

RESEARCH NOTE

COMPARISONS OF NEWLY QUALIFIED PRIMARY TEACHERS PAST AND PRESENT

PAUL O'HARA AND MARGOT CAMERON-JONES

SUMMARY

This research note re-analyses the grades received by primary teachers (PGCE and BEd trained) graduating from one institution in 1988 and also analyses grades from students graduating from the same college and courses in 1996. The results suggest that the two courses are producing teachers whose relative strengths are different.

INTRODUCTION

In our earlier 1988 national study (Cameron-Jones and O'Hara, 1990) the initial factor analysis of the grades on the final profiles of graduating students revealed the existence of a single large general factor to describe the Scottish primary teacher. In order to identify where the main divide among the 12 characteristics on the profile lay we looked further for a two-factor structure. The resulting two factors were described as representing in the first instance practitioner competence and in the second, competence of a personal/professional nature.

A new profile for grading graduating teachers was introduced in 1993 with the publication of the SOED's Guidelines for Teacher Training Courses (SOED, 1993). However on the surface the new profile had much in common with the previous profile (e.g. both profiles were subdivided into four domains and both allowed for grading from A to E). The most noticeable change was the reduction from 12 to 7 competences.

THE ANALYSIS OF GRADES

To re-analyse the 1988 student grades from one college only, and to analyse the 1996 grades from the same college, the same methods of scoring and subsequent statistical analysis were used as had been employed in the previous study (i.e. the complete national study) referred to above. The previous scoring system (viz. A = 1, B = 2, C = 3, D = 4) was re-imposed upon the grades and the same computational methods were applied both to the smaller subsample of the earlier data (i.e. the 1988 data from one college only) and to the new data (i.e. the 1996 data from that same institution). Both sets of data were subjected to the same factor analytical techniques as before i.e. the extraction method used was Principal Components Analysis with Varimax rotation and Kaizer Normalisation (SPSS/PC+, 1990).

Once again, a large single factor emerged for both years accounting for as much as 65% (1988) or 73% (1996) of the total variance. Again, an additional two-factor solution was imposed on the data. In the case of the 1988 data the resulting solution is perhaps not as neat or as amenable to ready description as that found nationally in 1988 but of course the subsample was much smaller than the entire 1988 national sample.

Table 1

1988 (n = 155)

Characteristics	Factor	Loading	BEd (n = 91)			PGCE (n = 64)			ANOVA F values (all sig. at .02)
			Mean	Rank	%As	Mean	Rank	%As	
Aims	F1	.88	1.93	8.5	30	1.30	6.5	72	35.9
Evaluation	F1	.78	1.84	6.5	32	1.20	3	84	39.0
Subject	F1	.77	1.97	11	28	1.31	8	75	34.9
Assessment	F1	.72	2.03	12	17	1.38	9	69	43.0
Pacing	F1	.62	1.96	10	26	1.48	12	61	17.3
Elicitation	F1	.61	1.93	8.5	25	1.36	10	70	29.5
Preparation	F1	.57	1.58	3	56	1.23	5	80	10.6
Commitment	F2	.57	1.62	4	46	1.14	1	88	28.6
Resources	F2	.61	1.84	6.5	36	1.30	6.5	78	23.2
Management	F2	.62	1.81	5	35	1.45	11	64	10.4
Qualities	F2	.77	1.53	2	55	1.17	2	88	14.0
Rapport	F2	.90	1.45	1	64	1.22	4	83	5.4
Overall	F1	65%	1.79		37	1.30		76	
	F2	7%	21.5			15.5			36.9

Table 2

1996 (n = 159)

