The standard pedagogical model applied to the performance training of piano majors in the majority of Australian tertiary music institutions today is the one-to-one lesson. In addition and relatively commonplace to one-to-one lessons are master classes, an environment where the pedagogue as ‘master’ instructs students in an audience-oriented environment. Less common is the group teaching of piano majors, this form of pedagogy traditionally applied in the context of training non-pianists basic keyboard skills. One of the key issues to emerge regarding the status quo is to what extent this standard procedure for instruction is based on research evidence, rather than the perpetuation of traditions. What is the most educationally viable and beneficial learning environment for tertiary piano majors? Are there alternative models that might be explored? Is it possible that there may be more productive systems of pedagogy for our piano majors? While it is possible to argue that the majority of pedagogues and students have participated in and thus developed experientially-based perceptions related to the one-to-one and master class models, it is less likely that many will have a basis by which to form perceptions regarding group piano teaching models, particularly at the advanced level.

The emergence of group piano teaching

While the group teaching of beginner piano students began in Europe in the early 1800s (Kowalchyk & Lancaster 1997; Thompson 1983, Hildebrandt 1988), the early use and development of such models for advanced students is less well known or documented. The master class as a large group environment has certainly been in existence for several centuries, with Liszt and Leschetizky two of the principal exponents in the Romantic period. Specific reference to advanced student group teaching is both scant and limited in terms of detail of the methodologies employed. At the same time, it would appear that the group teaching of first instrument students has been far from uncommon. Cahn (2003) describes group teaching in European conservatories between 1790-1843 as “the usual method”. Further reference to group instruction is made by Ritterman (2003), who refers to conservatories in Europe as focussing on providing an educational environment where individual students are taught in the presence of their peers. Montgomery (1999) refers to the group teaching of winds as dating back to the late 18th century at the Paris Conservatoire. Stevens (1988) also refers to group teaching on the continent and “the Renaissance principal of the master imparting knowledge to his apprentices” (p. 25,) although similar to Montgomery (1999), does not elucidate or provide specific examples. Group teaching appears to have existed outside the continent as well. Thompson (1983) discusses how early American colleges of the 19th century:

emulated the famous state conservatories, each student being taught individually but in front of his colleagues, an approach which became known as the ‘class conservatory method’ (p. 22).

In terms of piano pedagogy in the 20th century, renowned pianists and pedagogues refer to the benefits of group learning models. Schnabel (1961) believed implicitly in the value of group work and argued “the most productive way of higher teaching in music is to have all pupils present at lessons” (p. 125). Neuhaus (1973) refers to his studies at the Vienna conservatory and how several students would be assigned to play in any one session with an audience of up to twenty-five peers. Neuhaus (1973) remarked that:
pupils and the listeners came to the lesson with the scores, on which they followed attentively the playing of the pupil and the comments of the teacher. The advantage of this for all concerned was obviously very great (p. 200).

In addition to the views of Schnabel (1961) and Neuhaus (1973), a number of recent pedagogues, most notably those based in the United States, argue the value of group teaching approaches. Recent conferences held by the Music Teachers National Association (1999, 2000) involved a great deal of panel discussion and deliberation regarding the value of group teaching. Shockley (1999) summarises various issues raised by a number of the pedagogues who participated in discussions concerning group teaching at an advanced level:

- group instruction for advanced students can take many forms;
- group instruction offers numerous advantages in virtually all areas of applied study;
- the advantages of group teaching far outweigh any disadvantages;
- the most common barrier to group teaching is the prevalent attitude that one to one teaching is essential;
- group teaching requires flexibility, focus on process, not just curriculum, and the ability to promote the transfer of concepts and the productive exchange of ideas; and
- the teacher must be a facilitator who can learn from students and promote the benefits of the group learning environment.

Hence while the literature reveals a range of views and perceptions regarding the benefits of group learning, these have as yet, failed to be tested within a research framework.

**Extant research – models of group pedagogy**

There is a paucity of research that explores advanced student group teaching, a view supported by both Brandt (1986) and Kennell (2002). There have, however, been a number of studies which compare group and individual instruction at the beginning level (Hutcherson 1955, Waa 1965, Manley 1967, Shugert 1969, Keraus 1973). It would appear that additional research is needed, Kennell (2002) arguing that the various studies to date have “failed to reveal conclusive evidence in support of either class or private instruction” (p. 245). In terms of advanced student group teaching, one research study exists, with Seipp (1976) comparing advanced students taught in groups and individually.

