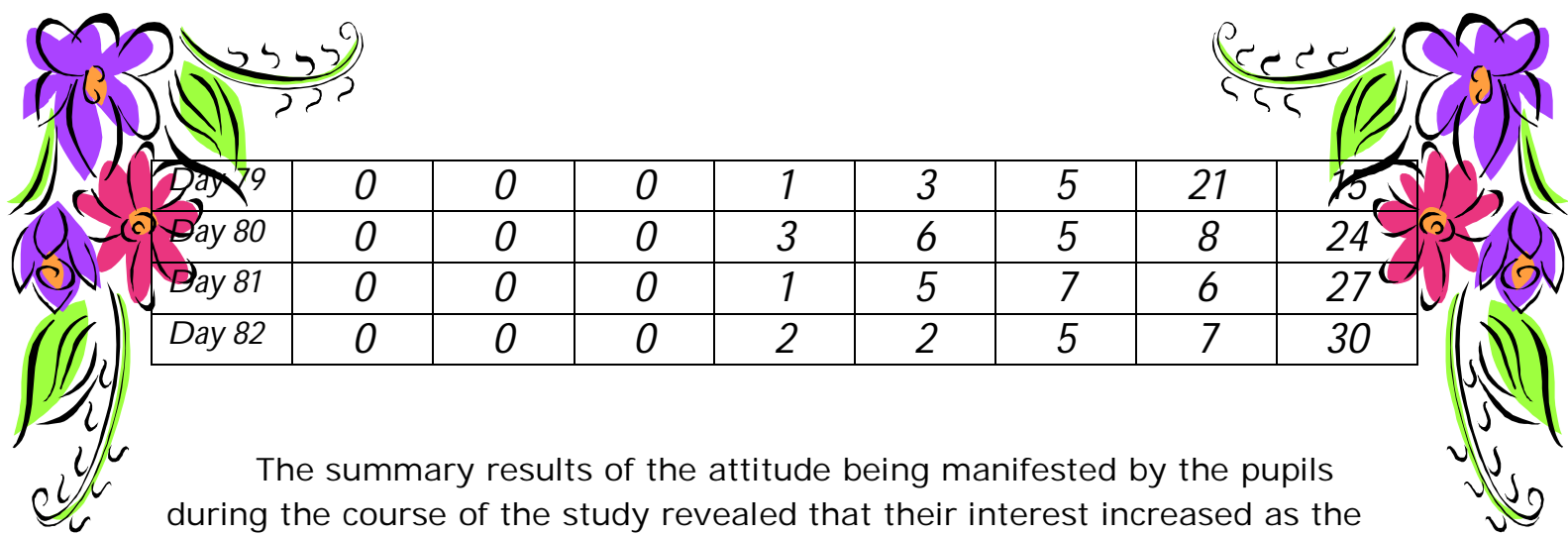




Day 13	2	5	10	12	5	5	4	0
Day 14	1	2	9	9	10	8	2	2
Day 15	2	4	3	11	15	4	3	1
Day 16	4	1	4	14	11	3	2	4
Day 17	5	1	2	2	14	8	4	7
Day 18	3	3	4	10	8	2	6	7
Day 19	2	2	5	3	10	11	8	2
Day 20	2	4	3	5	6	15	4	4
Day 21	2	3	3	6	6	8	8	7
Day 22	4	1	2	5	4	13	6	8
Day 23	5	3	5	3	6	8	5	8
Day 24	2	6	7	4	2	11	4	5
Day 25	3	4	1	8	7	7	8	5
Day 26	5	3	4	3	12	5	5	6
Day 27	1	1	3	8	9	10	8	6
Day 28	1	1	3	3	10	10	6	9
Day 29	0	3	2	3	9	10	4	12
Day 30	0	2	7	5	9	6	6	5
Day 31	0	1	5	4	11	10	2	11
Day 32	1	4	5	5	5	7	6	10
Day 33	0	3	2	5	7	7	7	12
Day 34	1	2	5	4	7	8	12	4
Day 35	0	2	3	9	10	7	6	6
Day 36	0	3	3	5	5	9	9	6
Day 37	0	3	5	2	5	7	9	11
Day 38	0	0	5	3	7	6	13	5
Day 39	1	0	4	2	4	10	11	6
Day 40	1	0	0	4	8	14	9	6
Day 41	0	3	1	5	6	10	8	9
Day 42	0	1	5	3	9	8	6	8
Day 43	1	0	3	5	7	7	9	8
Day 44	0	4	3	5	9	7	8	5
Day 45	0	1	3	6	6	8	8	10



