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ABSTRACT We focus on the music students at a conservatoire (A) that only trains performers and composers (performers/composers); a conservatoire (B) that also trains classroom teachers (education students); and a university (C) with only education students. We used a questionnaire to compare the experience and beliefs as instrumental teachers of the performers/composers at A and B; education students at B and C; and male and female performers/composers. Almost all students expected and hoped to do some work as instrumental teachers on graduation, and most were experienced as instrumental teachers. The beliefs of the two groups of education students were homogeneous. The beliefs of the two groups of performers/composers were similar, but those at B had more limited views. Male performers/composers emerged as less confident than females as instrumental teachers. Training performers/composers alongside classroom teachers does not necessarily enlighten their approach to instrumental teaching; male performers/composers may need particular support with broadening their approach.

KEYWORDS: *beliefs, class teacher, composer, instrumental teacher, performer, teaching experience, gender, conservatoire*

Introduction

Expert performers and composers of western classical music have traditionally trained at a conservatoire, such as one of the eight conservatoires in England and Wales. But while anecdotal value judgements – some unreservedly positive and others unreservedly negative – about these institutions are frequently published by the popular media (e.g. Woodrow, 2001), including a recent assertion that they are ‘glasses-in palaces for hothouse plants’ (Higgins, 2004), the conservatoires of England and Wales have not been extensively researched.

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The conservatoires are successful, in that many graduates become professional performers (Mills, 2004b). Yet little is known, other than through reminiscence and anecdote (e.g. Cleveland-Peck, 1985; Kennedy, 1981), about their culture, or about the quality and qualities of the instrumental (including vocal and compositional) tuition that forms the heart of their curriculum. Researchers have studied the relationship between performance expertise and peer learning (Ritterman, 2000), and the quality (Nielsen, 2002; Williamon and Valentine, 2000, 2002) and quantity (Davidson et al., 1998; Ericsson et al., 1993; Sloboda et al., 1996) of individual practice, but not the tuition or institutional culture themselves. Jørgensen (2000) has drawn on studies in Norway, Sweden and Denmark in addressing how Scandinavian conservatoire students develop independence as learners – and the individual differences that lead a minority not to welcome such freedom – and has suggested that English and Scandinavian relationships between teachers and students may differ, with the former being less enabling. However, recent research in an English conservatoire suggests that many students believe that they are taught autonomy as performers (Mills, 2002).

While two-thirds of the recent graduates of the same conservatoire go on to build careers in music that include some instrumental teaching (Mills, 2003), the conservatoires in England and Wales do not offer undergraduate courses for musicians who are intending to work mainly as classroom teachers. In this they differ from conservatoires in several other countries, including Australia and the Scandinavian countries. Musicians can find it difficult to become socialized as teachers (Froehlich, 2002), and it is possible that this difficulty may be aggravated by receiving a higher education in isolation from aspiring teachers.

The experience and beliefs of music performance and composition students as instrumental teachers are under-researched. Persson's (1996) investigation of novice instrumental teaching relates to a single experienced performer, who was no longer a student, working in a UK university. Study of instrumental teachers' views of what makes their teaching effective has focused on the views of career instrumental teachers working for UK Local Education Authority music services (Mills and Smith, 2003).

Research into the potential tension between the roles of performer and teacher has focused on class music teaching (e.g. Bouij, 1998; Froehlich, 2002; Kemp, 1996; Mark, 1998). The findings of this research are not all directly applicable to instrumental teaching, because instrumental teachers often work in relative isolation, without being part of a professional social group such as a school music department or a school staff. Froehlich argues that the custom of resolving musical performance problems through solitary individual practice conflicts with that of resolving problems with class teaching through discussion with other class teachers. Kemp found that UK secondary school music teachers are more extraverted (more outgoing and group-dependent) and less sensitive than musical performers. Instrumental

teachers can, if they wish, avoid the potential difficulties identified by Froehlich and Kemp. Particularly if they work privately, they have the opportunity to resolve any teaching problems individually, if that is what they would prefer to do. They need not be part of a social group on whom they must depend.

The eight music colleges in England and Wales all have proportionately more male instrumental tutors than male students (Federation of British Conservatoires, 2003); the teaching role models of music college students are predominantly male. Educational research into gender has typically addressed the gendered behaviour of learners, rather than that of teachers, even when the research is in the field of teacher education (e.g. Bennett and Carré, 1993). As an illustration of this, four consecutive recent issues of the specialist journal *Gender and Education* contain 14 articles with titles that relate specifically to children, and only four that appear to relate slightly to teachers. Within music education, the study of children's gendered choices of instruments is a popular topic (Hallam, 1998). While comparisons are sometimes made between children's gendered choices and the gender of musicians playing particular instruments in professional orchestras (O'Neill, 1997), investigation of the role of adults in children's gendered choices has been rare and has related to parents rather than teachers (Abeles and Porter, 1978).