Sixteen first-year trumpet students were initially tested in six areas: 1) performance level, 2) sight reading, 3) amount of work performed, 4) interpretive judgement, 5) auditory-visual music discrimination, and 6) student attitude and opinion. Seipp (1976) proceeded to randomly divide the sample into eight students taught individually and eight taught in two groups of four. Each group of four students was allocated one hour of weekly instruction, with privately taught students thirty minutes of tuition per week. Seipp (1976) argues that the teaching curriculum was essentially the same, particularly in the area of technical work, except a more flexible approach was applied to the assigning of repertoire to students. All lessons were “highly structured” (Seipp 1976, p. 70), and while Seipp (1976) implemented a different set of pedagogical procedures in the group classes to accommodate the different learning environment, these are not made clear to the reader. At the end of the academic year, all students were tested in the same manner as that applied at the commencement of the project. Table 1 profiles the findings.

What is of striking interest from the data in Table 1 is the fact that there were statistically insignificant differences in all areas of development except sight-reading, where group taught students progressed considerably more than those taught one to one. These findings not only challenge these students’ perceptions regarding the necessity for individual attention, but proposes that group teaching may be at least as productive as one to one pedagogy. Seipp (1976) also presents a time analysis of a sample of eight one to one and eight group lessons, the data revealing the significantly expanded opportunities for interaction in the group
environment. What is also interesting is the fact that group taught students only received an allocation of fifteen minutes of instruction per week as compared with the thirty minutes allocated to those students taught individually. Hence it is possible to argue that the productivity of the group sessions would have been amplified if the sessions were two hours each.

As part of his implications, and which is clearly appropriate given the small sample, Seipp (1976) argues the need to consider similar research projects involving different pedagogues, different musical instruments, with different groupings of students, and using different teaching techniques. Hence, the benefits of group teaching as identified in the literature present a research niche and opportunity to consider a group teaching model for advanced piano students at the tertiary level.

**Probing current models of group piano pedagogy: questionnaire data**

Given the lack of extant research literature concerning advanced student group teaching, and particularly so in the context of piano, it was determined that additional data would need to be developed prior to the development of a trial model. An extensive search of relevant and recent pedagogical publications was conducted, with a number of potential pedagogues identified in the proceedings of the Music Teachers National Association conferences on group teaching (Music Teachers National Association 1999, 2000). Given the geographical spread of the potential sample, a written questionnaire was deemed the most logical and practical method for gathering data, with questions developed to explore the following areas:

- Personal details
- Pre-university or college studies: analysis of tuition experienced
- Current pedagogical methods: models adopted and methods of pedagogy

Email and/or letters were sent to thirty pedagogues to determine if they were in fact engaged in advanced student group piano teaching at the tertiary level, and to request their participation in the research. Eleven pedagogues indicated that they did not engage in group teaching, seven did not respond, while twelve stated that they engaged in advanced student group teaching and that they were prepared to participate. Questionnaires were subsequently sent to these twelve and five returned, representing a return rate of approximately forty-two percent. Table 2 profiles the personal details of the five respondents, with name presented as pseudonym, given the respondents agreed to participate only under the condition of anonymity.

Table 2 reveals that the pedagogues were all of mature age, with considerable experience teaching at the tertiary level, while the range of experience of teaching outside the tertiary level varied considerably. In terms of the respondents’ experiences of tertiary piano studies, a number of general principles emerged on analysis of the data:

- Each had experienced only individual lessons as an undergraduate;
- Perceptions as to why they had not experienced group teaching at the undergraduate level were related to either the choice of the pedagogue concerned, institutional policy, or timetabling complications;
- At the postgraduate level each respondent had experienced group learning;
- These experiences ranged from group teaching only to a combination of individual and group learning; and
- Each of the respondents argue the necessity for regular group teaching in the standard undergraduate tertiary model, with one (Joseph) in fact arguing its priority over individual tuition.

The respondents were then asked to briefly outline the models of teaching that they currently employ. These are outlined in Table 3.
It is clear from the responses presented in Table 3 that school or institutional policy dictates to some extent the choice of pedagogical model(s), and that the formats identified in Table 3 may not necessarily be the preferred scenario. This is most noticeable in the case of Indiana, who would in fact would prefer to teach only in groups, and is equally frustrating for Rachel, although it is not clear in the latter’s case whether ‘regular performance classes’ in fact constitutes small group learning or larger performance classes. For the other respondents, group tuition is included in the pedagogical frame, albeit differently in terms of time and frequency. In order to further probe the various models of learning, the pedagogues were asked to briefly outline the format, structure and content of their method. Joseph chose not to complete this section given he had recently retired while Rachel did not complete this section given her move into a different teaching area. The models for the other three pedagogues are briefly defined in Table 4, with Indiana presenting detail of his undergraduate and postgraduate models.

