**Common objections or questions and suggested responses**

Here are is a list of the most common claims or reactions made by people who doubt the need for alternatively sized keyboards, and some suggested brief responses. The best way to respond is likely to depend on the context – whether the comment comes verbally, via social media, whether the phrasing or tone is sarcastic or serious, and whether the people involved already know each other.

See also the PASK document: ‘Frequently Asked Questions’ for responses that are generally longer and could suit different situations, for example, as hand-outs and for written responses.

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**Comment 1: These instruments are not real pianos/they are just toys!**

**Possible responses:**

- There is no change to the sound generated from an acoustic piano when a smaller keyboard is installed...the sound produced depends on the soundboard, strings and design of the piano itself, not the keyboard.
- If they are toys, then you are saying that Beethoven and Chopin composed on a ‘toy’, or that Josef Hoffman played on one?
- String players who perform on smaller sized violins do not consider them to be ‘toys’. They accept that different sizes suit different musicians.
- So does that mean that large men's bicycles are the only ‘real’ bicycles and all other sizes are ‘toys’?
- The DS6.0 and 5.5 sizes have been proven at performance level by many top level pianists who would not play on ‘toys’.
- They are designed to be enjoyable and empowering, rather than a torture rack for stretching small hands and causing tendonitis and cysts. Toys do not cause pianists to play much better and more comfortably than before.

**Comment 2: It’s cheating!**

**Possible responses:**

- Is it ‘cheating’ to wear running shoes that fit your feet in a race or use a bicycle that suits your body size?
- Cheating is exploiting unfair advantage. The conventional ‘large’ keyboard (large in a historical context) gives an unfair advantage to players with larger hands. Right size keyboards are fairer for everyone.
- Is adjusting the piano stool ‘cheating’?
• When pianists have a choice to play on keyboards that suit them ergonomically this helps to ‘level the playing field’ and make things fairer for all, rather than handicapping half the population as we do now.
• If piano playing were a purely physical competition like running a marathon then the aim might be to find out who can play the most notes in the shortest possible time! Piano playing is an art, not a sport.
• Piano playing requires technical as well as artistic skill. Comparable sports are freestyle skiing and ice-skating events...no-one expects those competitors to all have the same size skis or ice-skates.
• How is it cheating if everyone gets a choice?

Comment 3: But my child/students might want to be concert pianist/s so they will need to be able to play grand pianos in concert halls!

Possible responses:

• The Steinbuhler company in Pennsylvania has been making retrofit alternatively sized keyboards for grand pianos for two decades. Most of these are in North America including in universities where they are used by students and for recitals and piano competitions.
• There is no reason why the major piano companies cannot provide a choice of keyboards for grand pianos, which can be interchanged with the conventional keyboard in minutes.
• Prominent pianists are increasingly performing on keyboards with narrower keys, and demand will only continue to grow as more and more pianists discover the benefits. In 20 years, it is likely that most concert halls will have grand pianos with two or three different sized actions/keyboards.
• Just like smaller sized violins, narrower keys are best for small children so that they can learn sound technique and not develop bad habits caused by a keyboard that is too big for their hands.
• Would you buy an adult's bicycle for your toddler so he or she can ride a larger one later?
• Would you start your teenager off in a racing car when he first learns to drive, just because he might become a Formula One driver?
• It’s important to give your child the best start possible with a suitable ergonomic keyboard that will help to further progress their technique and musicianship and minimise the risk of injury.
• The ‘right’ sized keyboard will benefit your child and also allow them to play advanced pieces when they want to, rather than having to wait for their hands to grow.
• Progress on the instrument should only be limited by talent, not by growth. Having to pick repertoire on account of hand size is frustrating for the student. Alternatively-sized keyboards remedy that.
• You don't buy large size gloves for your kids because their hands might grow into them one day.
• If you want your child to become a concert pianist then you should start them on a piano suitable for their hand size. If you don't, your child could spend wasted months to years unlearning the tension that becomes part of their muscle memory from learning on an incorrectly over-sized piano.
• Even when one has to perform at a venue where only the conventional size is available, swapping between sizes is easy. (See Comment 5.) Practising on a smaller size actually helps one play on a size that is not ideal, rather than the reverse. It just becomes a
matter of choosing appropriate repertoire – which is what small-handed pianists are forced to do now in any case.