An earlier study (Mills, 2004a) investigated the beliefs and experience as instrumental teachers of 61 aspiring performers and composers in the third year of a 4-year undergraduate course at one of the conservatoires in London. A focus group of 15 students answered open-ended questions relating to what they enjoyed (or expected to enjoy) and did not enjoy (or expected not to enjoy) about giving instrumental lessons, and their answers were used to draw up 28 questions that were completed using a seven-point Likert scale running from 'strongly agree' to 'strongly disagree'. Between them, the questions were intended to reflect all the different beliefs that at least one of the students had offered; this was not an attempt to devise a unidimensional test, or a test consisting of several unidimensional sections. All the comments made by one or more students were incorporated into the 28 Likert-scale items; thus, together they describe the 'composite view' of the 15 students and have content validity. In addition, the 15 students gave information about their experience of giving instrumental lessons, and their answers were used to draft a series of factual questions relating to students' current and previous experience as instrumental teachers.

Following pilot testing that led to some refinement of the wording of questions, the questionnaire was administered to 61 students during a teaching session, with time allowed for students to complete the questionnaire and return it to the researcher. For the purpose of analysis, the 28 Likert-scale questions (see Table 1) were grouped under eight headings. This was a loose grouping, which took place after the questionnaires had

TABLE 1 *The responses of the four groups of students to the 28 Likert-scale questions and their significance levels*

Many conservatoire graduates give instrumental lessons. How much do you agree with the following statements about giving instrumental lessons when you graduate?	Cons A perf/comp (n = 61)		Cons B perf/comp (n = 73)		Cons B education (n = 26)		Univ C education (n = 26)		Sig level: MANOVA: institution, gender as between subjects factors
	M	SD	M	SD	M	SD	M	SD	
Q1. I expect that I will do some instrumental teaching when I graduate (i)	1.53	0.94	1.78	1.28	1.92	1.65	1.87	1.51	.281
Q2. I hope to do some instrumental teaching when I graduate (i)	2.10	1.40	2.51	1.78	2.42	2.12	1.94	3.04	.526
Q3. If I do some instrumental teaching, this will be mainly because I want the income (i)	3.03	1.60	3.01	1.92	1.94	1.28	1.28	1.95	.577
Q4. I think that I would find instrumental teaching boring (i)	5.72	1.29	5.13	1.72	5.69	1.57	5.38	1.55	.332
Q5. I hope that I will only teach for a few years, and then perform full time (i)	4.66	1.75	4.18	1.91	4.54	1.88	5.23	1.97	.699
Q6. One day, I would like to teach at a conservatoire (i)	2.80	1.68	3.38	1.84	4.00	1.74	4.81	2.14	.464
Q7. I would particularly like to teach beginners (iv)	4.08	1.68	4.24	1.67	3.80	2.00	2.96	1.99	.762
Q8. I would particularly like to teach advanced pupils** (iv)	2.60	1.50	2.84	1.50	3.66	1.52	3.62	1.70	.331
Q9. I would particularly enjoy teaching pupils who find music difficult (iv)	4.33	1.55	4.69	1.77	4.69	1.57	3.31	1.69	1.00
Q10. I would particularly enjoy teaching pupils who find music easy (iv)	2.87	1.37	2.93	1.68	3.27	1.80	3.56	1.50	.091
Q11. I would particularly enjoy teaching young children (iv)	3.56	1.66	3.77	1.76	3.31	2.19	2.77	1.99	.426
Q12. I would enjoy seeing my pupils develop into better musicians (v)	1.41	0.82	1.35	0.84	1.54	1.24	1.31	1.19	.403
Q13. I would enjoy working out how to improve my teaching (v)	1.61	0.94	1.86	1.16	1.81	1.47	1.73	1.61	.155