The data in Table 4 reveals that group models vary in sample and in operation, the format and content largely dependent on the pedagogue. The respondents were then asked to identify the advantages and disadvantages of group teaching models. Advantages far outweighed disadvantages, and indeed Joseph, Hilda and Nicole indicated that they consider there to be none. Rachel and Indiana both referred to scheduling problems as the fundamental difficulty in offering group lessons with Rachel also referring to occasional problems in detailing with ‘individual difficulties’. Table 5 presents the range and number of advantages identified by this sample.

The range and number of advantages identified in Table 5 propose the value of group models for tertiary piano majors, with the advantages largely a result of the fact that the learning environment is extended beyond the traditional master-apprentice style of delivery to one in which students engage in a range of interactions with their peers.

**Trial model reflections**

In developing a trial model, the pedagogue/researcher took into account a number of factors and implications for practice, including access to equipment, potential group size and sample, pedagogical goals and various strategies to promote self-critical work and peer interaction. Subsequent to this process, trial models involving domestic and international students at all levels of the undergraduate degree have been developed, implemented and evaluated over a period of four academic years. Students in groups of three to five are placed together after consideration of level and a diagnostic evaluation of their skills. While the limitations of this paper preclude the detailed presentation of the cyclical student evaluations, or analysis of various self- and peer-critical data, a sample of the 2002 academic year students’ comments relating to the benefits of working in small groups are evidenced via the following reflections. Students perceive the advantages of the group environment to involve/include:

- More feedback and the learning process is quicker;
- Learning how to teach others;
- Learning to help others and what to listen for which helps you to be your own teacher too;
- Hear what peers are learning, to actively take part in self-critical and peer-critical analysis and therefore learning to be an independent learner;
- There are more interactions/discussion that create a ‘friendly atmosphere’;
- More repertoire/pieces are covered/discussed in group lessons; and
- Sharing of ideas and experience, additional feedback and a more comfortable environment.
The identified advantages, which support those identified in the literature and questionnaire data, propose that group learning environments offer a range of benefits for students. As may be expected with any pedagogical model however, there are disadvantages identified by some students. Given that all participants to date had experienced one to one lessons only, and with only very few students having participated in an occasional master class, some students experienced transitional difficulties in moving into an environment where they are expected to actively contribute in a diagnostic, critical and performance oriented manner. At the same time, there is evidence that these concerns dilute over time as students become accustomed to the environment. Some students also report dissatisfaction due to the perception that individual attention would lead to a greater productivity for them; however analysis of these students’ practice journals and weekly self-reflection tasks reveals a less than desirable work ethic in all cases. Hence the rationale for this view is debatable. Indeed the issue that emerges here is the extent to which all pedagogical models rely on students’ work ethic between sessions and their subsequent ability to contribute to the learning environment.

**Directions and implications**

One of the key implications of this research is to suggest that pedagogues investigate group teaching as a viable and positive learning environment for students. Given the existence of such models in the tertiary environment, and the considerable benefits reported by those pedagogues that employ such methods, there is indeed an opportunity to explore such practices. Certainly, further research is needed not only in terms of the development and trial of group models by different pedagogues/researchers and for different instruments, but there is also a demonstrated need to engage in systematic research and comparison of the learning opportunities offered by all models of instrumental pedagogy. Rather than rest on the traditions of past teaching practices, it is indeed timely that new innovations and methodologies be further explored and developed.

**Contact details**
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James Cook University
Townsville Qld 4811
Email: Ryan.Daniel@jcu.edu.au
References
Table 1: Research findings - Seipp (1976)