Day 46	1	2	0	5	3	9	8	7
Day 47	1	1	3	3	8	9	10	4
Day 48	1	2	3	1	11	2	12	6
Day 49	1	3	2	4	6	9	6	10
Day 50	0	1	2	4	3	13	11	8
Day 51	0	0	5	2	9	12	7	6
Day 52	2	0	0	4	11	3	12	11
Day 53	0	1	2	4	6	9	10	11
Day 54	1	0	3	6	5	7	11	10
Day 55	1	3	3	1	10	12	9	4
Day 56	0	3	4	3	5	12	8	9
Day 57	1	0	3	3	2	8	14	12
Day 58	0	1	1	6	10	7	5	12
Day 59	1	2	6	9	6	6	8	6
Day 60	0	1	2	6	10	9	12	5
Day 61	0	4	1	7	8	11	9	4
Day 62	1	2	3	5	7	4	11	11
Day 63	0	1	3	6	7	14	8	7
Day 64	0	0	1	6	4	15	9	8
Day 65	1	1	1	7	7	19	5	5
Day 66	0	0	2	3	9	16	8	8
Day 67	0	2	0	3	9	7	6	17
Day 68	0	1	2	3	10	8	9	13
Day 69	0	1	3	4	10	11	6	10
Day 70	1	2	4	3	11	10	5	10
Day 71	2	2	0	2	5	11	7	13
Day 72	0	0	0	1	13	13	13	6
Day 73	0	0	0	4	6	10	11	15
Day 74	0	0	0	7	9	10	8	12
Day 75	0	0	1	0	7	18	10	10
Day 76	0	0	1	1	5	12	12	15
Day 77	0	0	0	1	7	12	10	16
Day 78	0	0	0	2	5	16	8	15



Day 79	0	0	0	1	3	5	21	15
Day 80	0	0	0	3	6	5	8	24
Day 81	0	0	0	1	5	7	6	27
Day 82	0	0	0	2	2	5	7	30

The summary results of the attitude being manifested by the pupils during the course of the study revealed that their interest increased as the days passed by.

The pupils became interested in learning Mathematics because of the new and creative audio-visual presentations shown to them.

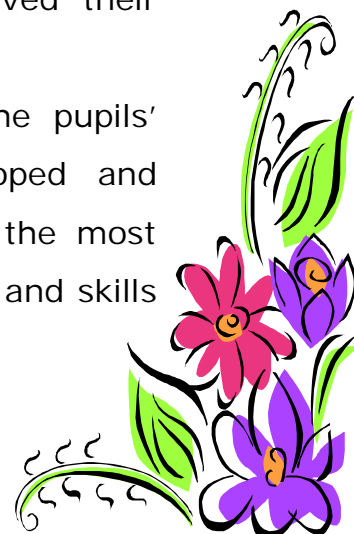
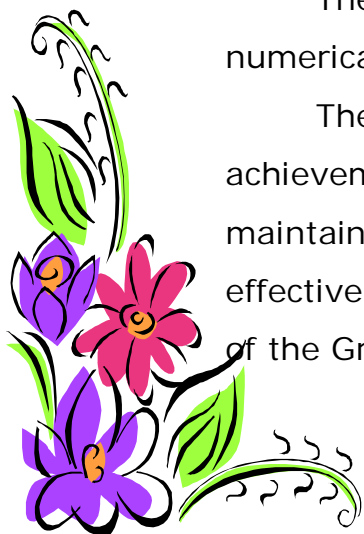
It is true that the teacher must find ways to alter or innovate her methodologies to suit the needs of the pupils.

#### **Frequency Distribution of Pupils' Improved/Not Improved/Retained in Mathematics**

	<b>Improved</b>		<b>Not Improved</b>		<b>Retained</b>	
	Frequency	%	Frequency	%	Frequency	%
Male	21	100	0	0	0	0
Female	25	100	0	0	0	0
Total	46	100	0	0	0	0

The results showed that 100% of the pupils improved their numerical skills in Math subject.

The audio-visual presentation positively influenced the pupils' achievement because the program has properly developed and maintained. The utilization of AVP has considered one of the most effective devices and strategies in enhancing the knowledge and skills of the Grade V pupils.





### **VII. Conclusion:**

Based on the findings of the study, the following conclusions were derived:

1. The gathered data revealed that the numeracy skills of the pupils were improved.
2. The level of interest in learning mathematics increased through the integration of computer and multimedia software in teaching.
3. The use of audio-visual materials increased pupils' participation.
4. Pupils were more enthused to learn Mathematics when new and creative audio-visual presentations.

### **VIII. Reflection:**

In view of the conclusions, the following reflections were drawn:

1. Monitoring and evaluation should be conducted regularly for the pupils to enhance their learning ability. Constant numeracy skills assessments must be given to pupils to monitor their progress and to address at once their difficulties.
2. It is important to integrate computer and multimedia software as Learning-Teaching resources because it promotes maximum participation.
3. The utilization of audio-visual aids should be adopted not only to Math subject but also to other subjects because it proved very effective in sustaining the interest of the pupils.

