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Study on Decoding process Costruction of Interaction matrix

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Abstract

After encoding the classroom events into ten category system 10x10 matrix table is prepared for decoding the classroom verbal behaviour. The interaction matrix table consists of 10 rows and 10 columns.

The generalized sequence of the pupil teacher interaction can be estimated in this matrix table. It indicates what events proceed and what follow. The two continuous categories from a pair, this, a tally is marked in a particular cell. The first number in the pair indicates the row and second number show the column. For example (10-6) pair would be shown by a tally in the cell formed by row 10 and column 6, thus each number in a series once becomes row and once becomes columns, the procedure is followed for preparing the matrix, after making the tallies for series, and each corresponding row and column total should be equal.

Key words: encoding, interaction matrix, sequence, corresponding.Introduction

Monastic orders of education under the supervision of a guru was a favored form of education for the nobility in ancient India. The knowledge in these orders was often related to the tasks a section of the society had to perform.The priest class, the *Brahmins*, were imparted knowledge of religion, philosophy, and other ancillary branches while the warrior class, the *Kshatriya*, were trained in the various aspects of warfare. The business class, the *Vaishya*, were taught their trade and the working class of the *Shudras* was generally deprived of educational advantages. The book of laws, the *Manuscript*, and the treatise on statecraft the *Arthashastra* were among the influential works of this era which reflect the outlook and understanding of the world at the time.

Secular Buddhist institutions cropped up along with monasteries. These institutions imparted practical education, e.g. medicine. A number of urban learning centers became increasingly visible from the period between 200 BCE to 400 CE.The important urban centers of learning were Taxila (in modern day Haryana) and Nalanda, among others. These institutions systematically imparted knowledge and attracted a number of foreign students to study topics such as Buddhist literature, logic, grammar, etc.

Review of Literature

N. Vasuki (1990) found those women of different occupations and age levels displayed favourable attitude towards women's education.

S. Ratnaveni (1991) identified the factors that constrain women education in Andhra Pradesh. This study analysed the impact of good socio-economic background factors on the education of women and recommends very strongly more research on education and employment status of women and provisions of more educational facilities and job oriented courses, both through formal and non-formal streams, with a greater role for distance education and open universities.

U. Nayar *et al.*, (1992) found in a major sample study of 3000 urban and rural households that parents have substantially lower educational and occupational aspirations for daughters as compare to sons and do not subscribe to equality between the sexes. Parents are unwilling to invest on the education of daughters because they feel they are temporary members of the household.

Iswar Singh (1993) also studied the growth of educarion in Haryana and found that Haryana region lagged behind in the field of education. There was deep dearth of school teachers and necessary facilities.

Urmilla (1994) too studied the development of women education and its main hurdles. Following are her findings:

- The researcher found that after formation of Haryana, it was satisfactory improvement in primary education. In 1966 number of girls in primary schools were 257 which became 548 in 1985.
- Till 1990-91 number of girls students reached up to 915269. In between 1991 total number of girl students were 28% of the total number of students which ultimately reached upto 44.37%.

Ram Kumar Singh (1995) studied the female literary in Rohtak District. The objectives of the study have to study the female literacy in various areas.

Suchita Dass (1997) identified in her studies "Impact of Free Education for Women in District Sonepat" the attitudes towards women education in the rural areas and also made suggestions for the improvement of women education.

Tiwari and Verma (2001) in their studies of women education found that in modern educational system, the participation of girls in vocational, higher and technical educational institutions is very low. It is painful to note that such is the dismissal picture of women's education after 56 years of independence.

R. Sudhakar (2002) in her studies 'Education development and changes in women education' found that women's education has been a vexed problem for a very long time. Women education is a foundation stone, since upon her rests mainly growth of a child into a man/male and female who will become an asset for his/her country. Women education will never reach great heights, in a predominantly society, the males are not educated to look at women's education with interest and give it unstived support.