<table>
<thead>
<tr>
<th>Area and testing process applied</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance level - Abeles Rating Scale</td>
<td>• Group taught students performed slightly better however not statistically significant</td>
</tr>
<tr>
<td></td>
<td>• The most advanced students performed better when taught one to one while the less advanced students performed better when taught in groups</td>
</tr>
<tr>
<td>Sight-reading skills - Watkins Farmum Performance Scale</td>
<td>• Progress was variable from student to student</td>
</tr>
<tr>
<td></td>
<td>• The progress mean score (group vis à vis one to one) is statistically significant with group taught students progressing considerably more</td>
</tr>
<tr>
<td>Amount of work performed - Weekly assignment sheets</td>
<td>• Group taught students tended to present a similar amount of work, except where extra credits were given</td>
</tr>
<tr>
<td></td>
<td>• Significant variation in the amount of work performed was reported with the one to one taught students</td>
</tr>
<tr>
<td></td>
<td>• One to one taught students as a whole presented slightly more work however not statistically significant</td>
</tr>
<tr>
<td>Interpretive Judgement - Gordon Music Sensitivity Test</td>
<td>• All but one of the sixteen students progressed, the progression variable from student to student</td>
</tr>
<tr>
<td></td>
<td>• One to one taught students as a whole performed slightly better in testing however not statistically significant</td>
</tr>
<tr>
<td>Auditory-Visual music discrimination - Aliferis Music Achievement Test</td>
<td>• All but two of the sixteen students progressed, the progression variable from student to student</td>
</tr>
<tr>
<td></td>
<td>• There was no difference in progress between the two groups of students</td>
</tr>
<tr>
<td>Attitudes and opinions - Student responses to questions using a five-point scale</td>
<td>• Both group averages were above three indicating positive attitudes from students</td>
</tr>
<tr>
<td></td>
<td>• Two significant differences were noted in terms of group taught students’ lack of satisfaction with the type of instruction and individual attention received</td>
</tr>
<tr>
<td></td>
<td>• The mean score comparing the effectiveness of group teaching with one to one was below three for all students</td>
</tr>
<tr>
<td></td>
<td>• Fifty percent of class and fifty-four percent of private students indicated that they would have considered going to another school if they knew they were to be taught in groups.</td>
</tr>
</tbody>
</table>

Table 2: Personal details: group teaching questionnaire respondents

<table>
<thead>
<tr>
<th>Name as pseudonym</th>
<th>Nicole</th>
<th>Hilda</th>
<th>Rachel</th>
<th>Indiana</th>
<th>Joseph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td>40+</td>
<td>30-40</td>
<td>40+</td>
<td>40+</td>
<td>40+</td>
</tr>
<tr>
<td>No. years tertiary teaching</td>
<td>35</td>
<td>11</td>
<td>23</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>No. years private teaching</td>
<td>0</td>
<td>18</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 3: Pedagogues’ modus operandi at the tertiary level: models of piano teaching

<table>
<thead>
<tr>
<th>Name</th>
<th>Breakdown and balance of pedagogy</th>
<th>Rationale and/or influences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole</td>
<td>Week 1 – one hour individual lesson, Week 2 – one hour individual lesson, Week 3 – two hour group lesson (group of 3 students).</td>
<td>Pedagogue choice.</td>
</tr>
<tr>
<td>Hilda</td>
<td>One hour of individual tuition and one hour group tuition per week (two hours total).</td>
<td>Music school policy.</td>
</tr>
<tr>
<td>Rachel</td>
<td>Weekly individual lesson (30-60 minutes) plus regular performance classes.</td>
<td>Very few performance students (3-4) and schedules made group lessons impossible.</td>
</tr>
<tr>
<td>Indiana</td>
<td>One hour of individual tuition and one hour group tuition per week (two hours total).</td>
<td>I would prefer 2-hour group lessons, but it is extremely difficult to schedule them.</td>
</tr>
<tr>
<td>Joseph</td>
<td>Students have individual lessons but are strongly encouraged to take Advanced Keyboard Skills in a class [which] rounds out the typical private lesson (repertoire and technique) by addressing piano skills such as reading, transposing, harmonising, improvising, playing in teams etc.</td>
<td>Pedagogue choice.</td>
</tr>
</tbody>
</table>

Table 4: Analysis of current models of group teaching adopted in the tertiary context