Q14. I would enjoy working out ways to help pupils understand a particular point (v)	1.70	0.94	1.96	1.16	1.65	1.16	1.77	1.39	.394
Q15. It is obvious how to teach: I do not need to be trained (iii)	5.38	1.46	5.68	1.39	5.84	1.74	5.19	1.86	.354
Q16. A good performer will always be a good teacher (iii)	6.07	1.21	6.33	1.27	6.27	1.48	6.31	1.41	.410
Q17. I would teach my pupils exactly the same way that my best teacher has taught me (iii)	4.78	1.70	4.19	1.68	4.04	1.97	4.08	1.68	.653
Q18. When a pupil gives up, I will worry that my teaching was not good enough (vi)	3.83	1.93	3.72	1.65	3.42	1.81	3.35	1.44	.629
Q19. If pupils do not practise enough, I would think that this was my fault (vi)	5.02	1.66	4.97	1.55	4.96	1.91	4.85	1.74	.007
Q20. Giving instrumental lessons would help me improve my playing (ii)	2.53	1.38	2.51	1.32	2.50	1.48	2.81	1.72	.178
Q21. I would want my instrumental lessons to be fun for my pupils (vii)	1.58	0.85	1.61	0.90	1.50	0.95	1.31	1.19	.924
Q22. I would want my pupils to take all their 'grades' from 1 to 8 (vii)	4.35	1.55	5.27	1.36	4.12	1.58	3.85	1.85	.397
Q23. I would teach my pupils to improvise and compose – not just perform (vii)	2.78	1.43	3.19	1.65	2.46	1.48	2.27	1.59	.507
Q24. I believe in getting the notes right first, and adding expression later (vii)	4.94	1.71	4.17	1.81	3.81	2.04	4.12	1.82	.262
Q25. The best way to solve a problem with a difficult passage is to keep on playing it again and again – until it is always right (vii)	5.24	1.71	4.36	1.79	3.92	2.15	4.77	1.88	.433
Q26. I think that it is important to start teaching pupils to read music from their very first lesson (vii)	3.81	1.73	3.14	2.03	2.42	1.75	3.73	2.18	.810
Q27. My teacher often talks to me about how teaching helps him/her to improve his/her playing (ii)	4.31	1.78	4.49	1.79	4.08	2.10	4.69	1.83	.022
Q28. Instrumental teaching is a career that is valued by the community (viii)	3.48	1.56	3.07	1.55	3.19	2.02	2.66	1.23	.005

Note: **For clarity, references to instrumental pupils as 'students' in the questionnaire are replaced with 'pupils' here.

been completed, simply to facilitate analysis. The students did not see these headings. Given that each question was intended to reflect a different belief stated by one or more students, high levels of internal consistency within the seven sections that had more than one question were not anticipated. Cronbach's alpha of only 0.18 for the six questions on teaching styles and curriculum indicate that they were linked but not interchangeable. Cronbach's alpha did not exceed 0.72 in any of the sections, and this indicates that none of the questions were effectively duplicates, and hence redundant. The 28 questions, listed in Table 1, were grouped as follows:

- i. Teaching and my career as a performer (Questions 1–6: Alpha = 0.22)
- ii. The relationship between my teaching and playing (Questions 20, 27: Alpha = 0.53)
- iii. My need for teacher training (Questions 15–17: Alpha = 0.37)
- iv. The pupils I would like to teach (Questions 7–11: Alpha = 0.38)
- v. Why I would enjoy teaching (Questions 12–14: Alpha = 0.72)
- vi. My responsibility for pupils' learning (Questions 18–19: Alpha = 0.71)
- vii. Teaching styles and curriculum (Questions 21–26: Alpha = 0.18)
- ix. The status of instrumental teaching as an occupation (Question 28)

The conservatoire students emerged as young musicians – often already experienced as instrumental teachers – who both expect and hope to include instrumental teaching in their career, look forward to engaging with teaching intellectually, think that they need to be trained as a teacher, and consider that being a teacher will improve their playing. They are generally open to 'sound before symbol' (see Department of Education and Science, 1985) approaches to music making, ambivalent about whether pupils should be entered for the full gamut of graded performance examinations, committed to making their lessons fun for pupils and teaching pupils to be expressive from the earliest stages of learning to play a piece, and opposed to the notion that performances can be improved simply through repetitive drill. Students with at least one current instrumental pupil were less likely to feel that a teacher was to blame if a pupil gives up lessons, were more confident that they knew how to teach, and were more certain than their peers that they would teach when they graduated.

Male students were more committed to teaching in a conservatoire in due course and to teaching advanced pupils, and pupils who find music easy. They were more inclined to blame themselves if a pupil did not practise sufficiently, more committed to repetitive practice and to teaching staff notation from a pupil's first lesson, and less committed to 'sound before symbol' approaches to teaching. And while they still felt that experience of teaching would improve their teaching, they were less likely than females to have an instrumental teacher who explained this to them. They considered that instrumental teaching had higher status as a career.

The present study builds on the earlier study by investigating whether students' attitudes to engaging in instrumental teaching differ if they study alongside aspiring class music teachers, and whether the attitudes of aspiring class music teachers to engaging in instrumental teaching differ if they study alongside aspiring performers and composers. It involves three higher education institutions. Conservatoire A trains performers and composers, conservatoire B trains performers, composers and class music teachers, and university C trains class music teachers. The study asks:

- 1(a) Does the instrumental teaching experience of performers/composers at conservatoires A and B differ?
- 1(b) Do the beliefs about instrumental teaching of performers/composers at conservatoires A and B differ?
- 2(a) Are there gender differences in the instrumental teaching experience of the performers/composers?
- 2(b) Are there gender differences in the beliefs about instrumental teaching of the performers/composers?
- 3(a) Does the instrumental teaching experience of class music teaching students (education students) at conservatoire B and university C differ?
- 3(b) Do the beliefs about instrumental teaching of education students at conservatoire B and university C differ?