Material and Method

Table 1 Flanders's Interaction Analysis System

Observation-2

Name of the Pupil Teacher: Deepika **Class: X**

Subject: English **Topic: Articles**

Duration: 20 Minutes **Observer: Neelam Sharma**

Encoding

4, 8, 3, 2, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 8, 8, 8, 8, 8, 8, 8, 8, 7, 5, 5 , 5, 5, 5, 5, 5, 8, 8, 8, 8, 8, 8, 8, 7, 8, 8, 8, 8, 8, 8, 8, 2, 4, 8, 8, 8, 7, 7, 8, 8, 7, 8, 8, 8, 8, 8, 8, 8, 8, 7, 8, 8, 8, 8, 8, 7, 7, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 2, 3, 6, 5, 5, 5, 5, 5, 8, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 5, 5, 5, 5, 5, 5, 5, 9, 5, 9, 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 5, 5, 5, 5, 5, 5, 10, 5, 6, 6, 2, 4, 8, 2, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 4, 8, 9, 3, 2, 4, 7, 3, 2, 4, 8, 2, 9, 3, 3, 7, 4, 8, 3, 2, 5, 6, 5, 5, 5, 5, 5, 5, 4, 8, 2, 7, 5, 5, 5, 5, 5, 8, 2, 9, 3, 7, 5, 4, 8, 2, 7, 5, 5, 5, 5, 5, 5, 5, 5, 4, 8, 2, 7, 7, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 10, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 4, 8, 2, 4, 8, 2, 4, 8, 2, 7, 5, 5, 5, 5, 5, 5, 5, 4, 8, 7, 6, 5, 5, 5, 5, 5, 5, 5, 9, 9, 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 4, 8, 2, 4, 8, 5, 5, 5, 5, 5, 5, 5, 6, 8, 8, 8, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 5, 5, 5, 5, 5, 10, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 9, 9, 3, 3, 5, 5, 5, 5, 5, 5, 5, 5, 4, 8, 2, 4, 8, 2, 5, 5, 5, 6, 5, 5, 5

Decoding

10, 4, 8, 3, 2, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 8, 8, 8, 8, 8, 8, 8, 8, 7, 5, 5 , 5, 5, 5, 5, 5, 8, 8, 8, 8, 8, 8, 8, 7, 8, 8, 8, 8, 8, 8, 8, 2, 4, 8, 8, 8, 7, 7, 8, 8, 7, 8, 8, 8, 8, 8, 8, 8, 8, 7, 8, 8, 8, 8, 8, 8, 7, 7, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 8, 2, 3, 6, 5, 5, 5, 5, 5, 8, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 5, 5, 5, 5, 5, 5, 5, 9, 5, 9, 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 5, 5, 5, 5, 5, 5, 10, 5, 6, 6, 2, 4, 8, 2, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 4, 8, 9, 3, 2, 4, 7, 3, 2, 4, 8, 2, 9, 3, 3, 7, 4, 8, 3, 2, 5, 6, 5, 5, 5, 5, 5, 5, 4, 8, 2, 7, 5, 5, 5, 5, 5, 8, 2, 9, 3, 7, 5, 4, 8, 2, 7, 5, 5, 5, 5, 5, 5, 5, 5, 4, 8, 2, 7, 7, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 10, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 6, 5, 5, 4, 8, 2, 4, 8, 2, 4, 8, 2, 7, 5, 5, 5, 5, 5, 5, 5, 4, 8, 7, 6, 5, 5, 5, 5, 5, 5, 5, 9, 9, 3, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 4, 8, 2, 4, 8, 5, 5, 5, 5, 5, 5, 5, 6, 8, 8, 8, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 6, 5, 5, 5, 5, 5, 10, 10, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 9, 9, 3, 3, 5, 5, 5, 5, 5, 5, 5, 5, 4, 8, 2, 4, 8, 2, 5, 5, 5, 6, 5, 5, 5, 10

Table 2 Pair Table

S. No.	Pair	S. No.	Pair	S. No.	Pair	S. No.	Pair	S. No.	Pair
1	10, 4	8	5, 5	15	6, 8	22	5, 5	29	8, 8
2	4, 8	9	5, 5	16	8, 8	23	5, 5	30	8, 8
3	8, 3	10	5, 5	17	8, 8	24	5, 5	31	8, 8
4	3, 2	11	5, 5	18	8, 8	25	5, 5	32	8, 7
5	2, 5	12	5, 5	19	8, 8	26	5, 8	33	7, 8
6	5, 5	13	5, 5	20	8, 7	27	8, 8	34	8, 8
7	5, 5	14	5, 6	21	7, 5	28	8, 8	35	8, 8

(a) Construction of Interaction Matrix Tables

After encoding the classroom events into ten category system 10x10 matrix table is prepared for decoding the classroom verbal behaviour. The interaction matrix table consists of 10 rows and 10 columns.

