ST ANDREWS MUSIC PARTICIPATION YEAR ONE REPORT

IONA BAILLIE

Executive Summary

St Andrews Music Participation (StAMP) is a Fife-based music education programme which aims to invigorate the rich local heritage of community brass band playing, benefitting communities and individuals alike. The goals of StAMP are:

- *to raise aspiration and attainment, and improve health and wellbeing by providing opportunities for children to participate in joyful music-making;*
- *to build strong, sustainable and supportive partnerships with schools and community groups across Fife that can nurture future music makers;*
- *to energise and re-invigorate brass bands across Fife;*
- *to develop innovative methods of delivery and resources for supporting brass performance;*
- *to provide inspirational performance opportunities to young brass players across Fife;*
- *to research and disseminate the project's impacts both socially and artistically, as well as to create opportunities for others to learn about delivering community music projects.*

The project is led by the University of St Andrews in partnership with the Wallace Collection, Fife Music Service and Fife Brass Bands. StAMP aims to be socially responsible, and its free Discovering Brass programme is at the heart of this. Discovering Brass is a programme which can be adapted for online or blended delivery, and incorporates both traditional and innovate pedagogical approaches to teaching brass: it consists of 16 weeks of group teaching using the natural trumpet followed by progression into local brass bands on chromatic brass instruments. Discovering Brass is interdisciplinary and teaches children from the outset that music-making is fundamentally creative and not reproductive. In doing so, it teaches children high-level critical skills that are life-enhancing.

The aims of StAMP, and in particular Discovering Brass, focus on all socioeconomic groups, but particularly those who would not otherwise be afforded these types of musical opportunities. It is therefore of vital importance to investigate any influences that socioeconomic background may have on engagement in these programmes. It is also important to assess the progress of the project with regards to the initial aims set out, as well as against comparable projects. This will allow tailoring of work into the future and potential collaboration in a field which is relatively data-poor. Through assessing trends in data and suggestions/feedback from surveys, StAMP will be able to analyse and strengthen methodology and adapt to the needs of its participants.

This report describes the background of StAMP as well as its activity over the last year, going on to assess and evaluate to what degree the aims have been achieved over the year.

StAMP has been operating for one year now and so far, 164 children have participated in Discovering Brass over two intakes, with the third to begin in September 2021. 71 of these children have progressed to playing in brass bands and 21 have performed at an in-person concert this summer. Attendance and progression rates have been consistent and high (76% and 52% respectively) and feedback suggests this may be in part related to online delivery developed as a result of the pandemic. Analyses described within the report suggest that socioeconomic background (as measured by rank categories of the Scottish Index of Multiple Deprivation) does not influence attendance or progression rates. This is very encouraging as studies show

how the SIMD rank topics appear to influence general educational outcomes. Children with Additional Support Needs also have similar (if not higher) attendance and progression rates compared with the overall group.

Over the year, six other events have also been run by StAMP, with over 681 attendances and 13,157 views on social media. Many of these attendances reflect involvement from Discovering Brass participants, but the online format also allowed involvement from brass players all around the world.

The response to StAMP's activity has been very positive, with progressing and non-progressing participants of Discovering Brass both rating the experience highly at 4.8/5, and other events rated at around 4.4/5. Survey responses show that Discovering Brass participants came a long way in their learning and had a lot of fun doing so. The experience brought families more into contact with their communities and provided an opportunity to come together and make music during a time of restrictions. The social impact of StAMP's activity was acutely felt by participants; many participants of StAMP's other events also noted their appreciation for the rare chance to play together during the lockdown. Many even signed up for these events as a direct response to the lockdown, and although some participants missed the in-person element, for others, the online delivery allowed them to participate in ways that would not have been possible with an in-person delivery.

The success of the first year of StAMP shows that the Discovering Brass formula is an effective, enjoyable and accessible method of teaching brass which results in creative, curious musicians going out into the community. Participants are proud of their playing and benefit from the positive and encouraging teaching, which they praise in the feedback. The uniqueness of the Discovering Brass pedagogy, paired with the additional opportunities to get involved in other StAMP events creates a valuable, broad and equitable experience which features the building blocks to create positive change in children's lives.

This report concludes that in the first year of StAMP activity, there has been positively measurable progress on meeting the project aims. For example, there is evidence that participants of Discovering Brass thoroughly enjoyed their experience and that individuals improved their self-worth and confidence in the process. The programme has also resulted in an influx of young brass players to local bands and an increase of awareness of brass bands in participants, with StAMP engaging increasingly more bands and schools as the project progresses. The swich between the pre-pandemic classroom-set plan for Discovering Brass and the online version which was put into effect resulted in innovations in teaching practice in addition to those drawn up in the planning year. Together, Discovering Brass has gone a long way to meeting the aims of StAMP, providing inspirational playing opportunities to Fife children of all backgrounds and a delivery format which can be a model for similar projects around the UK. The other events run by StAMP were also designed with the project aims in mind and have had effects both close to home and further afield, building a worldwide StAMP community.

Key Recommendations

1. **Maintain the offer of technical support for online delivery.** There are already resources available to support participants of StAMP events and programmes which are sent out before meeting, but for some, this may not be enough, even though using software like Zoom has been widespread during the pandemic. Offering a practice Zoom call to those unsure about the software could potentially boost confidence and enjoyment in more nervous participants, especially in the one-off events to which different people can turn up each time.

2. Ensure the delivery style of teaching continues to integrate **pandemic-related innovations and adaptations** as online learning transitions into hybrid or in-person learning while also…

3. Using the transition to increased in-person learning to **improve the feeling of connection by introducing further performing, social and bonding elements** to Discovering Brass.

4. Put further measures into place to **support shy and more nervous children,** especially during the transition between lessons and brass bands.

5. Put measures into place to **minimise the effects that leaving primary schools** may have on engagement, noted in other programmes.

6. When marketing Discovering Brass to potential participants, focus particularly on schools in **more disadvantaged areas** so that groups from more deprived backgrounds are more strongly represented in Discovering Brass.

7. Use the strong track record for **supporting children with ASN** to increase representation of these children in further intakes, allowing the programme to be more inclusive of these groups.

8. Over time, use the **increasing body of data** to compare in-person engagement to online engagement, and look more closely at the engagement of those in the bottom deciles of the SIMD.

About the report author:

Iona is the StAMP Summer Intern (2021) and is a recent graduate of the School of Earth and Environmental Sciences at the University of St Andrews. She has been involved in music at St Andrews for the last five years, through participation in ensembles, modules and in her role as Vice- and Co-President of the Music Centre. In addition to playing the flute, she has enjoyed spending time in the field, undertaking geological mapping as part of her degree, so values the interdisciplinary opportunities the Music Centre has offered.

Acknowledgements:

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Front cover image: Participants of Discovering Brass playing at the outdoor Kellie Castle concert this summer as a part of the East Neuk Festival.

Photo credit: David Behrens, courtesy of East Neuk Festival.

Contents

1. Introduction

St Andrews Music Participation (StAMP) is a newly created, five-year music education project in Fife that aims to support and invigorate the cultural heritage of brass playing in schools, in the community, and across the world. The project has been operational for one year, in partnership between the University of St Andrews Laidlaw Music Centre, Fife Music Service, Fife Brass Bands and The Wallace Collection, and has been awarded The RCS Award for Education/Community Project in the Scottish Awards for New Music 2021.

Historically connected to industry, Fife has a long and established tradition of brass bands with over 130 in existence in the nineteenth century. Though many of the pits, mines and factories have closed, the music continues to this day with eight active bands operating in the region.

1.1 StAMP aims and overview

StAMP aims to be a socially responsible project which can be an example for other centres for musical learning. The locus of Fife is central to the project: the industrial heritage of the area has a rich brass band culture but also many socioeconomic issues, including increased child poverty in former mining towns (Scottish Government, 2017). Living in poverty has wide-reaching effects on children, such as increased stress levels and an inability to thrive in school due to issues such as hunger and lack of equipment or technology.

The goals of StAMP are:

- *to raise aspiration, attainment and improve health and wellbeing by providing opportunities for children to participate in joyful music-making;*
- *to build strong, sustainable and supportive partnerships with schools and community groups across Fife that can nurture future music-makers;*
- *to energise and re-invigorate brass bands across Fife;*
- *to develop innovative methods of delivery and resources for supporting brass performance;*
- *to provide inspirational performance opportunities to young brass players across Fife;*
- *to research and disseminate the project's impacts both socially and artistically, as well as to create opportunities for others to learn about delivering community music projects.*

StAMP has set out to fulfil these goals through a variety of events, workshops and programmes, involving primary and secondary school children from Fife as well as university students, staff, and professional and amateur musicians from around the world. This will lead to long-lasting community benefits as well as the development of a new musical pedagogy which can be an example to similar projects across Scotland and beyond.

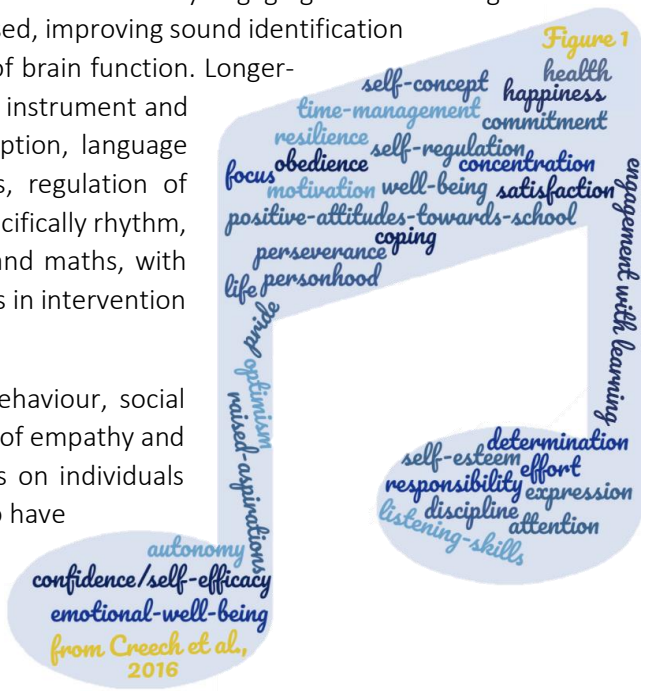
The heart of StAMP is the Discovering Brass programme, which in its first year aimed to be an in-school introduction to brass playing, taught using the natural trumpet. While the coronavirus pandemic meant that Discovering Brass took place online, children were still given access to polycarbonate valveless trumpets as planned and given lessons at home. In addition to these lessons, participants were given the opportunity to progress to playing chromatic brass instruments in a local brass band, as well as participate in other StAMP activities which incorporate multidisciplinary learning on topics such as science, history, anthropology and language.

1.2 Scientific and pedagogical basis: how can stamp use music to achieve its aims?

This section outlines the evidence that active engagement in music-making can influence wellbeing and attainment in children, explaining why music is the ideal method for addressing StAMP's aims.

There is a comprehensively researched scientific basis as to the benefits of music engagement on the brains and general lives of children. Whilst a complete review of this is beyond the scope of this report, particularly given the proliferation of such reviews coming from the sector in the past decade, a snapshot of some literature is given here for any reader unfamiliar with the area. The majority of this review has been drawn from Hallam's 2010 book *The Power of Music*.

Neuroscientific studies show that being exposed to external stimuli and learning new things changes the structure and function of our brains on both the short- and long-terms, and that the material and method of learning impacts how these changes manifest. Music, in particular, is shown to have especially beneficial and far-reaching effects on our brains. Evidence shows that actively engaging in music during childhood structurally affects how sound is processed, improving sound identification and leading to knock-on effects of other aspects of brain function. Longer-term processes which may also be affected by the instrument and degree of musical training include speech perception, language skills, literacy, auditory memory, spatial abilities, regulation of attention, self-regulation and creativity. Music, specifically rhythm, is used to help children struggling with reading and maths, with high-quality music tuition shown to boost IQ scores in intervention studies.



Engaging with music may also improve mood, behaviour, social skills, and self-esteem, as well as the development of empathy and emotional sensitivity. Figure 1 shows the impacts on individuals noted by Sistema Global (Creech et al., 2016), who have carried out numerous studies showing the positive impacts of music on many aspects of children's lives.

While it appears that engagement in music helps aspiration, motivation and attainment across the board, it may be that more able children are attracted to music in the first place, limiting the causality interpreted. Some studies have shown that those already engaging better in school are more likely to participate in musical activities, and if this is the case those already struggling may be missing out on these positive effects. However, when involved in music, children of lower abilities who may be disaffected are particularly influenced by the social impacts on cohesion and bonding. Disadvantaged children engaging in music may benefit from better social play skills, better education at home and better behaviour in both children and parents, with group music-making also reducing aggression and low self-esteem in children with behavioural problems. Music can reduce stress and anxiety (Hallam, 2010), which may particularly affect children from households affected by poverty (Wallace et al., 2019).