Comment 4: But my old teacher/pianist X (Alicia De Larrocha most common example) had small hands and she was a wonderful pianist!

Possible responses:

- How do you define ‘small hands’? Pianists such as Alicia De Larrocha often had/have relatively large hands compared with the ‘average’ adult female, but they may just be smaller than those of many famous (mostly male) concert pianists.
- Pianists with hands that appear small (perhaps delicate bone structure, thin fingers) may turn out to have quite a big reach, which is what is most relevant.
- Alicia De Larrocha could reach a 10th in her youth, which the vast majority of women (at least 85%) cannot achieve. A person’s height is not an accurate guide to their hand size.
- Was this pianist able to play all the repertoire she would have liked to, or did she just choose very carefully? Did she suffer pain or discomfort while playing and perhaps not tell people? (You can't always detect this just by watching someone.) Could she have achieved greater heights with the right sized keyboard or, in other words, did she reach her full musical potential?
- Repertoire choice is key. Most pianists have to limit their repertoire due to hand span limitations. A hand that’s fine for Schubert and Beethoven may not be ideal for some Romantic and 20th century works. (How many pianists can attempt Schumann’s Toccata?) And a very small hand can be fine for Mozart and Bach.
- An elite swimmer who swims in board shorts or jeans would still be a great swimmer; they would just not achieve their potential!
- The smaller the hand, the narrower the choice of repertoire and the more injuries.

Comment 5: Even if I can get used to a smaller size, I’m sure I would no longer be able to play the ‘standard’ keyboard.

Possible responses:

- After the initial adjustment to a different size (normally no more than one hour) pianists have no trouble swapping back to the conventional size – for repertoire that they can physically play on that size. Having access to a keyboard that best fits your hands opens up more repertoire choice that was previously denied.
- String players often swap back and forth between violin and viola, wind players between flute and piccolo or between different-sized clarinets.
- Pianists who specialise in baroque music can easily swap between the modern piano, harpsichord or forte piano.
- After you learn to adjust to driving on the ‘wrong’ side of the road, you find you can readily drive on that side again, even if years later.
- The human brain learns patterns rather than absolute measurements – it is like learning to climb stairs as an infant; you learn the basic patterns of movement so you can instantly adapt to any set of stairs that you come across without looking or thinking.
- Switching keyboard sizes is a skill you can practice and learn - and it is much easier than you expect it will be. Reaching an interval wider than your hand span can never be learned, so increase your repertoire with a narrower keyboard and know that you can play on both if you want.
Comment 6: I don’t want to turn up to perform somewhere and find that the keyboard is not what I’m used to playing on. It’s not practical to take your own piano/keyboard.

Possible responses:

- If it is a ‘serious’ performance in front of an audience, then a pianist would expect to be told what sort of piano will be available in advance. So if the keyboard size is not ideal for them, they should choose repertoire accordingly...this is what all small-handed pianists have to do now.
- Following the initial adjustment, swapping between different sizes is easy. (See Comment 5.)
- For a ‘serious’ performance, any pianist would expect to be given time to warm up before performing.
- Currently, pianists may find they have to play an upright piano instead of a grand – this adjustment is comparable to swapping between sizes.
- For casual, ‘non-serious’ performing, perhaps in someone’s home or in a public place, nobody would expect a pianist to sit down and play a Liszt Etude perfectly with no warm-up.
- Gig pianists would be able to take their own digital keyboards to performances.
- Within the foreseeable future, it is likely that concert grand pianos in major performance venues will have at least two or three keyboard sizes available.

