

16. Eranskina

DATUAK AZTERTZEKO JARRAITUTAKO PROZESUA

1. eta 2. Taulentzako hitzak

Pr	Pre-test
Ps	Post-test
Ald	Aldaketa
Eg	Egoera
O	Okertu
H	Hobetu

	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps	Pr	Ps		
1. item	3	3	3	3	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
2. item	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	2
3. item	1	2	1	2	2	2	2	1	1	2	1	1	1	1	3	2	3	2	1	2	3	3	3	2	3	3	3	1	1	2	1	3
4. item	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	
5. item	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	2	3	3	3	2	2
6. item	2	2	2	2	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
7. item	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8. item	1	1	2	1	2	2	2	3	1	1	1	1	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	1	1	1	2	1
9. item	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
10. item	2	2	2	2	3	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2
11. item	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2

1. taula. Pre-testa eta Post-testan jasotako erantzunen balioak

	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16																				
	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald	Pr	Ps	Ald																		
1. item	3	3	=	3	3	=	2	3	≠	2	3	≠	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=												
2. item	1	1	=	1	1	=	1	1	=	3	1	≠	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	2	1	≠	1	1	=	1	1	=	1	1	=	2	2	=	2	2	=	2	2	=									
3. item	1	2	≠	1	2	≠	2	2	=	2	1	≠	1	2	≠	1	1	=	1	1	=	3	2	≠	3	2	≠	1	2	≠	3	3	=	3	2	≠	3	3	=	3	1	≠	1	2	≠	1	2	≠	1	3	≠	1	3	≠	1	3	≠	1	3	≠	1	3	≠			
4. item	2	2	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	2	1	≠	1	1	=	2	1	≠	1	1	=	1	1	=						
5. item	3	3	=	3	3	=	3	3	=	1	3	≠	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	2	3	≠	2	3	≠	3	3	=	2	3	≠	3	3	=	2	2	=	2	2	=	2	2	=						
6. item	2	2	=	2	2	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	2	2	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=			
7. item	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=			
8. item	1	1	=	2	1	≠	2	2	=	2	3	≠	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	1	1	=	2	1	≠	2	1	≠	2	1	≠	1	2	≠	1	1	=	1	1	=	1	1	=	2	1	≠	2	1	≠	2	1	≠	2	1	≠			
9. item	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=			
10. item	2	2	=	2	2	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	2	2	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	3	3	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=			
11. item	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	2	2	=	3	2	≠	3	2	≠

2. taula. Emandako aldaketak

	1			2			3			4			5			6			7			8			9			10			11			12			13			14			15			16								
	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg	Pr	Ps	Eg						
1. item							2	3	H	2	3	H																																										
2. item										3	1	H																			2	1	H																					
3. item	1	2	O	1	2	O				2	1	H	1	2	O							3	2	H	3	2	H	1	2	O				3	2	H				3	1	H	1	2	O	1	3	O						
4. item																																											2	1	H									
5. item										1	3	H																						2	3	H	2	3	H															
6. item																																																						
7. item																																																						
8. item				2	1	H				2	3	O																2	1	H	2	1	H	2	1	H	1	2	O							2	1	O						
9. item																																																						
10. item																																																						
11. item																																																	3	2	H			

3. taula. Aldaketen egoera

	=	≠	Σ	% =	% ≠	Σ %
1. item	14 ikasle	2 ikasle	16 ikasle	87,50%	12,50%	100%
2. item	14 ikasle	2 ikasle	16 ikasle	87,50%	12,50%	100%
3. item	5 ikasle	11 ikasle	16 ikasle	31,25%	68,75%	100%
4. item	15 ikasle	1 ikasle	16 ikasle	93,75%	6,25%	100%
5. item	13 ikasle	3 ikasle	16 ikasle	81,25%	18,75%	100%
6. item	16 ikasle	0 ikasle	16 ikasle	100%	0%	100%
7. item	16 ikasle	0 ikasle	16 ikasle	100%	0%	100%
8. item	9 ikasle	7 ikasle	16 ikasle	56,25%	43,75%	100%
9. item	16 ikasle	0 ikasle	16 ikasle	100%	0%	100%
10. item	16 ikasle	0 ikasle	16 ikasle	100%	0%	100%
11. item	15 ikasle	1 ikasle	16 ikasle	93,75%	6,25%	100%

4. taula. Item bakoitzean emandako aldaketan ehunekoak

	HOBETU	OKERTU	Σ ≠	% HOBETU	% OKERTU	Σ % ≠
1. item	2 ikasle	0 ikasle	2 ikasle	100%	0%	100%
2. item	2 ikasle	0 ikasle	2 ikasle	100%	0%	100%
3. item	5 ikasle	6 ikasle	11 ikasle	45,45%	54,55%	100%
4. item	1 ikasle	0 ikasle	1 ikasle	100%	0%	100%
5. item	3 ikasle	0 ikasle	3 ikasle	100%	0%	100%
6. item	0 ikasle	0 ikasle	0 ikasle	0%	0%	0%
7. item	0 ikasle	0 ikasle	0 ikasle	0%	0%	0%
8. item	4 ikasle	3 ikasle	7 ikasle	57,15%	42,85%	100%
9. item	0 ikasle	0 ikasle	0 ikasle	0%	0%	0%
10. item	0 ikasle	0 ikasle	0 ikasle	0%	0%	0%
11. item	1 ikasle	0 ikasle	1 ikasle	100%	0%	100%

5. taula. Item bakoitzean emandako aldaketan egoeraren ehunekoa