Scottish Government CfE reports (2018) show how children from more deprived areas perform more poorly in school than children from less deprived areas. The *Growing Up in Scotland* study (Bradshaw, 2011) shows

that children from low-income families may be 10-13 months behind their peers at school entry, as factors such as parent income/education, diet/nutrition, family structure and home life, housing, neighbourhood, may all affect school performance (White, 2018). These are children who would benefit from the positive effects discussed above, but who may not be able to afford or engage properly in music-making due to their living situation and income.

There are various musical outreach programmes operating in Scotland which report the positive impacts, discussed above, on children from low-income families. The arts outreach project ASPIRE (based in some of the most deprived areas of Dundee) shows participation increases motivation, skills and Growth Mindset development, resilience, aspiration, enjoyment in learning and concentration (Clancy, 2017). Sistema Scotland runs Big Noise centres in the more deprived areas of Stirling, Glasgow and Aberdeen (Harkins et al., 2019), noting that engagement in their programme leads to improvements in confidence, aspiration, pride, communication, leadership, team-work skills, academic skills and discipline, as well as aspects of wellbeing – "*resilience, happiness, sense of belonging and fulfilment".*

The benefits of engaging in music during childhood are numerous and far-reaching. For children of low-income households who may be disadvantaged in schools because of their home environment, music engagement can be a useful tool to improve aspiration and attainment. **Hallam's work (2010) shows that important factors in reaching the positive effects discussed include quality of teaching, early engagement, long-term involvement, group music-making, performance opportunities, style of teaching and relatability to the children being taught, and this is accounted for in the StAMP pedagogical approach.**

1.3 Why brass bands?

This section summarises the historical context of brass playing in Scotland, and Fife in particular, and outlines the place of brass banding in music education.

British brass bands are one of the UK's historical musical inventions and are a unique part of our cultural heritage. They provide a community-based setting for inclusive and joyful music-making which offers musicians of all abilities the chance to learn, play, compete and socialise.

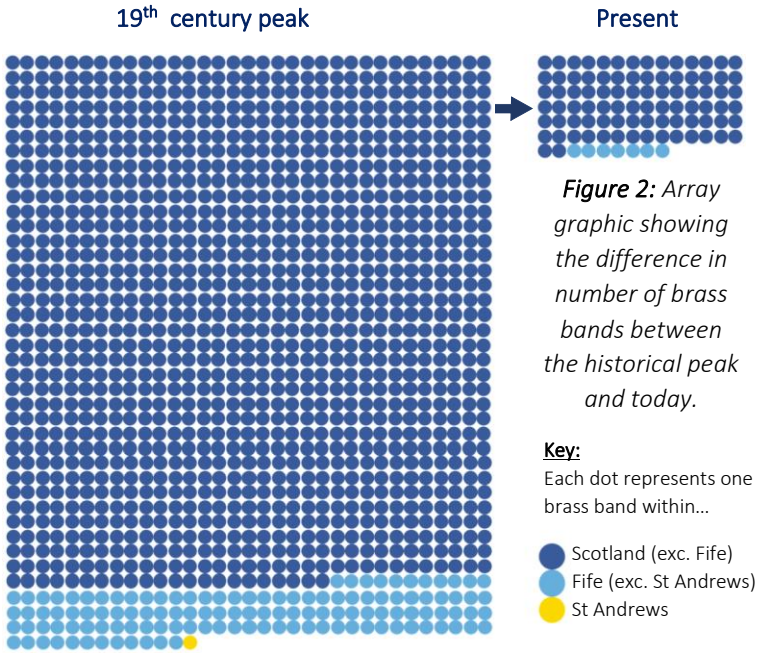


Figure 2: *Array graphic showing the difference in number of brass bands between the historical peak and today.*

The brass band movement developed during the Industrial Revolution alongside other organised group activities such as sports teams and choral societies, with the rail network allowing increased travel for participation and competition (Herbert, 2000). The Scottish brass bands first came together to form a formal association (the Scottish Brass Band Association) in 1895. At this point there were approximately 1300 brass bands in Scotland, and local bands were a huge source of community pride (Wallace et al., 2019). Brass bands spread out from

the UK, particularly to European and former Commonwealth countries, but over time the numbers of bands at home dropped. There are now 93 brass bands in Scotland with seven of those in Fife (down from a peak of 123). The Scottish Brass Band Association still exists and now also runs the National Youth Brass Band of Scotland which involves around 250 children over three bands (Wallace et al., 2019).

There are currently no brass bands in St Andrews (see Figure 2), but between 1879 and 1950 the St Andrews City Brass Band was an important and very active part of the community (Craig, 2020). They would perform at weekly concerts and at historic events (such as Queen Victoria's Jubilee), as well as travel across Scotland to support industry excursions (Craig, 2020). The band disbanded due to a lack of experienced players after the decline in the band caused by the war and popularisation of the radio.

In spite of the dwindling numbers (Figure 2), brass Bands are still an intrinsic part of the musical culture of the UK and provide an important setting for music-making and learning. Unlike in formal music education environments, learning an instrument in a brass band setting involves primarily listening to others and learning by aural transmission (Wallace et al., 2019). Skills in music notation, theory and reading sheet music are learned more passively, with the focus being on ensemble playing and a deep engagement with the gestalt of sound.

1.4 The StAMP pedagogical approach

This section outlines StAMP's unique pedagogical approach which has been designed around the aims, science and brass band history detailed in the previous sections.

StAMP offers high-quality and long-term (months to years) music education which utilises our knowledge of the cultural, historical, scientific and pedagogical basis of brass playing. Its main tool for educating young people is its Discovering Brass programme, which consists of a 16-week programme of group lessons on the natural trumpet followed by community progression to playing brass instruments in brass bands. Discovering Brass has run for nearly a year and is about to recruit its third intake of local young people (aged 7-17).

> *"At the University of St Andrews Music Centre, we believe music can transform lives and have a positive impact on anyone. StAMP provides opportunities that set children up with the potential to start a life-long journey in music. Children will all be supported to continue their musical journey in their local brass band."*

The Discovering Brass method is based on the founding principles of enhancing curiosity (and a give-it-a-go attitude), fun and creativity in participants (Figure 3) within a framework of positivity and encouragement. It gives young people the freedom to create music at a very early stage, empowering them to understand music-making as fundamentally creative rather than reproductive. There is a focus on musicianship and brass skills over conventional trumpet technique, music literacy and theory, with the goal of creating a cohort of "*curious musicians who happen to play brass*". It encourages improvisation and creativity which in many other music education settings are seen as advanced

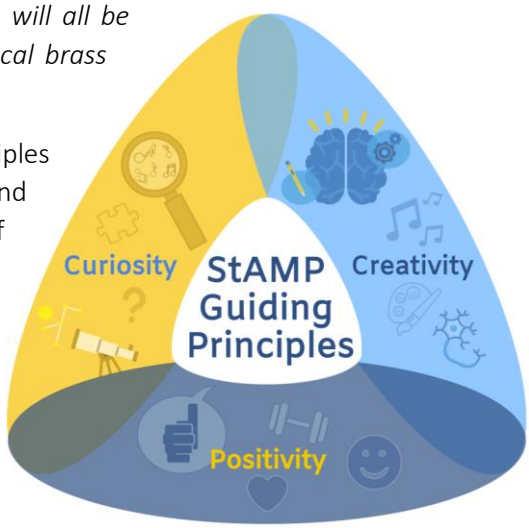


Figure 3: *StAMP's Guiding Principles*

skills built over an ability to reproduce music from notation. By not imposing a musical aesthetic from the western classical tradition, Discovering Brass gives participants a more engaging experience: it invites children to explore music from their own perspective and not that of an external authority.

> *"With this, the young person is very much part of the creativity right from the very beginning… The young person is completely engaged in the process."* – Tony George (tutor)

When you teach children to improvise you are teaching them to create sound out of silence as well as develop sound dialectically. But for children, silence is an invitation to hear all sound: bringing a single sound out of silence is a highly critical and conscious act – so too is to is the act of contributing sound to other sounds. This high-level cognitive skill is one of decision-making; the child is considering, 'What sounds can I play? What sounds could I play? What sound do I wish to play?' After playing, the child can consider, 'What was the significance of my sounds, of the sounds of others, of the sounds of us all?' StAMP believes that music, and specifically improvisation, teaches cognitive skills which are fundamentally based on decision-making, discernment, selection and choice, and that in our age of information abundance, that these are very necessary critical skills.

The original plans for in-person teaching were adapted due to the switch to online learning, with the previous structure distilled to work better in online groups. The group sizes were originally larger than the <10-person class sizes run because the polycarbonate instruments were designed to sound good in groups of about 30. A lot of focus in the online setting had to be given to describing how to do things (such as embouchure) rather than showing and this often led to positive and innovative adaptations which will be utilised during in-person delivery.

The initial lessons take place using polycarbonate natural trumpets, which are excellent instruments for teachin, and ideal for online delivery. There is no need to explain mechanisms or fingerings as the instrument is valveless, so the focus is more on the sound, which is best in large groups, further adding to its suitability. It is physically light and robust (ideal for young players) and, operating on the harmonic series, it allows for interdisciplinary leaning as well as a smooth transition to other, fully chromatic brass instruments.

2. Activity to date

StAMP underwent planning stages for the five-year programme during the 2019-2020 academic year and set to involve children from 11 schools (Lumphinnans, Foulford, Balmullo, Castle Hill, Carleton, Markinch, Dunnikier, Valley, Denbeath, East Wemyss and Bulcurvie) and five brass bands based in Cupar, Kirkaldy, Levenmouth, Glenrothes and Cowdenbeath. The onset of COVID restrictions and uncertainties about the following academic year led to a switch to online learning and the project was quickly adapted to meet the challenges these changes brought. Originally StAMP events would have been predominantly in-person, most of the activity to date has been online (via Zoom), with a few recent exceptions as the local rules have relaxed.

After one year of planning and one year of delivery, 164 children have been taught over 414 lessons in the Discovering Brass programme. Other StAMP events such as masterclasses, workshops and concerts have had 681 attendances and 13,157 watches cumulatively. Figures 4 and 5 show the activity to date.

2.1 Brass Camp and Discovering Brass

The flagship StAMP event was the online Brass Camp. This was run over three consecutive Saturdays in July 2020 and was open to children and adults of any age and ability. It was formatted as virtual tents based on playing ability and instrument, with warm-ups, ensemble playing, masterclasses, panels, interviews, talks, quizzes, films and a final concert. The online nature allowed not only a rare opportunity for music-making during the national lockdown, but also for over 200 people from around the world to come together to learn about brass playing.

A full report on the Brass Camp can be found here.

The Brass Camp was also the setting for the initiation of the Discovering Brass programme, with 76 children from central Scotland being given polycarbonate natural trumpets so that they could experience lessons in small online groups at no cost. These children were given the opportunity to learn how to play brass instruments from scratch at the Brass Camp and continue to take regular lessons should they so choose.