<table>
<thead>
<tr>
<th>Name</th>
<th>Analysis of group piano pedagogy model(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole</td>
<td>Sample: Three students (combination of graduate and undergraduate)</td>
</tr>
<tr>
<td></td>
<td><strong>Frequency/Duration:</strong> Two hours every third week</td>
</tr>
<tr>
<td></td>
<td><strong>Format/Content:</strong> Study of repertoire</td>
</tr>
<tr>
<td></td>
<td><strong>Teaching strategies:</strong> Some demonstration – teacher alone generally, make evaluations.</td>
</tr>
<tr>
<td></td>
<td><strong>Pedagogical goals:</strong> To enhance students’ critical analysis of performance</td>
</tr>
<tr>
<td>Indiana</td>
<td>Sample: Three students (Two doctoral, one masters)</td>
</tr>
<tr>
<td>(one)</td>
<td><strong>Frequency/Duration:</strong> 1 hour per week</td>
</tr>
<tr>
<td></td>
<td><strong>Format/Content:</strong> Repertoire playing and discussion. Emphasis is on interpretation with incidental attention to technique/memorisation.</td>
</tr>
<tr>
<td></td>
<td><strong>Teaching strategies:</strong> Leadership floats from student to student and occasionally to teacher.</td>
</tr>
<tr>
<td></td>
<td><strong>Pedagogical goals:</strong> Improve performance skill, sensitivity, technical skills, critical thinking.</td>
</tr>
<tr>
<td>Indiana</td>
<td>Sample: Four undergraduates students (different year levels)</td>
</tr>
<tr>
<td>(two)</td>
<td><strong>Frequency/Duration:</strong> 1 hour per week</td>
</tr>
<tr>
<td></td>
<td><strong>Format/Content:</strong> Repertoire, performance issues, memorisation, improvisation, reading skill.</td>
</tr>
<tr>
<td></td>
<td><strong>Teaching strategies:</strong> Leadership floats from student to student and occasionally to teacher.</td>
</tr>
<tr>
<td></td>
<td><strong>Pedagogical goals:</strong> Improve performance skill, sensitivity, technical skills, critical thinking.</td>
</tr>
<tr>
<td>Hilda</td>
<td>Sample: Six students (all undergraduates of different levels)</td>
</tr>
<tr>
<td></td>
<td><strong>Frequency/Duration:</strong> 1 hour per week</td>
</tr>
<tr>
<td></td>
<td><strong>Format/Content:</strong> 15-20 minutes technique, then repertoire. Students discuss, critique, record/analyse/evaluate their work. We video classes and they watch for habits. They perform duets.</td>
</tr>
<tr>
<td></td>
<td><strong>Teaching strategies:</strong> Mostly discussing good/what could be better. Working until the necessary change occurs.</td>
</tr>
<tr>
<td></td>
<td><strong>Pedagogical goals:</strong> To enhance students’ critical analysis of performance and to hear students in the performance space because the sound is different from the studio.</td>
</tr>
</tbody>
</table>
Table 5: Perceptions of the advantages of group pedagogy in the tertiary context

<table>
<thead>
<tr>
<th>Identified advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nicole</strong></td>
</tr>
<tr>
<td>- Expand knowledge of repertoire</td>
</tr>
<tr>
<td>- Observe teaching techniques</td>
</tr>
<tr>
<td>- When not on ‘hot seat’ as performer, even more perceptive to concepts presented to classmates</td>
</tr>
<tr>
<td>- Better preparation for group lesson because of peer pressure</td>
</tr>
<tr>
<td>- Transfer of concepts to one’s own repertoire (of those taught to classmates).</td>
</tr>
<tr>
<td><strong>Hilda</strong></td>
</tr>
<tr>
<td>- Interaction</td>
</tr>
<tr>
<td>- Students hear other repertoire</td>
</tr>
<tr>
<td>- Interesting as a teacher to say what I want instead of playing the piece as I would do a lot of in a private lesson</td>
</tr>
<tr>
<td><strong>Indiana</strong></td>
</tr>
<tr>
<td>- Exposure to other group members’ repertoire, technical strengths and weaknesses, reading abilities, sensitivities, questions, ways of thinking and speaking, priorities, ways of ordering and organizing knowledge.</td>
</tr>
<tr>
<td>- Witnessing how the teacher works with the other group members on similar problems.</td>
</tr>
<tr>
<td>- Opportunity to perform for others, and to experience opportunities for leadership within group activities.</td>
</tr>
<tr>
<td><strong>Joseph</strong></td>
</tr>
<tr>
<td>- Excitement of working with (and making discoveries with) others</td>
</tr>
<tr>
<td>- No. of pairs of ears to give feedback</td>
</tr>
<tr>
<td>- Constant playing before others</td>
</tr>
<tr>
<td>- Constant involvement (even when not playing)</td>
</tr>
<tr>
<td>- Opportunities for ensemble work</td>
</tr>
<tr>
<td><strong>Rachel</strong></td>
</tr>
<tr>
<td>- Cooperative learning skills</td>
</tr>
<tr>
<td>- Lots of performance practice</td>
</tr>
<tr>
<td>- Hearing lots of repertoire and how to teach it</td>
</tr>
<tr>
<td>- Appreciation of different learning styles and individual strengths</td>
</tr>
<tr>
<td>- Opportunities for functional skills (improvisation, sight reading)</td>
</tr>
<tr>
<td>- Leadership development</td>
</tr>
<tr>
<td>- Close bonding with other students</td>
</tr>
</tbody>
</table>