Method

This is a comparison study involving four groups of undergraduate students in three higher education institutions:

- Cons A Perf/comp: 61 performance and composition students at conservatoire A, in London. Conservatoire A does not have education students.
- Cons B Perf/comp: 73 performance and composition students at conservatoire B, in Australia. Conservatoire B was a natural choice of a conservatoire with education students for comparison with conservatoire A. There are no conservatoires with undergraduate education students in England or Wales. Like conservatoire A, conservatoire B is internationally prestigious and English speaking, and the systems of school music, instrumental tuition and conservatoire education in England and Australia are similar.
- Cons B Education: 26 education students at conservatoire B. These students are all training to be secondary class music teachers.
- Univ C Education: 26 education students at university C, which is in the same Australian state as conservatoire B. Again, these students are training as secondary class music teachers.

TABLE 2 *Specialisms of 186 students*

	<i>n</i>	Specialism							
		Keyboard	Strings	Brass	W'wind	Voice	Perc	Comp	Unknown
Cons A Perf/comp	61	10 16%	28 46%	2 3%	11 18%	3 5%	3 5%	4 7%	0 0%
Cons B Perf/comp	73	6 8%	20 27%	3 4%	26 36%	10 14%	5 7%	1 1%	3 4%
Cons B Education	26	6 23%	5 19%	3 12%	7 27%	4 15%	0 0%	0 0%	0 0%
Univ C Education	26	5 19%	2 8%	5 19%	6 23%	6 23%	1 4%	0 0%	1 4%

TABLE 3 *Gender of 157 students*

	<i>n</i>	Male	Female
Cons A Perf/comp	57	23 40%	34 60%
Cons B Perf/comp	62	26 42%	36 58%
Cons B Education	20	7 35%	13 65%
Univ C Education	18	2 11%	16 89%

The 186 students all completed the same questionnaire (Table 1). Group 1 had completed the questionnaire for the earlier study, in February 2003, and their responses were revisited for the present study. Students in groups 2–4 completed the questionnaire during May and July 2003. Like group 1, they were handed the questionnaire by their usual lecturer, and time was provided during a teaching session for them to complete it. Prior to the administration of the questionnaire, the lecturers met with the researcher to discuss the questionnaire. This discussion revealed no cultural differences in understanding of the meaning of questions.

Table 2 summarizes the instrumental family specialisms of the 186 students. Their instrumental specialisms are as follows: piano (24), organ (3), violin (30), viola (4), cello (8), double bass (7), flute (12), oboe (4), clarinet (17), bassoon (6), saxophone (11), trumpet (7), horn (1), trombone (3), euphonium (2), percussion (9), guitar (5), harp (1), voice (23), composition (5), unknown (4). Table 3 shows the gender of the 157 students who disclosed this.

Results

A multivariate analysis of variance with institution as a between subjects factor, gender as a second between subjects factor, and students' responses to the 28 Likert-style items entered as dependent variables, did not lead to rejection of the hypothesis that the interaction between institution and gender is zero (Pillai's Trace > 0.05). In the light also of the relatively low internal consistency of the items that fall within each of the questionnaire headings, which results from the deliberate attempt to ensure that none of the items were duplicates and hence redundant, one needs to investigate the research questions stated above that relate to students' beliefs (research questions 1b, 2b and 3b) by considering their response to individual items.

We consider the performers/composers first, and then the education students, in both cases addressing first their experience and then their beliefs.

RESEARCH QUESTION 1A: THE INSTRUMENTAL TEACHING EXPERIENCE OF PERFORMERS/COMPOSERS AT CONSERVATOIRES A AND B

The proportions of performers/composers at conservatoires A and B who had taught were similar ($\chi^2 > 0.05$). There was no significant difference in the age at which performers/composers at conservatoire A and conservatoire B began giving instrumental lessons. However, the performers/composers at conservatoire A had not taught a pupil for as long as at conservatoire B ($M = 12.7$ months, $SD = 9.2$ and $M = 27.4$ months, $SD = 22.7$ respectively, ($F(1,86) = 11.9, p < 0.05$)). This may be because many of the students at conservatoire B have family homes nearby, so that they could find it easier to continue giving lessons to pupils who they first taught before entering the conservatoire. Table 4 shows that the performers/composers at conservatoire B who currently have instrumental pupils have significantly more of them (in particular teach more females); teach more pupils at home; teach more pupils individually; and teach for more hours each week.