56 children chose to progress to weekly lessons as part of the first intake of Discovering Brass (see Figure 4). They were taught by Tony George (supported by Denise Crichton-Ward and John Wallace) in small groups of one to seven between September 2020 and February 2021, following the innovative and fast-paced approach described in 1.4. In February 2021, 30 of the 56 children progressed, with 16 joining their local brass bands (Tullis Russell Mills Band, Clackmannanshire and District Brass Band, Kingdom Brass Band, Cupar Beginners Brass) and 14 continuing with lessons in areas where there are not yet bands working in

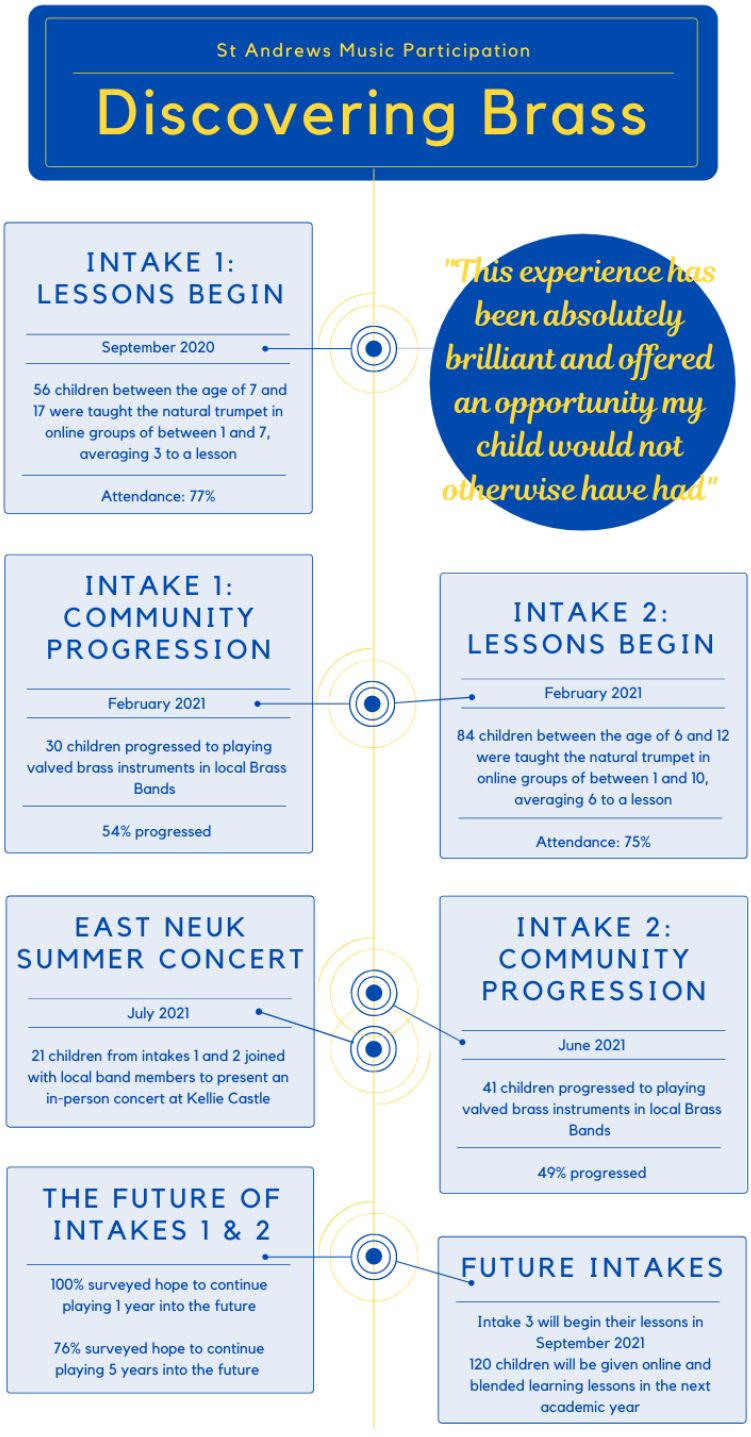


Figure 4: Flowchart showing StAMP activity regarding Discovering Brass

partnership with StAMP. Without exception, band directors were impressed at the level of playing demonstrated by all progressing participants.

At this point, the second intake of Discovering Brass began their lessons. The second intake was larger, with 84 children being taught in groups of one to ten. The flexibility of online delivery enabled the tailoring of class sizes based on the educational needs of the children and demand for popular timeslots and this caused the variability in class sizes seen. 41 children from intake two progressed in June 2021 – with additional bands now involved such as Dysart Colliery Silver Band – and a month later, the first completely in-person StAMP event took place at Kellie Castle, Fife. 21 children from intakes one and two came together with local band members and the Wallace Collection to perform an outdoor concert as part of the East Neuk Festival.

2.2 Other StAMP events

Over the course of the year, there have been several other online events and workshops run by StAMP, which have been attended by Discovering Brass pupils as well as other children and adults from across the UK and abroad. A timeline of these events displaying key statistics such as participation and reach is shown in Figure 5. These have been well attended with a diverse range of music-making and learning opportunities and many guest musicians giving talks, seminars and masterclasses.

The online Brass Camp, discussed previously, was delivered by Laidlaw Music Centre staff, members of The Wallace Collection and Solstice Brass, as well as guests Marco Blauuw, Christine Chapman, Trevor Herbert, Peter Holmes and Arnold Myers.

For those children who began their StAMP journey with the Brass Camp and continued into Discovering Brass, there was the opportunity to keep playing with the Wallace Collection at the StAMP Virtual Concert 'Under Stars and Satellites', where they joined live as a 'Zoom Wall' in the recently opened Laidlaw Building. They also had the chance to explore the connections between music and astronomy with Dr Anne-Marie Weijmans and composer Andrew Knight-Hill (from the universities of St Andrews and Greenwich respectively) and watch the internationally renowned trumpeter and composer Markus Stockhausen perform live from Germany, and the Royal Scottish National Orchestra Brass Quintet.

This event was run for participants of Discovering Brass and was comprised of workshops and a final concert. 67 members of Discovering Brass attended and the concert (found here) was viewed by 2,582 on social media.

In the same month as 'Under Stars and Satellites', the first Virtual Conservatoire took place, attended by nearly 100 children and adults of all playing abilities from around the world, including many from the Discovering Brass programme. Using the positive feedback and experience of running the Brass Camp, the Virtual Conservatoire was run on Zoom and featured masterclasses, play-along sessions and seminars. The feedback from this event demonstrated strong demand for more, and a second Virtual Conservatoire was scheduled for March 2021.

The first event of 2021 was an online workshop delivered to 70 members of the Scouts. This interactive session introduced the world of brass through its history, science and musicality in a fun and exciting way involving body percussion, musical games and craft. It was led by members of the Laidlaw Music Centre staff and StAMP tutors and a recording of it can be found here.

The following month, in March 2021, the second Virtual Conservatoire ran, co-promoted by the Royal Irish Academy of Music and New Music Dublin, featuring The Wallace Collection, Richard Michael, Russell Gray, Tracey Redfern, Andrew Knight-Hill, Stuart Harris Logan and yoga instructor Shams Abu-Tayeh. Over 100 children and adults of all playing abilities attended from around the world, with a wide variety of workshops including yoga breathing, playing by ear, contemporary extended techniques, as well as a play-along with the Wallace Collection and a dive into the archives of brass instruments and manuscripts. Both Virtual Conservatoires were free to attend.

Following the success of the multidisciplinary 'Stars and Satellites' workshop/concert event, a collaboration event with the Department of Earth and Environmental Sciences took place on the same day as the second Virtual Conservatoire. 'Ebb and Flow: The Pulse of Our Planet' comprised of workshops with geophysicist Dr Richard Bates for Discovering Brass participants (115 attendances) followed by a concert which aimed to musically explore our oceans. The concert featured the Wallace Collection, Whitburn Band and Discovering Brass participants in premiering Pippa Murphy's 'Ebb & Flow'. The project was linked with the Museums of the University of St Andrews' 'Dive In' exhibition and supported by the Scottish Oceans Institute and MASTS People Ocean Planet initiative. A recording of the concert can be found here.

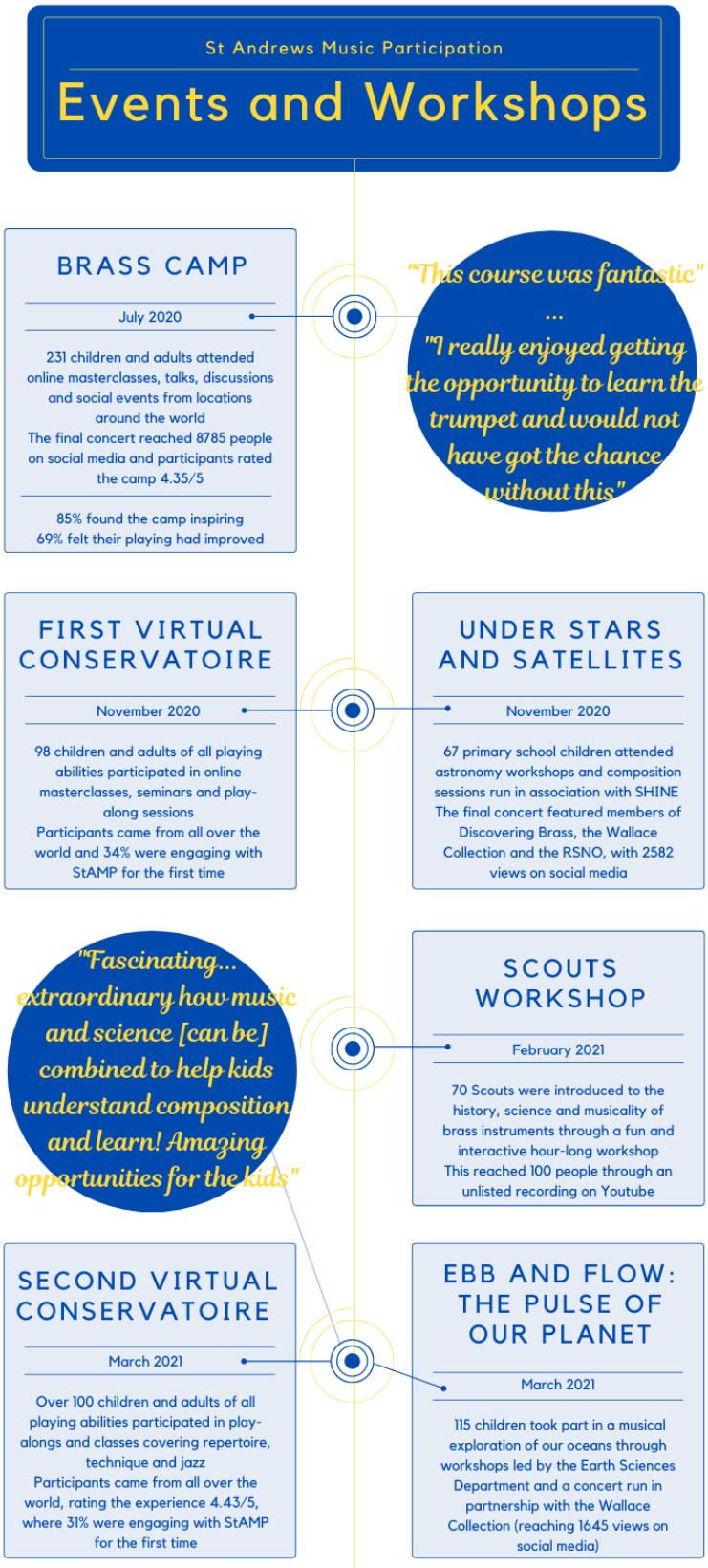


***Figure 5**: Flowchart showing StAMP activity regarding events and workshops other than Discovering Brass.*

2.3 Looking ahead

The third intake of Discovering Brass will begin lessons in September 2021. As restrictions ease, it is expected that a mix of online and blended learning will eventually take place. Around 120 participants are expected over the next academic year.

The Discovering Brass experience will naturally evolve over the transition to more in-person learning and the resulting adaptations in group size etc. that result from this. Another change which is anticipated is a bolstering of online resources for practice which will enable participants to practise accurately between lessons, using backing tracks. There is currently not a focus on practice so this may improve uptake of brass playing skills for participants of intake three.

Other StAMP events are also being planned for the coming academic year, with the first of these to be the StAMP Brass Weekend, running at the end of September. The StAMP Brass Weekend will give young brass players from Fife and Clackmannanshire (of any brass instrument) the opportunity to take part in workshops alongside the National Youth Brass Band of Scotland, The Wallace Collection and Fife Brass Bands, followed by a live-streamed final concert. This event is entirely interdisciplinary: the final concert is called 'Stars and Spectra'; participants will learn about how light is used by astronomers to discover the story of the universe. It will give participants of Discovering Brass their first experience of playing in a full brass band as part of a professional performance, as well as provide inspirational musical role models in the NYBBS players. This event will align with the StAMP aims for accessibility and social responsibility, fostering links with communities (through the brass bands involved) and providing opportunities for joyful music-making.

3. Methods

Data from several evaluation surveys and project updates from the two years were used in addition to relevant external literature in order to research this report. Additional feedback was gathered through surveys, interviews and through gathering comments from Facebook. 42 participants/parents responded to Discovering Brass surveys, 52 responded to the Brass Camp and 40 to the Virtual Conservatoire evaluation survey. Additionally, an interview was conducted with Tony George (Discovering Brass tutor).

Numerical data was gathered from Zoom call logs in order to create registers, which were used to extract attendance and class size figures. This data was also used for a postcode analysis of Discovering Brass participants whereby Scottish Index of Multiple Deprivation 2020 (Scottish Government, 2020) ranks (for income, employment, health, education/skills, housing, geographic access and crime) were obtained for each child using their postcode, and these ranks compared to their attendance and progression status. Analyses involved using linear regression modelling between attendance data (for each intake separately and combined) and Scottish Index of Multiple Deprivation (SIMD) ranks (all categories), as well as using box plots to compare attendance in the subsets of participants representing those living in below and above average ranked postcode areas (for each SIMD rank category). Box plot analyses were similarly used to compare the ranks between the groups who progressed/ did not progress.