The generalized sequence of the pupil teacher interaction can be estimated in this matrix table. It indicates what events proceed and what follow. The two continuous categories from a pair, this, a tally is marked in a particular cell. The first number in the pair indicates the row and second number show the column. For example (10-6) pair would be shown by a tally in the cell formed by row 10 and column 6 thus each number in a series once becomes row and once becomes columns, the procedure is followed for preparing the matrix, after making the tallies for series, and each corresponding row and column total should be equal.

S. No.	Pair	S. No.	Pair	S. No.	Pair	S. No.	Pair	S. No.	Pair
36	8, 8	89	5, 5	142	8, 2	195	6, 5	248	2, 4
37	8, 8	90	5, 5	143	2, 5	196	5, 5	249	4, 8
38	8, 2	91	5, 5	144	5, 5	197	5, 5	250	8, 8
39	2, 4	92	5, 5	145	5, 5	198	5, 5	251	8, 2
40	4, 8	93	5, 6	146	5, 5	199	5, 5	252	2, 4
41	8, 8	94	6, 5	147	5, 5	200	5, 5	253	4, 5
42	8, 8	95	5, 5	148	5, 5	201	5, 5	254	5, 5
43	8, 7	96	5, 5	149	5, 5	202	5, 5	255	5, 9
44	7, 7	97	5, 5	150	5, 5	203	5, 5	256	9, 9
45	7, 8	98	5, 5	151	5, 5	204	5, 5	257	9, 3
46	8, 8	99	5, 5	152	5, 5	205	5, 5	258	3, 6
47	8, 7	100	5, 5	153	5, 6	206	5, 7	259	6, 6
48	7, 8	101	9, 9	154	6, 10	207	7, 7	260	6, 5
49	8, 8	102	9, 3	155	10, 7	208	7, 6	261	5, 5
50	8, 8	103	3, 3	156	7, 6	209	6, 5	262	5, 5
51	8, 8	104	3, 5	157	6, 5	210	5, 5	263	5, 5
52	8, 8	105	5, 5	158	5, 5	211	5, 5	264	5, 5
53	8, 8	106	5, 5	159	5, 5	212	5, 5	265	5, 5
54	8, 8	107	5, 5	160	5, 5	213	5, 5	266	5, 4
55	8, 7	108	5, 5	161	5, 5	214	5, 5	267	4, 8
56	7, 8	109	5, 5	162	5, 5	215	5, 5	268	8, 2
57	8, 8	110	5, 5	163	5, 4	216	5, 5	269	2, 5
58	8, 8	111	5, 5	164	4, 8	217	5, 4	270	5, 5
59	8, 8	112	5, 5	165	8, 8	218	4, 8	271	5, 5
60	8, 8	113	5, 4	166	8, 9	219	8, 2	272	5, 5
61	8, 7	114	4, 8	167	9, 3	220	2, 4	273	5, 5
62	7, 7	115	8, 2	168	3, 3	221	4, 8	274	5, 5
63	7, 8	116	2, 10	169	3, 6	222	8, 8	275	5, 5
64	8, 8	117	10, 4	170	6, 6	223	8, 2	276	5, 5
65	8, 8	118	4, 8	171	6, 5	224	2, 4	277	5, 6
66	8, 8	119	2, 4	172	5, 5	225	4, 8	278	6, 7
67	8, 8	120	4, 8	173	5, 5	226	8, 8	279	7, 7
68	8, 8	121	8, 2	174	5, 5	227	8, 2	280	7, 6
69	8, 8	122	2, 3	175	5, 5	228	2, 6	281	6, 5
70	8, 8	123	3, 4	176	5, 5	229	6, 6	282	5, 5
71	8, 8	124	4, 8	177	5, 5	230	6, 5	283	5, 5
72	8, 8	125	8, 2	178	5, 4	231	5, 5	284	5, 5
73	8, 8	126	2, 4	179	4, 10	232	5, 5	285	5, 5
74	8, 8	127	4, 8	180	10, 4	233	5, 10	286	5, 5
75	8, 8	128	8, 2	181	4, 8	234	6, 5	287	5, 5
76	8, 8	129	2, 5	182	8, 2	235	5, 5	288	5, 5
77	8, 2	130	5, 5	183	2, 3	236	5, 5	289	5, 5
78	2, 3	131	5, 5	184	3, 4	237	5, 5	290	5, 5
79	3, 6	132	5, 5	185	4, 8	238	5, 5	291	5, 10
80	6, 5	133	5, 5	186	8, 2	239	5, 5	292	10, 5
81	5, 5	134	5, 5	187	2, 3	240	5, 5	293	5, 5
82	5, 5	135	5, 5	188	3, 5	241	5, 5	294	5, 5
83	5, 5	136	5, 3	189	5, 5	242	5, 5	295	5, 5
84	5, 5	137	5, 5	190	5, 5	243	5, 5	296	5, 5
85	5, 8	138	5, 5	191	5, 5	244	5, 5	297	5, 5
86	8, 5	139	5, 4	192	5, 10	245	5, 4	298	5, 4
87	5, 5	140	4, 8	193	10, 6	246	4, 8	299	4, 8
88	5, 5	141	8, 8	194	6, 6	147	8, 2	300	8, 2