TABLE 4 *Teaching styles and curriculum: performers/composers at the top conservatoires*

	Conservatoire A		Conservatoire B		Degrees of freedom		F	p
	M	SD	M	SD	Between groups	Within groups		
I would want my lessons to be fun for my pupils	1.6	0.8	1.6	0.9	1	130	.03	NS
I would want my pupils to take all their 'grades' from 1 to 8	4.4	1.5	5.3	1.4	1	129	13.0	< .05
I would teach my pupils to improve and compose – not just perform	2.8	1.4	3.2	1.6	1	130	2.3	NS
I believe in getting the notes right first, and adding expression later	4.9	1.7	4.2	1.8	1	129	6.2	< .05
The best way to solve a problem with a difficult passage is to keep on playing it again and again – until it is always right	5.2	1.7	4.4	1.8	1	130	8.2	< .05
I think that it is important to start teaching pupils to read music from their very first lesson	3.8	1.7	3.1	2.0	1	129	4.1	< .05

TABLE 5 *Performers/composers currently teaching*

	<i>n</i>	Total instrumental pupils		Male pupils		Female pupils		Pupils taught at home		Pupils taught at school		Pupils taught in groups		Pupils taught individually		Hours taught per week	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Cons A	29	5.6	6.8	2.9	5.4	2.7	3.8	1.5	4.4	4.2	7.8	1.1	3.1	4.8	5.3	3.4	2.6
Cons B	41	12.1	9.0	5.6	6.2	6.6	4.8	4.4	4.7	7.8	8.9	0.7	1.7	11.6	9.0	7.1	5.0
<i>F</i>		10.9		3.7		12.6		9.8		3.1		0.5		13.1		12.2	
<i>Sig</i>		.002		.060		.001		.003		.081		.477		.001		.001	

RESEARCH QUESTION 1B: THE BELIEFS ABOUT INSTRUMENTAL TEACHING OF THE PERFORMERS/COMPOSERS AT CONSERVATOIRES A AND B

Teaching and my career as a performer

One-way analysis of variance with institution as the between subjects factor found no significant difference in the responses of students to five of the six questions. However, the performers/composers at conservatoire A thought it less likely that instrumental teaching would be boring ($F(1,129) = 4.8$, $p < 0.05$).

Teaching styles and curriculum

There were significant differences between the performers/composers in conservatoires A and B for four of the six questions. Table 5 summarizes these. Performers/composers at conservatoire A were:

- more committed to their pupils working through the full range of graded performance examinations;
- less committed to pupils 'getting the notes right first and adding expression later';
- less committed to the improvement of difficult passages through repetitive practice;
- less committed to teaching pupils to read staff notation from their very first lesson.

The relationship between my teaching and playing; my need for teacher training; the pupils I would like to teach; why I would enjoy teaching; my responsibility for pupils' learning; the status of instrumental teaching as an occupation

There were no significant differences in the responses to these 16 items.

Thus, there were significant differences ($p < 0.05$) in five of 28 items. The binomial probability of at least five of 28 items appearing to be significant at the value of $p = 0.05$ only through chance, i.e. through Type 1 error, is 0.0117. Consequently it is reasonable to conclude that there is an effect here, that the performers/composers at the two conservatoires have some differing beliefs about instrumental teaching, and that these differences relate to beliefs about aspects of teaching styles and curriculum, and how boring teaching is perceived to be as an occupation.

RESEARCH QUESTION 2A: GENDER DIFFERENCES IN THE INSTRUMENTAL TEACHING EXPERIENCE OF THE PERFORMERS/COMPOSERS

The proportions of male and female performers/composers at conservatoires A and B who had taught were similar ($\chi^2 > 0.05$). There were few significant differences in the experience as instrumental teachers of males and females who are performers/composers at conservatoire A or conservatoire B. At both of the conservatoires, the differences related to females having younger pupils and, at conservatoire A, teaching fewer males.

At conservatoire A, the youngest pupils taught by females and males were 7.6 years and 10.8 years respectively. At conservatoire B, they were 6.6 years and 8.0 years respectively. Female and male students at conservatoire A teach an average of 1.1 and 6.4 male pupils, respectively.

RESEARCH QUESTION 2B: GENDER DIFFERENCES IN THE BELIEFS ABOUT INSTRUMENTAL TEACHING OF THE PERFORMERS/COMPOSERS

Teaching and my career as a performer

At conservatoire A, male performers/composers had a stronger wish than female performers/composers to teach at a conservatoire in future ($F(1,55) = 5.0, p < 0.05$).

The relationship between my teaching and playing

At conservatoire A, male students were less likely than female students to have had a teacher who explained to them how experience of teaching impacted positively on their performance ($F(1,53) = 7.4, p < 0.05$). At conservatoire B, male students were more likely than female students to have had a teacher who explained this to them ($F(1,60) = 4.8, p < 0.05$).

My need for teacher training

There were no significant differences in the responses to these three items.

The pupils I would like to teach

At conservatoire A, male students had a stronger wish than female students to teach:

1. advanced pupils ($F(1,55) = 4.7, p < 0.05$);
2. pupils who find music easy ($F(1,55) = 4.5, p < 0.05$).

At conservatoire B, male performers/composers wished less strongly than female performers/composers to teach young pupils ($F(1,59) = 6.8, p < 0.05$).

Why I would enjoy teaching

At conservatoire B, male performers/composers:

1. expected less enjoyment than females from seeing their pupils develop into better musicians ($F(1,59) = 6.8, p < 0.05$);
2. expected less enjoyment than females from working out how to improve their teaching ($F(1,60) = 9.2, p < 0.05$).