The resulting feedback, data and statistics were compiled and compared, where possible, both internally and externally, to similar types of projects running in the UK.

4. Findings

4.1 Engagement and participation in Discovering Brass

Participation was very high in Discovering Brass despite the complications brought about by COVID and changes to school involvement. Discovering Brass aimed to involve 200 beginner children per year and so far, 160 children have participated (56 in intake one and 84 in intake two, with a further 20 attending at Brass Camp only). The age range was narrowed from 7-17 in the first intake to 6-12 in the second because of social factors and online group dynamics, as groups with similar age ranges were easier to tailor for. The age group was also brought down as younger children had a better progression rate and found it easier to interact with each other, with older children also not needing the online social experience as much as the younger groups.

In pre-pandemic planning stages, it was the intention to target participants from lower income backgrounds who might not otherwise have had the opportunity to play a brass instrument. These children would be from the catchments of Lumphinnans, Foulford, Balmullo, Castle Hill, Carleton, Markinch, Dunnikier, Valley, Denbeath, East Wemyss and Bulcurvie schools in order to revitalise the local brass bands of those areas (Cupar, Kirkaldy, Levenmouth, Glenrothes and Cowdenbeath).

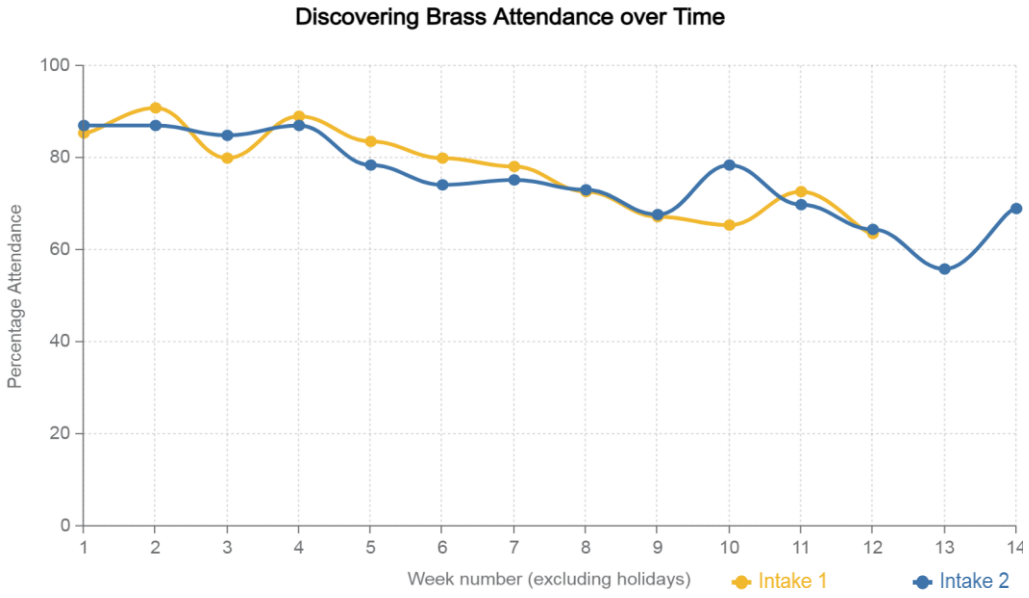


***Figure 6**: Graph showing the trends in attendance between the two intakes of Discovering Brass, plotted against week number rather than date for ease of comparison.*

The overall attendance for Discovering Brass was excellent at 76%, with only a 2% difference between the two intakes (see Figure 4). Figure 6 shows the pattern of attendance over the period of online teaching for each intake (from beginning lessons to community progression), and it can be seen that both intakes show similar temporal trends in attendance. Both show consistently high attendance (starting at nearly 90%) with a drop-off towards the end of the term (still finishing at over 60%). In comparing the first and second halves of the teaching period, intake one attendance drops from an incredible 85% to a still impressive 70%, and similarly intake two attendance decreases from 82% to 68% (with overall attendances being 77% and 75% respectively). This drop-off in attendance may be in part due to participants anticipating community progression and stopping coming to lessons, but dips can also be correlated with returning from holidays (such as Easter and October). Some of the attendance decrease in intake two may also be related to the opening up of after school sports clubs as restrictions eased, causing competition for extracurricular

activities and more time-commitments being taken on by children and families. There may also be inconsistencies in the data in school holidays not accounted for, as participants came from several local authority areas, each with their different holiday dates.

Factoring in absences and classes engineered to be smaller to facilitate participant learning, intakes one and two had average class sizes of 3 and 6 respectively. 187 lessons were taught during intake one, with 42 children taught in the average week. This increased to 227 lessons in intake two, with 70 taught per week, as this intake was 50% larger than the first.

Like attendance, community progression was slightly lower in intake two (see Figure 4) but overall, 52% still progressed. Those who progressed either joined their local band or if this was not possible, they continued in lessons. Progression and engagement in brass bands was reported as good by the intake one band leaders, but for the 14 children who continued in lessons, average attendance dropped from 85% before progression to 76% after. Although there is no statistically significant difference in attendance between those who ultimately progress and those who don't progress, the spread is much wider and the median attendance is over 20% lower in the group which do not progress (Figure 7).

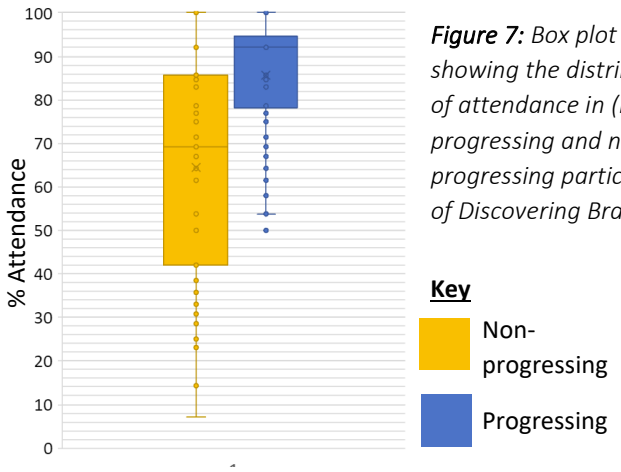


Figure 7: *Box plot showing the distribution of attendance in (later) progressing and non-progressing participants of Discovering Brass*

Unlike attendance and progression, the socioeconomic background of participants did vary between the intakes, and this may be due to the differences in promotional methods between the two. The university community was more aware of the second intake than the first, as word-of-mouth and the presence of a StAMP staff member in one of the St Andrews school communities led to more signups from this group. This difference was observed in the results from the postcode analysis, where more participants in intake one come from households in postcodes below the average national rank than in intake two. Table 1, below, shows how, for nearly all categories, the first intake involved more children from areas of lower SIMD ranks. The data behind this are complex and discussed in detail in the appendices (section 8.2), where it is suggested that despite intake one appearing to involve more children from lower-ranked areas, intake two involved more participants from the lowest two deciles of SIMD ranks. Around a third of intake one participants came from areas whose overall rank, income rank and employment rank were below the Scottish average compared to around a quarter from intake two. Overall, 37 participants of Discovering Brass are from postcode areas below the average 'overall rank', 40 are from below average income rank and 39 are from below average employment rank.

SIMD Category	Overall	Income	Employment	Health	Education/ skills	Housing	Geographic access	Crime
Intake one	**30%**	**32%**	**33%**	25%	25%	14%	61%	32%
Intake two	24.%	27%	24%	25%	25%	**22%**	**63%**	**40%**
Total	26.%	29%	28%	25%	25%	19%	62%	36%

Table 1: Percentage of participants per intake who live in postcode zones below the average SIMD rank (by category)

On average (in 2017), 11% of Scottish pupils are in the bottom two deciles for Overall SIMD rank (Moore et al., 2017) and in Discovering Brass, 8.6% of participants fall into this group.

When comparing these ranks with the engagement data, no statistically significant patterns were found between socioeconomic background and attendance or progression. Attendance data for each intake (and both intakes combined) were compared to each rank and the strongest correlation still only explained less than 4% of the variation present. The weakness of the patterns aside, the SIMD ranks of income, housing and education/skills may had a very minor influence on attendance. The strongest pattern observed across both intakes was between attendance and housing rank, with a gradient of 10 and an r^2 of 0.03. This means that there may be a trend where a 10-point increase in housing rank (these are out of 6976) correlates to a 1% increase in attendance, but that only 3% of the data (i.e. participants included) experience this trend. This is a very weak correlation but, given the nature of online learning and difficulties in home-learning in smaller houses, may be worth thinking about. For this reason, further analyses were carried out to compare the attendance between the above- and below-average SIMD ranked participants. This reiterated that no statistically significant correlation exists between attendance and SIMD ranks.

It is also worth noting that although intake one included participants from lower SIMD-ranked areas, the weak trends mentioned above were stronger in the second intake. The reason for this is unclear – it may be due to the larger sample size, or larger disparities existing between medium- to higher-ranked areas than between lower- to medium-ranks.

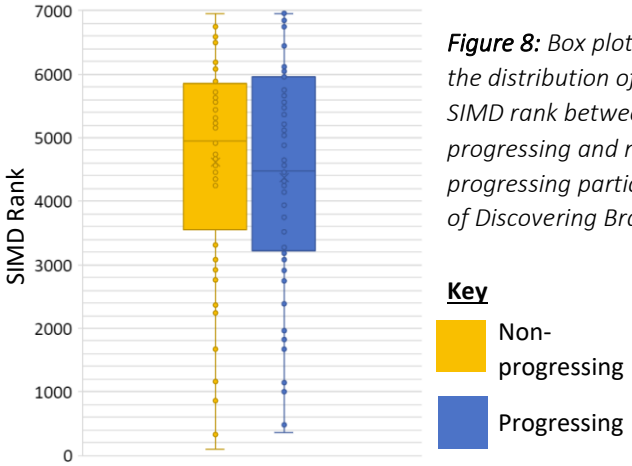


Figure 8: *Box plot showing the distribution of overall SIMD rank between progressing and non-progressing participants of Discovering Brass*

Postcode analyses were also undertaken between the progressing and non-progressing subsets, with no ranks correlating with progression. In fact, the distribution in overall SIMD ranks between progressing and non-progressing participants look almost identical (Figure 8). A complete breakdown of the analyses between SIMD rank and attendance/progression data can be found in the appendices (Figures A1 and A2).

Overall, the postcode analyses suggest that attendance and progression rates in Discovering Brass participants have not been influenced by socioeconomic background as measured by SIMD ranks. Despite the slight variability mentioned, it can be taken that attendance and community progression are broadly similar between the intakes, and that there is no major difference in Discovering Brass accessibility between those from more or from less deprived areas.

Accessibility of the programme towards participants with ASN (additional support needs) was also investigated. 22% of all Scottish pupils (including those at specialist schools) have ASN (Moore et al., 2017) and in Discovering Brass, 8.9% of intake one had ASN, rising to 12.5% in intake two. Table 2 shows how attendance and progression vary (in each intake) between all participants and the subset of participants who have ASN. Overall, both attendance and progression are higher in participants with ASN, with this trend presenting more strongly in the first cohort. This is very encouraging and highlights the supportive and accessible nature of the programme.

	----------Average Attendance----------		----------Progression Rate----------	
	All participants	Participants with ASN	All participants	Participants with ASN
Intake one	77%	**92%**	54%	**60%**
Intake two	**75%**	68%	49%	**50%**
Both Intakes	76%	**77%**	52%	**54%**

Table 2: Attendance and Progression statistics compared between participants with ASN and the whole group. Higher values are in bold. NB. There are only 13 participants with ASN overall so the sample size is low.

These statistics and analysis may be limited by the sometimes small sample sizes, grouping of SIMD ranks by postcodes, and further unknown, unmeasured and untested variables which likely influence the areas investigated.

4.2 Participant responses to Discovering Brass

The response to Discovering Brass has been overwhelmingly positive, with progressing and non-progressing participants giving the experience similar 4.78/5 and 4.79/5 respectively and surveys showing that 96% of parents noticed their child improving on their instrument.

Figure 9: *Chart panel showing key survey statistics regarding Discovering Brass experience*

Aspects of the lessons which the children loved the most included learning new things, home-learning, making (loud!) noises and notes, playing funny tunes, the creativity involved and the feeling of playing together. The most common themes were how much they loved their tutor and how much fun they had! Figure 9 shows how the lessons have given the children a sense of pride and enjoyment in their playing, as well as interest and exposure to new types of music.

Additionally, by the end, 100% of children could produce a sound on their instrument, 96% could play more than one note and 63% said they could understand written notation. 96% said they enjoyed playing natural trumpet and taking lessons with Tony. 100% of participants surveyed hope to continue playing one year into the future, and 76% hope to continue five years into the future.