S. No.	Pair
301	2, 4
302	4, 8
303	8, 2
304	2, 5
305	5, 5
306	5, 5
307	5, 5
308	5, 5
309	5, 5
310	5, 5
311	5, 5
312	5, 5
313	5, 5
314	5, 5
315	5, 5
316	5, 8
317	8, 8
318	8, 2
319	2, 4
320	4, 8
321	8, 2
322	2, 4
323	4, 8
324	8, 8
325	8, 2
326	2, 4
327	4, 4
328	4, 8
329	8, 2
330	2, 4
331	8, 2
332	2, 4
333	4, 8
334	8, 2
335	2, 4
336	4, 8
337	8, 2
338	2, 4
339	4, 8
340	8, 8
341	8, 2
342	2, 4
343	4, 8
344	8, 2
345	2, 4
346	4, 4
347	4, 8
348	8, 2
349	2, 7
350	7, 7
351	7, 4
352	4, 8
353	8, 2

S. No.	Pair
354	2, 4
355	4, 8
356	8, 2
357	2, 5
358	5, 4
359	4, 8
360	8, 2
361	2, 6
362	6, 6
363	6, 6
364	6, 4
365	4, 8
366	8, 2
367	2, 5
368	5, 5
369	5, 5
370	5, 5
371	5, 5
372	5, 5
373	5, 6
374	6, 6
375	6, 7
376	7, 5
377	5, 5
378	5, 9
379	9, 9
380	9, 3
381	3, 3
382	3, 5
383	5, 5
384	5, 5
385	5, 5
386	5, 5
387	5, 5
388	5, 5
389	5, 5
390	5, 4
391	4, 8
392	8, 2
393	8, 4
394	4, 8
395	8, 2
396	2, 5
397	5, 5
398	5, 6
399	6, 5
400	5, 10

Table 3 Observation Matrix Table

Category	1	2	3	4	5	6	7	8	9	10	Total
1											0
2			I	IIII II	IIII I		IIII		II		19
3		IIII	II		III	I	II				12
4							I	IIII IIII IIII II II			19
5				IIII III	IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII	IIII IIII II		II	III	IIII I	222
6				II	IIII IIII II	IIII		II			18
7			I	I	IIII I	I	III	IIII I		I	17
8		IIII IIII IIII II	II		II		IIII II	IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII II	I		77
9			IIII II						II		8
10				I	IIII I					II	8
Total	0	19	12	19	222	18	17	77	8	8	400

Table 4 Interpretation of Interaction Matrix

S. No.	Behaviour ratios	Formulae	Result (%)
1.	Teacher talk (TT)	$\frac{\sum f\,(\text{Column 1 to 7})}{N}\times 100$ = 307/400 × 100	76.75
2.	Indirect teacher talk (ITT)	$\frac{\sum f\,(\text{Column 1 to 4})}{N}\times 100$ = 85/400 × 100	21.25
3.	Direct teacher talk (DTT)	$\frac{\sum f\,(\text{Column 5 to 7})}{N}\times 100$ = 257/400 × 100	64.25
4.	Pupil talk (PT)	$\frac{\sum f\,(\text{Column 8 to 9})}{N}\times 100$ = 50/400 × 100	12.50
5.	Silence or confusion (SC)	$\frac{\sum f\,(\text{Column 10})}{N}\times 100$ = 8/400 × 100	2.00

Conclusion

1 Govt. should give more importance to improve literacy rate in low literacy rate area of Mahendergarh .

2 Govt. of sindh and other agencies should run Literacy campaigns about the adult literacy in low literacy rate area of the north Haryana.

3 Media should play effective role to educate the parents about those attitudes that can effect positively the educational achievement of children.

4 Govt. Schools should arrange teacher parent meetings to inform them about the progress of their children.

5 Parents should visit the school if school calls them. To ignore the call of school or teacher is not good.

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