My responsibility for pupils' learning

At conservatoire A, male performers/composers were more likely than females to blame themselves if pupils did not practise as much as they should ($F(1,54) = 4.9, p < 0.05$).

Teaching styles and curriculum

At conservatoire A:

1. male performers/composers believe more strongly than females that the best way of solving a problem with a difficult passage is to practise it repetitively ($F(1,54) = 4.9, p < 0.05$);
2. male performers/composers believe more strongly than females that pupils should be taught to read staff notation from their first lesson ($F(1,53) = 6.6, p < 0.05$).

The status of instrumental teaching as an occupation

At conservatoire A, males thought that the career was more valued ($F(1,54) = 4.7, p < 0.05$). At conservatoire B, males thought that it was less valued ($F(1,60) = 4.3, p < 0.05$).

Thus, there were significant differences ($p < 0.05$) in eight of 28 items at conservatoire A, and four of 28 items at conservatoire B. The binomial probability of at least eight of 28 items appearing to be significant at the value of $p = 0.05$ only through chance is below 0.001. Thus it is reasonable to conclude that there is an effect here, and that male and female performers/composers at conservatoire A have differing beliefs about instrumental teaching, in respects such as those listed above.

The binomial probability of at least four of 28 items appearing to be significant at $p = 0.05$ only through chance is 0.0491. Thus it is reasonable to conclude, albeit more cautiously, that there is a gender effect in respect of beliefs about instrumental teaching also at conservatoire B. The fact that the probability of a Type 1 error for each of the four items was less than, rather than equal to, 0.05 strengthens the reasonableness of this conclusion.

RESEARCH QUESTION 3A: THE INSTRUMENTAL TEACHING EXPERIENCE OF EDUCATION STUDENTS AT CONSERVATOIRE B AND UNIVERSITY C

The proportions of education students at conservatoire B and university C who had taught were similar ($\chi^2 > 0.05$). There were no significant differences in the experience as instrumental teachers of the education students at conservatoire B and university C. They began giving instrumental lessons at a similar age, had taught their longest serving pupil for a similar length of time, and taught similar numbers of pupils for a similar number of hours per week.

RESEARCH QUESTION 3B: THE BELIEFS ABOUT INSTRUMENTAL TEACHING OF EDUCATION STUDENTS AT CONSERVATOIRE B AND UNIVERSITY C

There were significant differences only in respect of two of the 28 items. The education students at conservatoire B were less enthusiastic than students at university C about teaching pupils who find music difficult ($F(1,50) = 9.4, p$

< 0.05), and more enthusiastic about teaching pupils to read staff notation from their first lesson ($F(1, 50) = 5.7, p < 0.05$).

The binomial probability of at least two of 28 items appearing to be significant at $p = 0.05$ through chance is 0.4117. The possibility of Type 1 error here is high: we cannot conclude that the beliefs of the two groups of education students differ.

Discussion

This study builds on earlier work that investigated the experience and beliefs as instrumental teachers of students studying at a conservatoire in England (conservatoire A) to be performers or composers. The conservatoires in England and Wales do not offer courses for students who wish to be class music teachers, and the present study included two institutions in Australia (conservatoire B and university C) in order to investigate whether aspiring performers/composers' experience and beliefs as instrumental teachers differ if they study alongside aspiring class music teachers, and whether the experience and beliefs as instrumental teachers of aspiring class music teachers differ if they study alongside aspiring performers and composers. A hypothesis here was that aspiring performers/composers would be more enthusiastic as instrumental teachers, more enlightened in their approach to instrumental teaching, and more socialized as teachers (Froehlich, 2002) if they were accustomed to being with students who were aspiring class music teachers. The notion was that something of the enthusiasm and enlightenment of the aspiring class music teachers might rub off on the aspiring performers and composers or not.

The results have shown that the instrumental teaching experience and beliefs about instrumental teaching of all four groups of students have much in common. In particular, they suggest that it makes little difference to an aspiring class music teacher, in terms of their experience and beliefs as an instrumental teacher, whether they are taught in the same institution as aspiring performers/composers or not.

The impact on aspiring performers/composers of being taught in an institution that also trains class music teachers has proved to be more complex. Where there are differences in the beliefs of the two groups of aspiring performers/composers, they are not in the direction that was predicted. The aspiring performers/composers in the institution that also houses aspiring class music teachers are *less* – rather than more – enlightened in their beliefs about instrumental teaching. Interpretation of the finding that the students in England are more wedded to the idea of pupils working their way through a series of graded performance examinations is clouded by the balance of different graded performance examination systems used in the two countries. But moving beyond this item, the aspiring performers/composers at conservatoire B are more committed to approaches

to instrumental teaching that are traditional and dutiful, rather than necessarily enjoyable, for both teachers and pupils. These students give greater weight to the teaching of staff notation from the earliest stages of tuition, support an approach to practice that is mechanical rather than intellectual and creative, and appear to see expression as other than intrinsic to performance.