Comment 7: It’s all a matter of technique. Hand size is a non-issue. Many famous pianists have had small hands.

Possible responses:

- Such statements have no basis according to scientific principles of ergonomics and biomechanics, performing arts health research, nor can they be reconciled with the overwhelming evidence from pianists who have experienced alternatively sized keyboards.
- The so-called ‘small hands’ of famous pianists often turn out to be relatively large or at least ‘average’ compared to the adult population as a whole. Or – these pianists deliberately limited their repertoire.
- How many top-level female pianists have world class recordings of the complete Chopin or Liszt Etudes, or even Beethoven Sonatas? Hand span issues generally mean that not all can be performed at the top level by most women.
- If keyboard size is not an issue, then why has a famous conservatory in China encouraged young pianists to stretch their fingers with chopsticks or even recommended hand surgery? Why are children encouraged to use small violins?
- See also Comment 4.

Comment 8: I’m happy with my hands/reertoire. I’ve invested many years in developing ‘work-arounds’ and do not want to see that effort wasted.

Possible responses:

- Nobody is forcing you to play on a smaller sized keyboard...but many other pianists would like the choice.
Smaller-handed pianists have often had to develop a refined technique just to avoid injury and survive as a performer...this effort will not be all wasted when you try a more appropriately sized keyboard. Good technique will in fact help you adjust quickly, and open up new possibilities in repertoire and musical expression.

Comment 9: But what about men with fat fingers who have trouble with the current keyboard? Surely they would like an even bigger keyboard?

Possible responses:

- There is no evidence that there is significant demand for keyboards larger than the conventional 6.5 inch octave keyboard, which is indeed 'large' by historical standards.
- While there are some Caucasian men who have difficulty fitting their fingers between the black keys, there are possible solutions in relation to design of the black keys. Black key shape and size is not standardised.
- Men with thick fingers do not necessarily have a very large hand span, so may not want to lose some of their available reach by having a keyboard with even wider white keys.
- Pianists worldwide – even including many concert pianists – overwhelmingly complain about 'small hands' not 'large hands'.

Comment 10: But it is going against a long 'tradition'!

Possible responses:

- Piano keyboards have not always been the size they are today. The current 6.5 inch (16.5 cm) octave is arbitrary and large by historical standards.
- The keyboard we still have today was designed to produce a big sound in large concert venues and suited the needs of some famous European male virtuosi in the late 19th century. It does not suit all pianists today – women, children and those of Asian descent.
- There is nothing 'magical' or 'sacred' about today's conventional keyboard.
- Pianists in the 1800s would have been used to playing keyboards of different sizes.
- The basic premise of ergonomics is to adapt tools to humans, not the other way around.

Comment 11: But what about child prodigies? They have small hands but can play the conventional keyboard without a problem!

Possible responses:

- Firstly, children’s hands vary enormously. Ten-year old boys will often have hands larger than most adult women. Sometimes even very small children can have hands much bigger than average for their age: an example being a renowned female pianist in Australia who recalls that she could play octaves at the age of 4 – allowing her to play Beethoven’s Pathetique Sonata. She was accepted into a prestigious US music school at the early age of 11 and not surprisingly, her hand span is unusually large for a woman.
- Children will choose repertoire that they can manage at their stage of development, which can include quite virtuosic works but without the large stretches and thick chords favoured by certain composers. They may also omit notes or modify the score if needed.
- As child prodigies will normally be playing the piano for hours a day they are especially prone to developing unhealthy and faulty technique if the keyboard is the wrong size, potentially leading to injury later on.
FURTHER INFORMATION

www.smallpianokeyboards.org

www.paskpiano.org

YouTube: www.youtube.com/watch?v=tj1RNLn8K6g

For several hand-out documents (including this one) that can be downloaded and printed, go
to: www.cicadabay.com/pianos