Parent feedback has been particularly appreciative towards the tutors and for the work they have done over the last year. The selection below has been edited for grammar and anonymity where required:

"Massive thanks to Tony and all of the team involved with this project. My son…has loved the lessons and has been so inspired by Tony's energy and enthusiasm that he's joining our local brass band, through your excellent continued support. Tony has made the lessons fun and interesting, thanks so much again."

"Tony's patience with the children, his ability to relate to them all well, his sense of fun and silliness and fab teaching. Oliver loves his lessons with Tony! Thank you so much. Because of you, Oliver wants to continue learning and really enjoys the cornet."

"Our son found Tony such an inspirational teacher who kept all the children engaged virtually – amazingly talented teacher."

"You teach the kids with such enthusiasm and patience. It has been great listening to you in the background as you teach…Thank you, Tony! Our son has really enjoyed these lessons and is inspired to carry on with trumpet."

Progression to playing in brass bands is anticipated by the participants, who think it looks 'fun'. For those who have already progressed, the vast majority are enjoying the experience and are seeing both their skill and enjoyment increase (Figure 10). The feedback shows children like their band leaders and parents are grateful for their children's experience. However, more could potentially be done in the future to instill a sense of camaraderie, which is missing due to the lack of team-building and in-person socialising.

***Figure 10**: Chart panel showing key survey statistics regarding the brass band experience*

Another highly valued aspect of the Discovering Brass programme is the performance aspect. The feedback is very positive regarding the concerts the participants have played in. Between the progression to community brass bands, opportunities to play in wider St Andrews and brass community events (also run by StAMP) and the Discovering Brass concert at Kellie Castle this July, participants have had the opportunity to gain more confidence in their playing, as well as become more involved in their local and musical communities:

"Anna enjoyed seeing herself and others in the concert. She also liked seeing the community bands as it gave her an idea of what she could do as she progresses with her music."

"During lockdown, being able to contribute and then watch Ebb and Flow was beneficial. It allowed Erin to feel part of a collective and to take pleasure from the learning experience. As a parent/carer it was a nice to be able to see the collective efforts of this cohort."

"Great for my daughter to see the concert and hear what it is like for different instruments to come together."

Like many other educational groups, Discovering Brass had to adapt its structure because of the coronavirus pandemic, and the shift to online learning prompted concerns regarding the potential impacts of digital poverty on the programme. However, 100% of surveyed participants had adequate access to technology to participate using Zoom and 94% had sufficient bandwidth, with 96% finding Zoom adequate for learning the natural trumpet. Although these statistics may be biased due to the online nature of the survey, they are still encouraging.

Despite home-learning, 66% still felt connected to others on the programme. In fact, 88% of those surveyed found the experience actively more valuable because of the ongoing pandemic and 94% found participation from home beneficial:

"My child welcomed the opportunity to try Discovering Brass during the 1st lockdown and it's been so valuable to her wellbeing throughout. She thoroughly enjoys it and a year on its just amazing what all the tutors have achieved with the kids...over Zoom!"

"Thank you everyone! One thing that we might struggle with is attending regularly, it was far easier to commit when on Zoom."

"As a working mum, the convenience of doing a class at home was a revelation. We struggle with going to afternoon clubs because of our schedule but this we managed to fit in! Would love to be able to do more Zoom classes in future."

"Logan is a massive fan of Tony's. I'm certain that it's his sense of humour and way of teaching that has engaged him for so long. We are amazed at how hard everyone has worked behind the scenes and so grateful that it has continued for so long. We have only been able to do this because of lockdown and classes moving online. We could not have committed to the travelling. Thank you so much."

According to the survey, the Discovering Brass experience could have been improved if communication was timelier and more consistent into community progression, and if there could be some kind of in-person aspect for the children to play together in real life. This aspect was met at the Kellie Castle concert, but it is hoped that as the situation with the pandemic improves, there will be further room for hybrid learning and more in-person elements of the programme. Further suggestions included a StAMP party or get-to-know-you event for the children, as well as a bridge lesson into the brass band stage to encourage shy children to continue. It was also suggested that some parents would benefit from getting tips on how to use the technology required for online learning, although the tutors were always very helpful in this regard. There was interest in weekend lessons and the opportunity for weekly/monthly lessons after community progression (both in addition to, or instead of, playing in the brass bands).

Of those who discontinued participating in Discovering Brass, those surveyed were very happy with the experience. Reasons, when stated, included a busy schedule and not wanting to play in the brass band (sometimes relating to shyness).

Overall, despite the challenges associated with the pandemic and online learning, the structure and operation of Discovering Brass was very well-received, with families and participants alike valuing the opportunity:

"An excellent programme, thank you so much for giving my daughter the chance to learn to play a musical instrument. I think it is great that your programme covers Clackmannanshire. Clackmannanshire is a deprived area and there aren't many free activities for kids. My daughter enjoyed it very much."

"…The tuition was delivered very professionally and with an excellent manner."

"Just wanted to say a huge thank you to Tony and the whole organisation. This is such a great opportunity for children and my daughter really loved the lessons and is keen to continue playing. Tony made the lessons really fun and it was very well organised and explained in each lesson. Thanks!"

"It's amazing how you were able to inspire and get the best out of them in what must be pretty challenging circumstances. Thanks for your patience and for the brilliant lessons."

4.3 Engagement and participation in other StAMP projects

The other StAMP projects can be divided into the large worldwide events (the Brass Camp and Virtual Conservatoires) and the more local workshops ('Under Stars and Satellites', 'Ebb and Flow: Pulse of a Planet' and the Scouts workshop). Figure 5 shows details, figures and statistics for these events.

The worldwide events were targeted at brass players of all ages and abilities, from anywhere in the world, although Discovering Brass participants (current and potential future) were particularly encouraged to attend. They were attended by a range of players of all ages, from complete beginner level to conservatoire and professional standard. Attendance was high, with 231 participants in the Brass Camp (76 of these were Discovering Brass beginners) and around 100 in both Virtual Conservatoires. Of those surveyed, 77% of Brass Camp attendees were under 18 years old, with 77% living in Scotland, 13% living in other parts of the UK and 10% from outside of the UK (in North and South America). The Virtual Conservatoires were attended by 66% over 18-year-olds from the UK (62%), Europe (29%), North America (7%) and elsewhere (2%). Of these, 14% were beginners, 50 % were intermediate, 9% were advanced, 12% were at a conservatoire or studied their instrument at university, and 15% were professionals/teachers.

The scientific workshops and concerts involved participants of Discovering Brass in addition to professional musicians. 'Ebb and Flow' and 'Stars and Satellites' had attendances of 115 and 67, reaching 1645 and 2582 (on social media) respectively.

The Scouts workshop was attended by 70, reaching 100 on an unlisted YouTube recording, and was the only event which was not at least partially aimed at Discovering Brass participants.

Of the participants of Discovering Brass who were surveyed, 83% had been involved in other StAMP events, with the most common activities attended being the Brass Camp and 'Ebb and Flow'.

The map (Figure 11) shows the worldwide reach of these events.

***Figure 11**: World map with the UK highlighted in blue and other countries where people have participated from highlighted in gold.*

4.4 Participant Responses to these projects

The Brass Camp and Virtual Conservatoire had very good feedback from participants and although there is less feedback for the scientific/Scouts workshops and concerts, these were also well appreciated.

The Brass Camp was rated by participants at 4.35/5 with the speakers and tutors, organisation and all other features of the camp rated at least 4.2/5 (see Figure 12). The highest rated elements were the speakers, tutors, masterclasses and performance classes. Participants thought the most useful aspects were sectionals/playing together and introductory lessons whereas the discussions were found to be less useful for the younger children. 85% found the camp inspiring and 69% thought their playing had improved as a result of the camp. 77% said they would consider coming to similar camps in the future and 75% said they

would consider attending one-off digital workshops in the future. There is an appetite for more technique workshops, masterclasses and brass history in future camps, though most other aspects included in the Brass Camp were in demand for the future too.

Some suggested limiting numbers to improve the lagging issues and others suggested opening the rooms early so that participants could meet each other and chat. Participants loved the sectionals and there were suggestions to have more playing time structured into them or open them up to all levels.

"For a free programme this was EXCELLENT! I especially enjoyed working with Ian Bousfield and watching the classes with people like Trevor Herbert."

"I think this has been an absolutely amazing experience. With lockdown, unfortunately our state music lessons ceased and motivation to practise music … was lost. This opportunity inspired my son to pick up his instrument every day! We found Sandy (and the others) to be very kind and encouraging and positive feedback really gave him a boost so that he wanted to play more. Thank you so much (from player and his mum) this was his first opportunity to play with others as [there are] very few brass players locally even out of lockdown! He came on loads and got really enthusiastic, which was wonderful to see."

"This was so fascinating! I never even thought I'd be interested in this ancient history and culture that we have as brass players, but I want to learn more now!"

"Thank you. I loved it and have been wanting to learn trumpet for a long time!"

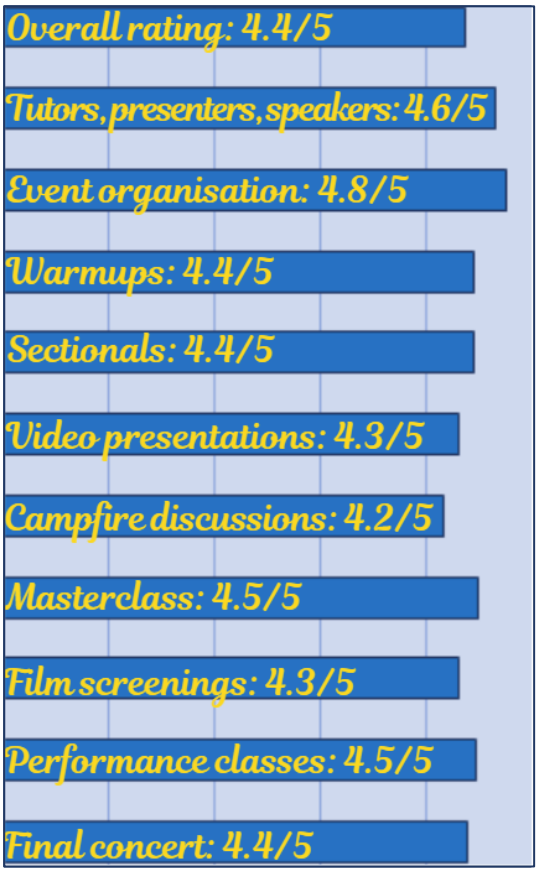


***Figure 12**: Graph panel showing how participants rated aspects of the Brass Camp*

Participants noted that the online format allowed for more inclusivity towards people who are shielding for medical reasons, as well as removed the need to travel hundreds of miles to access opportunities like this. Although some had issues with lagging, others thought the online format worked 'very well' and praised the opportunity to come together and play during the restrictions. 63% of participants said they signed up due to the lockdown.

***Figure 13**: Graph panel showing how participants rated aspects of the second Virtual Conservatoire*

The Virtual Conservatoires were similarly well-received, with the overall experience rated as 4.4/5 and the tutors and speakers ranked at 4.6/5 (see Figure 13). Participants found the technique, jazz and ensemble elements to be the most useful aspects of the experience, with the Virtual Side-by-Sides making participants feel the most connected and the Jazz and 'Ask me anything' sessions being the most

inspiring. The experience of playing together during the lockdown was noted by several participants as being inspiring and heartening.

Some participants said they would have enjoyed more playing/ensemble playing opportunities, as well as more direction on using the technology. A guide was published ahead of time in order to help use Zoom, but because events such as the Brass Camp ran very early on in the lockdown and the general population might not have had much experience using Zoom (especially among the older age groups), more could have been done to help those struggling with the technology. In future, one option to tackle this would be to have an introductory call so that participants could have the opportunity to practise using Zoom before progressing to the larger call of the workshops themselves. There was also a demand for more standard brass band-specific workshops, but others enjoyed the more avant-garde aspects covered and wanted to see more of that side of brass playing.

> *"Overall, it was unpredictable/unusual and that made it really interesting."*
>
> *"Continue with more! Absolutely inspiring and delightful. I would enjoy seeing more playing events."*
>
> *"Everyone was so happy playing music."*

The scientific workshops and concerts also had a positive reception, with surveys showing that participants had high level of awareness about the oceans after participating in 'Ebb and Flow'.

> *"Loved the special guests at camps and the solos by the other music professors. More camps like the space one :)"*
>
> *"The lessons from the astronomer helped enhance the experience."*

90% of Discovering Brass players who participated in 'Ebb and Flow' agreed that oceans affect people's lives and Earth's climate. Participants also felt a strong sense of responsibility to protecting the oceans and could identify multiple ways human beings are endangering our oceans.