But was this because of the presence of the class music teachers, or because the two institutions are in different countries? It is unlikely that the fact that the two conservatoires are in different countries makes no difference at all, even though the countries were matched as closely as possible in terms of their music education. But there is sufficient similarity in the experience as instrumental teachers of the students in the two conservatoires for it to be reasonable to suggest that there are aspects of 'conservatoire' that have transcended national boundaries, so that the juxtaposition of aspiring performers/composers and aspiring class music teachers in an institution is insufficient to ensure that the performers/composers become more enlightened in their approach to instrumental teaching. The performers/composers in the two institutions include similar proportions that have taught, and they began teaching at a similar age, but the students in conservatoire B have, in effect, set up substantial traditional 'private practices' more frequently than the conservatoire A students. The conservatoire A students are working with their pupils in their school settings, and following the school system of teaching pupils in groups, more frequently. Instrumental teaching is well established in schools in both England and much of Australia. Private practice is a centuries-old way of organizing instrumental tuition that grew up long before instrumental tuition became established in the schools of either England or Australia. With respect to the organization of their instrumental teaching, the conservatoire B students are more conservative than the conservatoire A students – despite the presence of the aspiring class music teachers.

In order to identify a system of educational organization that more effectively promotes enlightened instrumental teaching by aspiring performers/composers, it may be helpful for future research to include comparison of conservatoire A with one or more of the conservatoires in Scandinavia where aspiring performers/composers are taught jointly with education students for part of their programme – rather than simply juxtaposed with them. The pedagogy courses in some Scandinavian conservatoires have adopted a textbook (Schenck, 2000) that values enlightened instrumental teaching, and indeed this textbook is used also in at least one conservatoire in the UK. However, such research would need to bear in mind linguistic considerations, and a greater difference between national education systems.

Turning to gender, female students at both conservatoires teach younger students, and at conservatoire A they teach fewer male students. The findings

at conservatoires A and B indicate that males may need special support with developing their confidence as instrumental teachers, able to provide for a wide range of pupils. The extent of the differences in the beliefs of male and female performers/composers at conservatoire A, in particular, is striking. The males are more disposed to teach pupils who are essentially like they are: at a conservatoire, advanced, and among those who find music relatively easy. It is perhaps because of this that they feel more strongly that the teacher is to blame if a pupil does not practise sufficiently between lessons. Beyond this, though, the male students appear to be identifying with their own teacher, and may do this more strongly than the female students, partly because a large majority of the instrumental teachers at conservatoire A are themselves male. The students' stronger sense that instrumental teaching is a valued occupation may reflect the high regard in which they hold their own teachers. But they seem to be seeing their own teaching as something that they do to emulate their own teachers, who they do not recall suggesting that experience of teaching will help a student become an accomplished performer or composer. The male students' stronger sense that they are part of a long tradition may also help to explain why they hold views about teaching approaches – notably the roles of staff notation, and of repetition in practice – that we have already described as traditional in respect of the students at conservatoire B.

There are fewer differences in the beliefs of male and female performers/composers at conservatoire B. Like the male performers/composers at conservatoire A, those at conservatoire B are less interested than female students in teaching younger pupils. But, more strikingly, they are less engaged as teachers – deriving less enjoyment from seeing their pupils develop as musicians, and from working out how to improve their teaching – and they also consider that instrumental teaching is valued less by the community. That said, Table 1 earlier shows that performers/composers overall at conservatoire B still expect strongly to enjoy seeing their pupils develop into better musicians, and to enjoy working out how to improve their teaching.

Finally, the study has pointed to the paradox of education students carrying out instrumental teaching without training and from a young age, although they believe that training in instrumental teaching is needed, and plan to invest time in training for their chosen career of class music teaching. It is difficult to believe that instrumental pupils' learning needs would not be met more effectively by teachers who were trained, or who at least had more experience of life and music making. None of the institutions that participated in this study currently emphasize training as instrumental teachers within their undergraduate courses for performers/composers or secondary class music teachers. Raising the profile of training for instrumental teaching in higher education could help to raise the status of getting trained as an instrumental teacher more generally, and discourage untrained students,

who are little more than children themselves, from taking on too early the role of instrumental teacher.

This study grew from the intention to compare a conservatoire that trains only performers/composers with one that also trains class music teachers. It found most difference neither between institutions, nor between countries, but between students of different gender in the same institution, particularly the institution in England. The differing responses of male and female students to conservatoire education is an area that would merit further research.