Competences	Factor	Loading	BEd (n = 104)			PGCE (n = 55)			ANOVA F values (all sig. at .0001)
			Mean	Rank	%As	Mean	Rank	%As	
School	F1	.86	1.59	2	49	1.05	2	95	36.3
Professionalism	F1	.83	1.44	1	63	1.04	1	96	22.4
Assessment	F1	.69	1.99	7	26	1.15	3	85	67.4
Subject/Content	F1	.62	1.88	6	31	1.16	4	84	48.5
Methodology	F2	.67	1.87	5	26	1.18	5	82	54.6
Communication	F2	.80	1.74	3	38	1.20	6	80	30.1
Management	F2	.87	1.78	4	36	1.22	7	80	29.9
Overall	F1	73%	1.75		28	1.14		86	61.3
	F2	7%	12.3			8.0			

For 1988 Table 1 lists the 12 characteristics, and for 1996 Table 2 lists the 7 competences, arranging them by the patterns and size of their loadings on either Factor 1 or Factor 2. More precisely the characteristics or competences are listed in the descending order of loadings on Factor 1, which tends to mirror their ascending loadings on Factor 2. The relevant factor loadings are listed in columns 1 and 2 of each table. Thus as a rule of thumb, the more rows of items that separate any two items, the less similar they are in their nature as reflected by their grade patterns. For instance in Table 2 School Competence and Classroom Management are furthest apart; they have the least high correlation of any pair of the seven competences and as a consequence are constituents of different factors. Correspondingly in Table 1 Aims and Rapport have the greatest separation, i.e. are least alike.

Striking results can be seen in the extreme right hand columns of both tables. For both study years, the results of a series of analysis of variance tests exploring the difference between the mean grades of the BEd and PGCE students reveal extremely and consistently large F values. These results show that there was a highly significant statistical difference *between* the two courses on every single item for both 1988 and 1996. In every case the PGCE group obtain a better mean grade — averaging out at approximately one half a grade point for both study years. This finding is much reinforced when one examines the columns displaying the percentages of grade A, which for both years averages out at over double for PGCE students. However, though these differences are *statistically* significant, in order to attach *educational* significance to them one would need to feel sure that the same standards were applied to the grading of both sets of students.

A safer assumption would be that the same standards were applied by assessors to students *within* (rather than across) the two courses. This makes it particularly instructive to examine the ranks of the mean grades within each course. In both Tables 1 and 2, the item ranked 1 is that with the lowest mean, indicating the competence for which each group has the best mean grade.

In 1988 the PGCE students have the better ranks on the lead items on Factor 1, namely Aims, Evaluation, Subject, and Assessment; whereas the BEd students have relatively better ranks on the remainder of the Factor 1 items, namely: Pacing, Elicitation, and Preparation. They also have better ranks on a couple of lead items on Factor 2, namely Rapport and Management.

For 1996 where the two groups differ in ranks on Factor 1 items, the PGCE students have the better ranks, that is on Assessment as well as on Subject/Content. Conversely, rank differences within Factor 2 favour the BEd students. These are shown by the Management and Communication competences.

Thus both in 1988 and in 1996 a pattern emerges indicating that the PGCE students are relatively stronger on the more *cognitive aspects of pedagogy*, viz. handling the Subject, Planning learning; Assessing and Evaluating. The PGCE's strength in Assessment was particularly marked in 1996 where Assessment was the third best competence for them (as opposed to the worst for the BEd).

In contrast, the relative strengths of the BEd course students seem to lie in their *interaction with children*, viz. their Management of Children and their Communication with them. (This is indicated by the data for Rapport, Questioning, Timing and Pacing in 1988, and for Communication and Management in 1996.)

CONCLUSION

In conclusion, the study suggests for both years (i.e. for 1988 and 1996) that there may be two different kinds of primary teachers being produced here. They are, typically, the PGCE-trained primary teacher who is relatively stronger on Assessment and Subject content and the BEd-trained primary teacher who is relatively stronger on classroom Communication and classroom Management. It would be good to see

those suggestive results from one institution tested by findings from others, so that some general ideas can be developed about the nature of different models of the Scottish primary teacher across the system as a whole.

REFERENCES

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