5. Discussion

While the Virtual Conservatoire and other projects were directly related to the project aims, this discussion primarily focuses on Discovering Brass.

5.1 Are the original project aims being addressed?

So far, there has been good progress on addressing the aims set out for the project. The first aim, '***to raise aspiration, attainment and improve health and wellbeing by providing opportunities for children to participate in joyful music-making****',* can be measured in this context by the level of enjoyment and benefit that participants believe they are seeing in themselves. Surveys and evaluation of StAMP events suggest that this aim is being met, with very positive responses surrounding wellbeing and enjoyment. One comment from a Discovering Brass parent stated that their child's wellbeing had improved over the course of the programme, and responses show that participants felt a sense of pride in their playing. Tutor observations also suggest there is evidence that many individuals have grown in self-worth and confidence. The overwhelming theme in the short-answer responses is that it was a very enjoyable activity for the children and that they loved the experience. It is important to remember that fun and learning cannot be easily separated in this context as children learn best though play and enjoyment, which was why this was

such an important aim of the project. In other StAMP projects, evaluation showed that events provided a welcome opportunity to come together during isolating times, and responses showed that participants felt improvements in their playing.

The second aim was '*to build strong, sustainable and supportive partnerships with schools and community groups across Fife that can nurture future music-makers*'. Survey responses and comments show that Discovering Brass made participants feel more part of their communities, and feedback in other StAMP events showed that participants enjoyed coming together with diverse groups to make music together. The brass band community concerts and the launch of Fife Youth Brass were postponed due to the pandemic, and when they take place (in the coming year) they will go a long way to achieving this aim. In the meantime, StAMP regularly meets with Fife Music Service to plan future events for young music-makers in partnership, such as the coming Brass Weekend. This not only bolsters links with the local music Service, but also connects young local brass players with excellent musical role models such as the members of the National Youth Brass Band.

The aim, '*to energise and re-invigorate brass bands across Fife',* can easily be investigated through looking at Discovering Brass community progression. So far, 71 children have progressed to playing in a brass band, and this number is set to rise as future intakes progress. This influx of young players to these bands should have lasting effects on participation rates, as statistics also show that participants of Discovering Brass hope to continue playing for years to come and have really enjoyed the brass bands experience so far. Survey responses also show that the experience is raising awareness of brass bands among participants, both through progression and also through the opportunities StAMP has provided to play with other brass ensembles.

The project also aimed *'to develop innovative methods of delivery and resources for supporting brass performance*'. Discovering Brass has evolved over the last two years and will continue to do so into the coming years with the easing of restrictions and improvements made using what we have learned. Online methods to circumvent the physical separation and issues arising from not being in the same room developed because of the pandemic. The Zoom chat feature was used to send links and boost engagement, and mechanical teaching methods such as using a straw in the mouthpiece (to help learn good embouchure) were developed (with the latter resulting in all participants making a sound almost immediately!). Other pioneering teaching methods were developed in the planning stages, such as the structure of a 16-week lesson period and subsequent community progression (Discovering Brass), online workshop 'tents' (Brass Camp) and the high degree of interaction between Discovering Brass and other StAMP events. The use of the polycarbonate natural trumpets themselves was an integral part of the Discovering Brass programme's uniqueness, with the sound and mechanism ideal for online teaching. The March Virtual Conservatoire also ran a ground-breaking online real-time play-along session which was both inventive and very successful. The events 'Global Breath', 'Stars and Satellites' and 'Ebb and Flow' featured contemporary repertoire developed for online performance: participants used smartphones to record themselves, and the recordings were later woven into the composition. There is reason to believe that StAMP was a model for other projects in Scotland who developed similar online participative performances. In the future, the development of resources to aid practice between lessons will further improve the quality of teaching, and the pandemic-related adaptations which were so successful won't be left behind as in-person teaching becomes more viable.

The aim '*to provide inspirational performance opportunities to young brass players across Fife'* has been addressed through the running of events such as the Kellie Castle concert (for participants of Discovering Brass) as well as 'Stars and Satellites', 'Ebb and Flow' and the final concerts of other workshops, which involved local and more far-flung players from within or outside of the Discovering Brass community. These concerts allowed participants to play with professional brass players and exposed them to new music, styles and fields of inquiry. Feedback shows that participants found StAMP events inspiring and parents of Discovering Brass participants reported that the children enjoyed coming together with others to perform. As these events continue to be run and restrictions ease, more in-person concerts will happen, and the brass bands which the participants of Discovering Brass joined will provide further performance opportunities for children.

The final aim was '*to research and disseminate the project's impacts both socially and artistically, as well as to create opportunities for others to learn about delivering community music projects'*. Over the course of the project, StAMP staff have presented numerous talks on their work, both internally to the university, as well as externally, to bodies such as the Music Education Partnership Group. Additionally, StAMP staff have been in communication with representatives of similar projects based in Cornwall, and have collaborated with the Royal Irish Academy of Music (to run more workshops and outreach projects), local schools and brass bands, the Scouts and external professional musicians. As well as communicating and sharing the project with these groups, StAMP has an active Facebook group and uses this, in addition to emails, to communicate with participants and share the successes and stories associated with the work being done. Finally, this report will aim to disseminate what we know so far about the impacts of StAMP's work to date.

5.2 Is the Discovering Brass formula (natural trumpet lessons followed by progression into a brass band setting) an effective, enjoyable and accessible method for learning?

Learning in a brass band setting is not a new invention, nor a new tool for improving community cohesion (Wallace et al., 2019). It is a tried and tested way of simultaneously benefiting children and communities. The focus on the guiding principles of curiosity, creativity, fun and positivity has resulted in cohorts of curious individuals who have benefitted from a positive and engaging online learning experience. The opportunities that participants have to make creative decisions on how to make noises from their instruments makes the experience empowering.

> *"What it's really shown is that you can have complete beginners who can all end up playing together really nicely and be creative and express music through a trumpet within weeks, which is absolutely incredible."* – Tony George (tutor)

Discovering Brass statistics show that even when children leave the programme, they still leave having visibly improved in their brass and general music literacy skills, as well as having been exposed to new types of music. Additionally, participants commonly found community progression increased both their enjoyment and level of playing. Together with the high attendance and progression rates, this shows that the Discovering Brass programme is very effective at teaching children brass instruments.

Feedback shows that participants overwhelmingly found the experience positive, building a sense of pride and enjoyment in their playing. Responses to surveys and social media engagement demonstrate how participants and their families thought the quality and style of tutoring was highly effective, with many commenting on how much the experience was made more enjoyable by the 'patient', 'encouraging', 'funny' and 'professional' staff.

Many respondents also commented on how aspects of the programme made it more accessible than mainstream music teaching. Reasons for this included the flexible online nature, the timeslots available, the lack of fees, how friendly the experience was to all of the children, as well as how well it coped with the lockdown restrictions (while most other lessons were being cancelled). Lesson group size is also tailored to the needs of participants, which meant that one-to-one tuition was provided to those who would benefit from it the most. Repertoire choices allowed the involvement of participants who might not otherwise have been able to participate in the concert without help, improving accessibility and confidence-building opportunities for children with Additional Support Needs (ASN). In fact, the engagement data indicate that children with ASN actually had higher attendance and progression rates than the overall group, showing that Discovering Brass provides a supportive and positive learning environment for these participants.

The unique nature of the Discovering Brass pedagogy – how engaging, empowering and positive the online experience is – separates it from most mainstream music education settings where playing and learning can be more formulaic and less creative.

5.3 How does the activity and engagement in StAMP compare with other similar projects in the UK?

The 'ASPIRE' project, part of the Attainment Challenge in Dundee, aims to transform children's lives (particularly those from more deprived areas) through the performing arts (Clancy, 2017). It has involved 700 participants aged 8-13 from areas selected using the SIMD. While the programme includes drama and dance in addition to music, it remains a comparable project to Discovering Brass, albeit on a larger scale. ASPIRE reports that their participants feel a sense of pride in their progress and really enjoy the programme, with resulting benefits of the project including strengthened community relationships. They also say that high percentages of participants are continuing playing into secondary school and joining local bands and orchestras. These findings are mirrored in Discovering Brass, both in our progression statistics as well as participant survey responses.

Another noteworthy project is Youth Music and Youth Partnership North funded 'Building Brass' which is based in Northumberland (Walker, 2017). Like Discovering Brass, it aims to rejuvenate the brass band culture through teaching schoolchildren brass instruments. Participants there give similar feedback, being very enthusiastic about their enjoyment and appreciation of the tutors. The schools involved noted that participation in Building Brass has led to better performance in subjects such as music and PE, and has given children who are not otherwise very academic a chance to shine. The similarities between the two projects make findings like this encouraging for the futures of the Discovering Brass participants. One difficulty they highlighted is that there is a high rate of leaving the programme on transition from primary to secondary school. Continuation rates for the bands involved varied from 7.9% to 58.2%, with the majority lying between 20% and 40%. The reason for this is interpreted to be due to the change in tutors associated with changing schools, as well as issues in funding. In order to avoid this in Discovering Brass, there is an overlap period where both the band leaders and lesson tutors come to the sessions and StAMP endeavours to make the transition just as smooth when teaching moves to hybrid/in-person. They also find that 'large and special' events particularly enhance participants' experience and this is found anecdotally for Discovering Brass too.

Perhaps the most well-known and influential musical outreach project, 'Big Noise' (SGSR, 2011) also aims to improve the lives of children coming from more deprived backgrounds through music. Run by Sistema Scotland, it operates all over the country and beyond, operating at a vastly larger scale than Discovering

Brass. Pre-COVID statistics show that 90% of Big Noise participants and 69% of their parents felt the programme enabled them to make more friends (SGSR, 2011). Discovering Brass statistics show that 66% of participants felt connected to others, which is lower than these similar statistics. This may be a reflection on the isolation brought about by online learning. 100% of parents noticed their child had become more confident and 93% noticed a change to their child's overall happiness after participating in Big Noise (SGSR, 2011), which reflects the similarly high level of pride and enjoyment seen in Discovering Brass participants. Sistema have long documented the improvements to many aspects of children's' lives brough about through participation in musical outreach projects, which is encouraging for the success of Discovering Brass.

Statistics from Big Noise Torry (2017) show that 55.5% of after-school participants were from the bottom two deciles of the SIMD (over-represented compared to those eligible) compared to a Scottish pupil average of 11% (Moore et al., 2017). They also report that 14.6% of their after-school activities' participants had ASN (under-represented compared to those eligible) compared to a Scottish pupil average of 22%. Comparatively, 8.6% of Discovering Brass participants so far have been from the lowest two SIMD deciles and 9.3% of participants have had ASN.

5.4 Does post-code / socioeconomic background affect engagement in Discovering Brass?

As described above, analyses presented suggest that socioeconomic background (as measured by SIMD postcode data) does not influence attendance or progression in Discovering Brass. This is very encouraging, as studies show how the SIMD rank topics appear to influence general educational outcomes (White, 2011).

Employment and subsequent parental income can affect attainment through access to learning resources, tutoring, extra-curricular activities, equipment and technology. It may also affect the quality of school catchment lived in and environmental factors such as parental mental health (White, 2011). Heavily linked to employment and income, parental education can influence attitudes to learning and the activities that children are encouraged to take part in. It also affects other aspects of children's lives such as health and access to adequate nutrition, which itself can strongly affect performance in the classroom (White, 2011). Housing (itself impacted by education, income etc.) affects children's performance if homes are overcrowded (lacking quiet spaces to work and impacting respiratory health) or improperly heated (also affecting health and therefore attendance), or if it impacts on their mental health. Living in areas of high crime affects children's mental health in the USA, though there is no comparable research from Scotland (White, 2011).

The impact of these areas could be expected to be even more significant in these times of home-learning, where having access to a quiet, comfortable workspace as well as internet and technology capable of running video-calls are of greater importance. Parental education may also be more important, as children might rely on parents for help with their work more than before. This may be why it is housing, parental education and income that are the variables which seem to have the most effect (though still very far from significant) on participants' engagement with StAMP.

The fact that no significant trends exist between SIMD ranks and engagement in StAMP means that this project is fulfilling its goal to be socially responsible, providing unbiased access to the benefits of participating in music-making. Over the coming years, as StAMP accumulates more data, further work should be done to ensure this remains the same, as well as to investigate the lowest SIMD deciles.