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REFERENCES

- Abeles, H.F. and Porter, S.Y. (1978) 'The Sex-Stereotyping of Musical Instruments', *Journal of Research in Music Education* 26: 65–75.
- Bennett, N. and Carré, C. (1993) *Learning to Teach*. London: Routledge.
- Bouij, C. (1998) 'Swedish Music Teachers in Training and Professional Life', *International Journal of Music Education* 32: 24–32.
- Cleveland-Peck, P. (1985) *The Cello and the Nightingales: The Autobiography of Beatrice Harrison*. London: John Murray.
- Davidson, J.W., Sloboda, J.A., Moore, D.G. and Howe, M.J.A. (1998) 'Characteristics of Music Teachers and the Progress of Young Instrumentalists', *Journal of Research in Music Education* 46: 141–60.
- Department of Education and Science (1985) *Curriculum Matters 4: Music from 5 to 16*. London: HMSO.
- Ericsson, K.A., Krampe, R.T. and Tesch-Römer, C. (1993) 'The Role of Deliberate Practice in the Acquisition of Expert Performance', *Psychological Review* 100: 363–406.
- Federation of British Conservatoires (2003) *Teaching Performance: The Employment of Musical Instrument Teaching Specialists: The Report of Hefce Good Management Practice Project 41*. London: Royal College of Music.
- Froehlich, H. (2002) 'Thoughts on Schools of Music and Colleges of Education as Places of "Rites and Rituals": Consequences for Research on Practising', in M. Nerland (ed.) *Research in and for Higher Music Education: Festschrift for Harald Jørgensen*, pp. 149–66. Oslo: Norges Musikkhøgskole.
- Hallam, S. (1998) *Instrumental Teaching: A Practical Guide to Better Teaching and Learning*. Oxford: Heinemann.
- Higgins, C. (2004) 'It's Time Our Music Colleges Learned to Embrace Change – before Middle-Class Conservatism Smothers Them', *The Guardian*, 8 January: 9.
- Jørgensen, H. (2000) 'Student Learning in Higher Instrumental Education: Who is Responsible?', *British Journal of Music Education* 17(1): 67–77.

- Kemp, A.E. (1996) *The Musical Temperament: Psychology and Personality of Musicians*. Oxford: Oxford University Press.
- Kennedy, M. (1981) *Britten*. London: Dent.
- Mark, D. (1998) 'The Music Teacher's Dilemma – Musician or Teacher?' *International Journal of Music Education* 32: 3–23.
- Mills, J. (2002) 'Conservatoire Students' Perceptions of the Characteristics of Effective Instrumental and Vocal Tuition', *Bulletin of the Council for Research in Music Education* 153/154: 78–82.
- Mills, J. (2003) 'Working in Music: The Careers of RCM Alumni from 1949–2003', paper presented at the 2nd Research Seminar – Music Education: Research, Policy, Practice, Royal College of Music, London.
- Mills, J. (2004a) 'Conservatoire Students as Instrumental Teachers', *Bulletin of the Council for Research in Music Education* 161–2 (Summer–Fall): 145–54.
- Mills, J. (2004b) 'Working in Music: Becoming a Performer-Teacher', *Music Education Research* 6(3): 245–61.
- Mills, J. and Smith, J. (2003) 'Teachers' Beliefs about Effective Instrumental Teaching in Schools and Higher Education', *British Journal of Music Education* 20(1): 5–28.
- Nielsen, S.G. (2002) 'Musical Practice in the Conservatoires: Strategies Advanced Students Use in Self-Regulated Learning', in I.M. Hanken, S.G. Nielsen and M. Nerland (eds) *Research in and for Higher Music Education: Festschrift for Harald Jørgensen*, pp. 69–84. Oslo: Norges Musikkhøgskole.
- O'Neill, S.A. (1997) 'Gender and Music', in D.J. Hargreaves and A.C. North (eds) *The Social Psychology of Music*, pp. 46–66. Oxford: Oxford University Press.
- Persson, R. (1996) 'Brilliant Performers as Teachers: A Case Study of Commonsense Teaching in a Conservatoire Setting', *International Journal of Music Education* 28: 25–36.
- Ritterman, J. (2000) 'Learning What It Is to Perform: A Key to Peer Learning for Musicians', in D. Hunter and M. Russ (eds) *Peer Learning in Music*, pp. 26–38. Belfast: University of Ulster.
- Schenck, R. (2000) *Spelrum: En Metodikbok För Sång- Och Instrumentalpedagoger* (At play: A textbook for song and instrumental students). Göteborg: Bo Ejeby Förlag.
- Sloboda, J.A., Davidson, J.W., Howe, M.J.A. and Moore, D.G. (1996) 'The Role of Practice in the Development of Performing Musicians', *British Journal of Psychology* 87: 287–309.
- Williamson, A. and Valentine, E. (2000) 'Quantity and Quality of Musical Practice as Predictors of Performance Quality', *British Journal of Psychology* 91: 353–76.
- Williamson, A. and Valentine, E. (2002) 'The Role of Retrieval Structures in Memorising Music', *Cognitive Psychology* 44: 1–32.
- Woodrow, M. (2001) 'Damned by Elitism', *The Guardian*, 26 June.

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