5.5 What difficulties exist for the project and how can they be tackled?

Challenges identified by StAMP staff, many of which were associated with the shift to online Discovering Brass lessons included:

- *Maintaining a feeling of connection among participants and staff*
- *Making sure participants felt engaged*
- *Technological difficulties*
- *Finding ways to correct playing without being in the room*
- *Potential impacts of digital poverty*
- *Difficulties engaging with schools*
- *Inconsistencies in the socioeconomics of intakes*

These were challenges which staff attempted to tackle in order to prevent the difficulties impacting on the learning experience of the participants. In doing so, opportunities arose for increasing creativity.

It was important for participants to feel connected as part of a group while also feeling that they were experiencing one-to-one tuition. The Zoom chat function was often used for participants to interact and comment, as well as to post links related to what individuals or the group were doing. This fostered a sense of connection and group bonding as well as encouraging the curiosity which was so important as a founding principle to the project. In fact, DB1 participants' curiosity has been so piqued by this that they are seeking to play music above the level they would traditionally play at, as they want to have a go and see what other pieces/styles sound like when they play them.

Online lessons are more difficult to keep engaging than in-person lessons, and group lessons also have to go at a slower pace than in one-to-one settings, so efforts were made to keep participants busy from the first minute of each call to the last. Techniques such as using children's names were also used to keep participants feeling engaged and involved.

Although staff equipment (microphones, broadband, lighting etc.) was of a high quality (which helped give participants a clear sound to imitate and learn from), participants often had poorer equipment or had difficulties using it. This meant that the sound reaching tutors/leaders was sometimes unclear and it was hard to hear the intricacies of students' playing.

> *"You can't really tell if they are making a good sound or not. All you can do is give them the skills to make a good sound and trust that they are."* – Tony George (tutor)

This belief resulted in the "fantastic" sound produced at the Kellie Castle concert and the impressed reactions of band leaders at the skill level demonstrated by progressing participants joining the brass bands. In the future, as in-person teaching becomes more viable, online learning will be interpolated with in-person events in order to ensure the sound is of a similarly high quality.

With the groups not taking their lessons in the same room, it was also difficult to correct mechanical issues in playing. However, this presented a valuable opportunity when it came to progressing to brass instruments. For example, children who played at a consistently higher or lower pitch were not made to correct this as long as rhythm and relative pitch were preserved. The music chosen and nature of the polycarbonate trumpets meant that the group still sounded good. Later, when they progressed, the natural aptitude or physicality for higher or lower instruments was used to indicate which they should progress to.

"As a practitioner, you have to put aside any traditional preoccupation with getting things right and realise that this is just a trajectory towards finding the right instrument for them."
– Tony George (tutor)

At the beginning of the pandemic, as life moved online, digital poverty became a concern for many institutions, including the university. However, survey statistics from StAMP are very positive and suggest that the vast majority of participants had adequate resources and bandwidth to participate fully. Additionally, there was no correlation between SIMD ranks and attendance/progression, suggesting that those from lower income backgrounds were not detrimentally affected by the move online.

The difference between the first and second intakes of Discovering Brass with regards to average socioeconomic background may show the power of word-of-mouth in how people find out about the programme and how this may affect the demographics taking part. Since the project aims to include children from areas of lower socioeconomic background, future marketing should aim to offset this, focusing particularly on boosting involvement from lower income areas. It does appear that, although there was an influx of participants from wealthier areas in intake two, there was also an increase in participants from the most deprived areas, meaning that there is evidence that StAMP is engaging better with these groups as Discovering Brass progresses.

The relationship with schools involved is pivotal for the successful running of Discovering Brass and StAMP have always gone the extra mile to include schools which might otherwise have had trouble engaging. Additionally, as Covid recovery for schools progresses, it is anticipated that schools will be freer and more willing to engage in external programmes such as StAMP.

Challenges acknowledged by participants of StAMP events and Discovering Brass followed similar topics:

- *Resources needed for online learning*
- *Limited social element due to online learning*
- *Helping shy children reach their potential*

Online learning via Zoom was great for many, allowing for greater flexibility around daily life, but participants of Discovering Brass and several other events expressed the difficulties they had been having as a result. Issues included not having enough space, bandwidth (although statistics show that this was rare), experiencing lag, and being in groups where people accidentally played over each other and it was difficult to hear each other properly as a result, in addition to a general lack of experience using Zoom. It was suggested that more guidance be sent out beforehand in order to better prepare participants (of other StAMP workshops) who might need this extra support.

The online nature of StAMP activity this year also made some feel a little isolated from each other, although statistics show that most participants felt connected to others, with feedback praising this as a rare opportunity to connect during the lockdown. Many participants wanted more in-person playing and socialising, and StAMP will endeavour to provide this as the restrictions continue to ease. Discovering Brass participants' families noted that more could be done to allow the groups to bond, and there was feedback in other StAMP events that they would like more socialising too. In this feedback, it was suggested that workshops and activities open the Zoom rooms early in order to let participants filter in and get to know each other before the sessions begin.

It was reported that tutors were very good at helping quieter children out of their shells during lessons; however, feedback also indicated that one reason for reluctance to progress to Brass Bands was shyness about the transition in environments. If this 'fear of the unknown' is leading to some shier children not progressing or being more nervous when they do, this is something which will need to be tackled in the coming years. One suggestion to tackle this was a 'bridge period' between the lessons and playing in bands, which would introduce children to the new setting while still having the support of the tutors and friends.

There are challenges which may become more influential into the future such as:

- *Transitioning to hybrid/in-person learning*
- *Keeping children playing their instruments over time*

The high engagement and parental involvement which is so important for the good retention and enjoyment of participants may become more difficult when Discovering Brass lessons transition from groups of <10 attending from the home to groups of <30 where the parents are not an active part of the lessons.

The drop off in engagement observed by Building Brass (Walker, 2017) could be indicative of a potential future problem for Discovering Brass. The drop is thought to be due to a mix of factors including financing issues and changes to children's tutors on moving schools after primary. With the brass bands remaining the same over this transition, this should hopefully be a minimal issue, but if children switch lesson classes, it should be noted that consistency in tutor may help with engagement during the transition. The Building Brass group also noted difficulties arising due to staffing, for example when new headteachers didn't value music education, so this should also be kept in mind.

6. Conclusions

Over the past year, StAMP has provided playing and learning opportunities to hundreds of young people and adults, through its long-term Discovering Brass programme as well as its day- and week-long events and workshops. Given what is known about the historical cultural and community aspects of brass band playing, brass pedagogy and the benefits of music on the brain, the positive effects of these opportunities go well beyond the musical skills developed, though feedback shows that these are also very well-received.

160 young people have participated in Discovering Brass so far, with two intakes having progressed to the community. Participant attendance, progression, feedback, and level of playing and musicality all paint a very positive picture of this project, with tutor Tony George describing musical development of the participants as "rapid". In particular, the accessibility and the encouraging and creative tutoring made the experience especially valuable.

As discussed above, it appears that the project aims are being met and the guiding principles being followed, leading to creative, curious and empowered young people who have a high level of musicality and brass-playing skills. Through the unique StAMP pedagogical experience, their journey so far has been positive and fun, and has, in many cases, been beneficial to their wellbeing, especially due to the lockdown which took place during the period of the programme. Similar types of outreach projects, as well as scientific research, suggests that these children will experience other benefits, both within the classroom and in their everyday lives. Performance opportunities have given participants inspiring opportunities to broaden their musical awareness and their progression to brass bands has led to families feeling more involved in their communities.

"There is a kernel in here which is really quite special. It seems that…we've managed to hit on something that works really quite well." – Tony George (tutor)

Over the last two years, StAMP has forged links with communities, schools and bands in Fife and over time, as more bands join, the Fife brass band community is set to benefit from the influx of young players. This will hopefully go a long way towards reinvigorating these bands which have been negatively impacted by the fall of industrialisation over the last hundred years (which also saw many local communities become more economically deprived).

In line with the recent university strategy, StAMP aimed to be a socially responsible project, and with its activity operating at no cost and no statistical evidence showing any trends between socioeconomic background and attendance rates/progression, it is interpreted that this aim is being met successfully.

The coronavirus pandemic meant StAMP activities had to adapt quickly, and although this presented a steep technological learning curve for both staff and participants, the vast majority were very happy with the quality of teaching provided using Zoom. In fact, the online format proved to be more flexible, allowing larger groups to meet and removing the need to book large venues. It was also beneficial to many participants, minimising travel time and costs, allowing parents to watch the sessions, and making the time commitment easier for busy families. The Discovering Brass lessons taking place from the home also led to more parent involvement. This often led to increased engagement and learning as parents facilitated participation and helped children, for example, in following along with the music. These unique aspects of Discovering Brass may be the reason for the unusually high retention and the great playing observed in participants. Although many StAMP participants missed the in-person and social aspects lost in this format, others valued the opportunity to come together during the lockdown. The advantages of online learning may have influenced the high attendance and progression statistics in Discovering Brass, and they certainly enabled a more worldwide participation for the other StAMP events. This is something which will be investigated further as restrictions ease in the coming years.

Overall, the work done by StAMP so far has been hugely successful and the future will hopefully bring similarly positive results and feedback. The Discovering Brass method stands up as an example for other musical outreach programmes due to its unique pedagogy and guiding principles.

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8. Appendices

8.1 Tables of Discovering Brass Statistics

Tables A1 and A2 show compiled Discovering Brass key and supplemental statistics.

	Intake one	Intake two
Start date	09/20	02/21
Total participants	56	84
Participants taught per week (average)	43	70
Percentage of participants with ASN	8.9%	12.5%
Class size (range)	1-7	1-10
Class size (average attended)	3	6
Average attendance	77%	75%
Average attendance (first half)	85%	82%
Average attendance (second half)	70%	68%
Percentage of intake progressed	54%	49%
Percentage of progressing participants requesting financial aid	No data	11.9%

Table A1: Overall statistics on Discovering Brass participants

Additional Intake One progression statistics	
Percentage progressing from Brass Camp to Discovering Brass Intake One	74%
Percentage progressing to community	54%
Percentage of progressed participants continuing with lessons	47%
Average attendance (lessons) of those who progressed to further lessons	85%
Average attendance (after progressing) of those who progressed to further lessons	76%

Table A2: Additional Intake One statistics

8.2 Discovering Brass SIMD Statistics

SIMD Rank	----------Intake one----------				----------Intake two----------			
	Average SIMD Rank	Percentage in lowest…			Average SIMD Rank	Percentage in lowest…		
		50%	20%	10%		50%	20%	10%
Overall	**4367**	**29.8%**	7.0%	1.8%	4497.5	24.1%	**9.6%**	**4.8%**
Income	**4382**	**31.6%**	7.0%	1.8%	4594	26.5%	**9.7%**	**4.8%**
Employment	**4207.5**	**33.3%**	8.8%	1.8%	4532	24.1%	**10.8%**	**4.8%**
Health	**4535**	24.6%	5.3%	**1.8%**	4770.5	**25.3%**	**9.6%**	1.2%
Education/Skills	**4280**	24.6%	5.3%	1.8%	4547.5	**25.3%**	**9.6%**	**8.4%**
Housing	4983	14.0%	**3.5%**	**1.8%**	**4708.5**	**21.7%**	0%	0%
Geographic access	2943.5	63.2%	31.6%	15.8%	**2583**	**63.9%**	**39.8%**	**22.9%**
Crime	4421	31.6%	8.8%	3.5%	**4250**	**39.8%**	**14.5%**	**4.8%**

Table A3: SIMD Statistics. In bold are the more deprived values (compared between intakes)

Table A3 shows how the average SIMD rank is lower in Intake One than in Intake Two, with the difference often being several hundred rank points. This suggests that participants of the first intake come from more deprived backgrounds than the second. However, when it comes to the percentage of participants in the bottom half of the ranks (i.e. coming from a postcode below the average Scottish rank), the two intakes seem more even, with the second intake ranking lower in five out of the eight categories. The second intake also has more participants than the first who are in the bottom one and two deciles of SIMD ranks.

Together, in addition to showcasing the power of the metric of SIMD used (lowest 50% versus lowest 20% etc.) this table shows that the differences between the first and second intakes are more complicated than one having lower SIMD ranks than the other.

When plotted, the distribution of SIMD rank data differs between the first and second intakes, as would be expected from the analysis above. The first intake generally shows a simple, wide, right-skewed normal distribution (meaning that there are less data from the extreme high and low ranks and a peak in data in the middle ranks, but that there is also a bias towards the higher ranks). The second intake shows somewhat normal distribution in several of the categories, but it is often also at least minorly bimodal, with a higher peak in the higher ranks. This results in comparatively higher volumes of data in the extreme low and high ranks, with Intake Two having both the highest and lowest datapoints observed. The distribution of SIMD rank data shows that in general:

- Intake Two includes more participants from very low SIMD areas than Intake One;
- Intake One includes more participants from mid-ranked areas than Intake Two;
- Intake One has a higher peak in the data compared to Intake Two;
- Intake Two includes participants from the highest ranked areas.

So overall, although Intake Two has a higher average vverall SIMD rank, it reaches more people from the lowest ranked SIMD deciles. Despite the influx of university-related families who may be partially responsible for the high-rank peak in the data of Intake Two, the second intake can be interpreted to otherwise have fulfilled the goal of reaching people from more deprived backgrounds *better* than the first income did.

Geographic access ranks are low in both groups, but this category is not seen to be as relevant for this study.

8.3 Discovering Brass Statistics on the SIMD versus Attendance

Table A4 shows the results from performing linear regression between SIMD ranks and attendance within both intakes (where 'm' is the gradient of the line – the strength of correlation – and R^2 is how well the data fit the correlation indicated). All values are low, indicating no correlation between any SIMD rank and attendance.

Income, Education/Skills and Housing were plotted (Figure A1) for further analyses as Income and Housing were the ranks with the strongest relationships in Intake One/Overall and Education/Skills had the strongest relationship in Intake Two data. Education/Skills shows the most difference in m and R^2 between intakes as it is the weakest correlation in Intake One and the strongest in Intake Two. The graphs (Figure A1) show that there may be a very slight trend whereby those coming from higher-ranked households have better attendance, but for all, the boxes overlap and the distributions of data cover the whole plot. Housing is the

SIMD category with the least weak correlation (with attendance), maybe due to the online learning taking place within the home. However, statistically, there is no significant correlation between these factors.

	----Both intakes----		------Intake One------		------Intake Two------	
SIMD Rank	m	R^2	m	R^2	m	R^2
Overall	7.6244	0.0145	4.9058	0.006	10.331	0.0262
Income	**9.3227**	**0.0195**	**7.6476**	**0.0132**	**11.462**	**0.0291**
Employment	7.5058	0.0132	5.1857	0.0062	10.477	0.0258
Health	7.6548	0.0158	5.7044	0.0096	10.06	0.0254
Education/Skills	**7.7827**	**0.0133**	**2.2681**	**0.0013**	**13.16**	**0.0345**
Housing	**9.5633**	**0.0285**	**8.4122**	**0.0186**	**9.8077**	**0.0353**
Geographic access	-5.0715	0.0051	-3.4333	0.0023	-7.5644	0.0112
Crime	-0.503	0.0005	-4.9971	0.0045	2.5924	0.0011

Table A4: Linear Analysis of how SIMD ranks compare with attendance data. The three categories with the seemingly highest correlation to attendance are in bold.

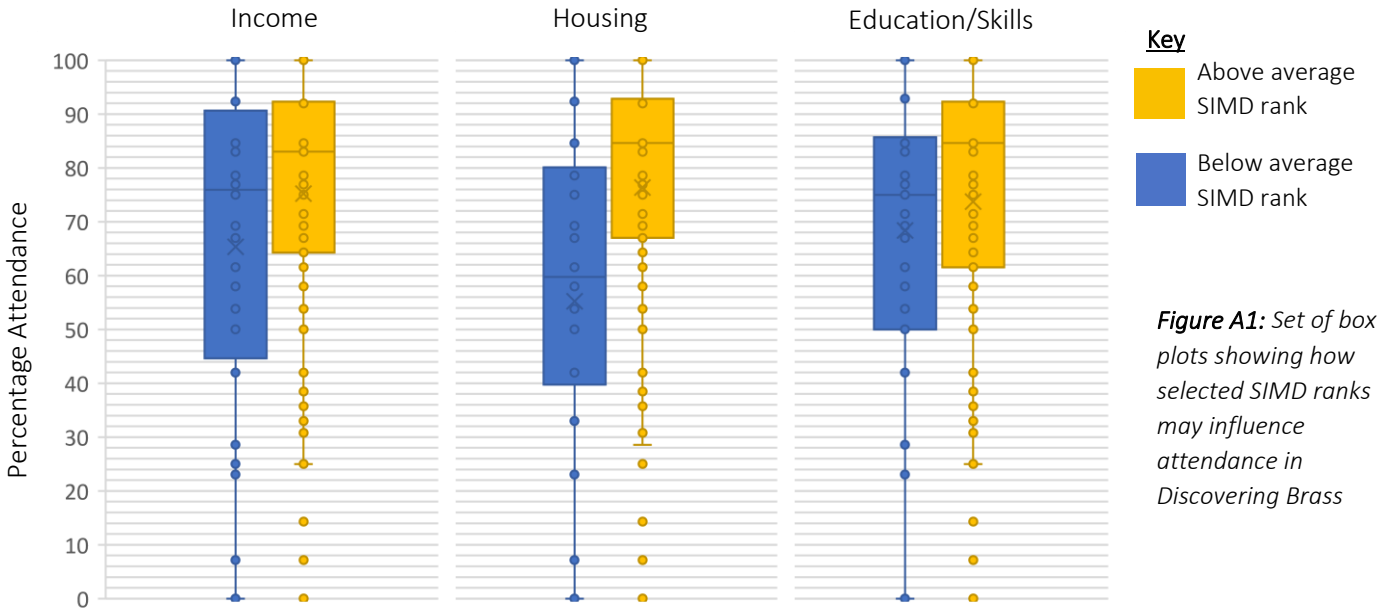

Figure A1: *Set of box plots showing how selected SIMD ranks may influence attendance in Discovering Brass*

8.4 Influence of SIMD on Discovering Brass Progression

Table A5 presents progression rates among subsets defined by SIMD. It shows how progression rates are high (mostly similar or higher than the overall average of 52%) among those from areas below the Scottish average SIMD, which is certainly encouraging. However, there is an overall trend whereby progression rates decrease with the narrowing of the subset towards lower SIMD deciles. It is very hard to be certain of this observation because the lowest two- and one-decile subsets are very low in sample size, but if the data is representative of what is going on, it may be that deprivation/SIMD rank does have an influence on progression rate. Over the years, when more data is accumulated, this should be further investigated in order to find out whether this is a real pattern or just an artefact of the low sample size.

	Overall	Income	Employment	Health	Education/ Skills	Housing	Geographic access	Crime
Bottom 50% ranks	54%	55%	56%	63%	57%	50%	47%	46%
Bottom 20% ranks	50%	50%	50%	45%	**36%**	n/a	43%	53%
Bottom 10% ranks	**40%**	**40%**	75%	50%	**38%**	100% (of 1)	46%	**33%**

Table A5: Percentage progression (both intakes) from each rank group by SIMD category. Progression rates below 42% (10% below the overall figure) are in bold.

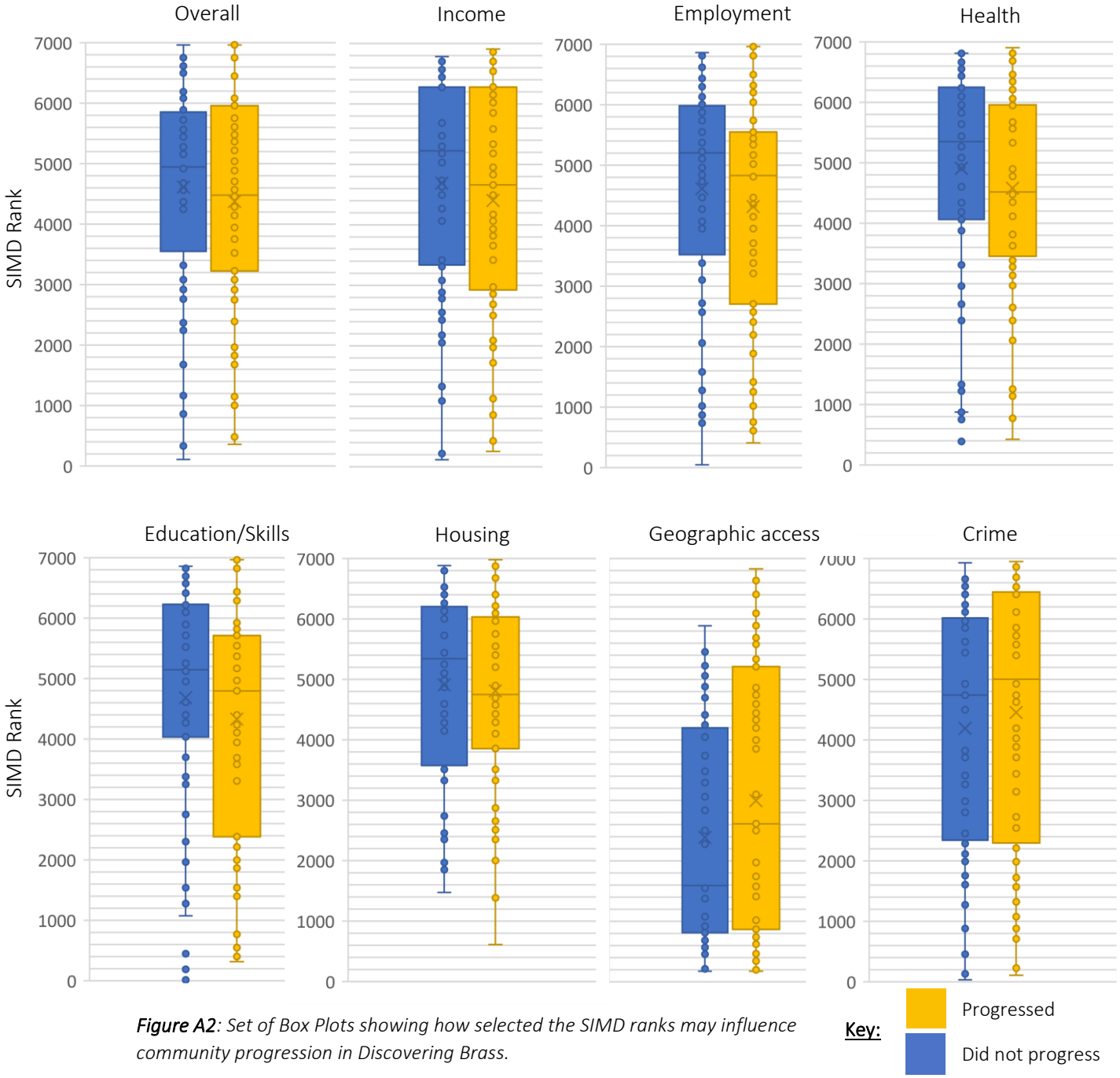

***Figure A2**: Set of Box Plots showing how selected the SIMD ranks may influence community progression in Discovering Brass.*

The panel of box plots above (Figure A2) show the distribution of SIMD rank data between those who progressed and those who didn't. The graphs show that there is no significant correlation between SIMD ranks and progression. There is even less of a correlation than that seen between SIMD ranks and attendance.

8.5 Discovering Brass SIMD Accessibility Statistics

SIMD Rank	All participants	Participants with ASN
Overall	**4490**	4575.5
Income	4543	**4520.5**
Employment	4460	**4388**
Health	4738	**4445**
Education/Skills	4500	**4141**
Housing	**4856**	5192
Geographic access	**2695.5**	3219
Crime	**4323.5**	4639.5

Table A6: SIMD Statistics between participants with/without ASN. Lower ranks (between the groups) are in bold.

Table A6 shows how the overall SIMD rank is slightly higher among participants with ASD, but the other categories are split between the two groups. This might could be interpreted as occurring due to the additional support families can give children with ASN if they are of a higher socioeconomic background, but the significance of the difference is low due to the small sample size and difference between ranks, suggesting there is no real difference in socioeconomic background between participants with ASN and the overall group.

SIMD Rank	All participants from Intake Two who progressed	Intake Two participants who progressed with…	
		Additional support needs	Requirement for financial aid for progression
Overall	**4625.5**	4935	4924.5
Income	4627.5	4886.5	**4591.5**
Employment	4630	4773.5	**4487.5**
Health	4836	**4790**	4922.5
Education/Skills	4634	**4476**	5028.2
Housing	**4776.5**	4794.5	5177.5
Geographic access	**2932**	3148.5	3916
Crime	**4624.5**	5630.5	4999.5

Table A7: SIMD Statistics comparing participants from intake two who have ASN and required financial aid for progression. Lowest ranks between the groups are in bold.

**Data from Intake Two subset who progressed only to allow comparison of the same group, as there is only financial aid data for these participants.*

There is only financial aid data for Intake Two participants who progressed. Table A7 shows how, among this group, there is no clear pattern in SIMD rank between the whole group, the subset of participants with ASN, and the subset who requested financial aid. The fact that the latter group shows no evidence of being significantly lower ranked on the SIMD shows the many factors at play and the issues in SIMD resolution and sample size.

It is suggested that SIMD does not vary between those with and without ASN, nor does it necessarily vary between those who required/did not require additional funding to progress (though this would have been predicted).