

Reflection Essay

**Create a Portfolio of Professional Work.
To be used to demonstrate my skills as a music producer.**

Overview:

After giving myself the task of creating a portfolio to showcase my skills as a music producer, I am now in the position to reflect on what I have accomplished. I had to create 30-45 minutes of music to show my capability in the following areas:

- Recording
- Editing
- Songwriting
- Arrangement
- Mixing
- Mastering

As I would like my future career to initially be focused on the Mixing/Mastering side of the business I decided to ensure a majority of my research and time was spent on these topics. Each of these topics would require years of training, research and experience to master so I was quite keen to focus on my preferred area. I have learnt a lot in regards to the actual role of a music producer from my year of study, and after completing this final portfolio, my views have changed massively in my outlook of the role of a music producer, and where my priorities need to be. If I had the chance to do this again, I would definitely do it differently from the start with a different outlook, and this paper will explain what that outlook is and how I got there.

The Tracks:

In total I completed 9 tracks for the assignment. These varied from full productions completed solely by myself, to tracks that I just mixed and mastered. The reason I wanted to have some tracks that I solely mixed and mastered is because I feel it is important that to complete these areas to a high standard, you must have not had a role in the songs creation, (izotope.com, 2019).

During songwriting, recording and arranging you can end up hearing the same sounds, melodies, frequencies over and over again, which can have an effect on how you hear the general mix. A good mix engineer will hear the track for the first time and probably notice something different to the producer who have had a hand in it from the start. He can then add something new to the feel of the track! Ideally I could have also mastered a mixed track for the same purpose, however did not have time to complete this.

Below is an overview of each track so you can understand how I was involved with the track and help me explain things further into the reflection.

Track 1 - "Sky Surf" (Feat - Francesca) - This track was created for a songwriting camp where we had to write to a brief. This one in particular was for electric pineapple and we were referencing a track called 'Awoo' by Sofi Tukker. I played, recorded and edited the guitar riff. Recorded and edited the vocals. Songwriting through to mastering done by myself.

Track 2 - "Do you like that" (Feat Dalla Supreme) — This track began from wanting to find an original/interesting sound for the main instrument of a track. I was thinking something like Flo Rider 'Low' as this was and still is a massive hit in the commercial clubs. Once I got a good sound and riff I build the rest of the track around that. Due to Covid restrictions it was hard to get vocals so did the first verse myself to show how I wanted the vocal melody, the second verse was recorded by an artist who lived too far away for me to see in the time frame we were given,

however he has the Caribbean accent I was looking for and recorded a verse and bridge for me that he wrote. Since then I have not been able to contact him, which is unfortunate as his recordings are very badly recorded due to clipping, distorting his audio. I would not normally include this in a production but as I wanted to show the style I wanted in regards to vocals I have added for this project. I did however run them through a program called RX8 which allowed me to remove some of the unwanted noise and hiss, unfortunately the damage done through the clipping is irreversible, (rebootrecording.com) . All other parts of production are done by myself.

Track 3 - "When I first met you" (Scott Loveless) - A hip hop/R&B style track. The artist wanted an emotional beat as he had an idea of a track for his partner. I wanted a good emotional chord progression, and as I am not the greatest at music theory I used a chord progression pack. I sampled many before I heard the one I felt would work. I then arranged the beat and sent to the artist who wrote the lyrics and hook. I then recorded and edited his vocals and finished with the mixing and mastering.

Track 4 - "Dance" - I wanted to create a song with energy and had in mind Jax Jones and Ella Henderson 'This is Real'. To begin this track I decided to completely break down the reference tracks arrangement and see what I could learn or get inspired from. Also, as I had not focused as much on this area as much as I should have previously, I thought it would be a good idea and make sure I am going into the track with a decent structure in mind. I used a technique quite popular with song writers where you sing a load of random words or noises over a track to get the melody and then figure out the words after, as Jimmy Webb (1998, Pg 5) mentions "some sit at a piano or hold a guitar and chain-of-consciousness sing-any-old-thing-that-comes-into-their-heads at the outset—getting a "sound" first and working out the intricacies of meaning later. Another well known writer stands in front of huge speakers and "word Jams" to tracks that are already finished". I have now written the words for the artist I choose to sing on the production and I have these printed in Appendix A so you can see how they would fit over my sounds. I have gone overboard with the auto tune due to my extremely poor singing voice, again this has just been included to show what direction I wanted the vocals to go in before finding an appropriate singer. All aspects of production done by myself.

Track 5 - "Iris" googoo dolls (Dick Dollar Remix) - Due to many producers getting a start in their careers from doing remixes, I felt it would be good to be able to show this in the portfolio. It is a track I have always wanted to create a remix of and have never been able to get the accapella. After purchasing izotope RX8 I used its instrument separation feature to acquire them. This does mean the vocals are of poor quality from the start, however I have used effects to try and hide this as much as possible. Once the production is fully complete I would request permission from the copyright holders to release (and gain access to original vocal recordings). Apart from the vocals and chord progression, all other production aspects were done by myself.

Track 6 - "Rectified" - For this track I wanted to get back to my hip hop roots. I usually create my own drum loops and beats from scratch however these have changed massively over the years and I believe was helping make my beats sound a bit dated. For this reason I decided to use a drum loop from a slate digital hip hop sample pack. Once I had the loop I found an accompanying melody and went from there. The vocals I did myself, again was mainly to show how I wanted the melody to go for a potential artist to mimic. Also a chorus hook needs to be developed. All aspects of production completed by myself.

Tracks 7-9 - These were 3 tracks produced by Amit Dhiman up to the mixing and mastering stage. I have then taken the stems and mixed and mastered. It was important I had not heard these tracks before so I could compare the differences between mixing someone else's tracks and my own.

Analysis:

To analyse each track during the mix and master process I used the Izotope Tonal balance and Insight 2 plug in. These gave me my loudness ratings whilst also showing my general frequency response compared to a reference track. I monitored the loudness throughout the track, and also the stereo spread and how this changed through the duration of a song.

What I found was that the loudness would slightly increase at certain points throughout the track, generally with the peak of these increases being at the start of each chorus. Also the true peak would tend to be over the 0db mark that I was unaware was a commercial standard. I believe the reason for this could be the streaming processing that is applied before the platform loads the track to its site.

I found myself focused primarily on the momentary loudness, as this is the level at which the user is hearing the track at any given point. I also monitored the fluctuation at which the short term loudness fluctuated. The integrated loudness is easily manipulated through clever control over the short term and momentary loudness and as streaming sites use the integrated to set its levels, this is a smart way to ensure your track is perceived louder than competitors in the market.

I have realised that to be a successful music producer being an expert on the 6 points of focus is near on impossible. It is about nurturing the experts currently in those fields to produce something quite extraordinary and this is through the vision of the producer at the start of a project. Giving the songwriter some inspiration and guiding them to that catchy melody, understanding what you want from the recording engineer so you get the expected results, knowing how to bring the best out of a vocalist to capture the best performance.

To succeed in each of these brackets and get the best you can expect will ensure that the track created will excel and be the success that is wanted from each and every producer. My ongoing learnings will be focused on songwriting as I feel this where the magic happens.

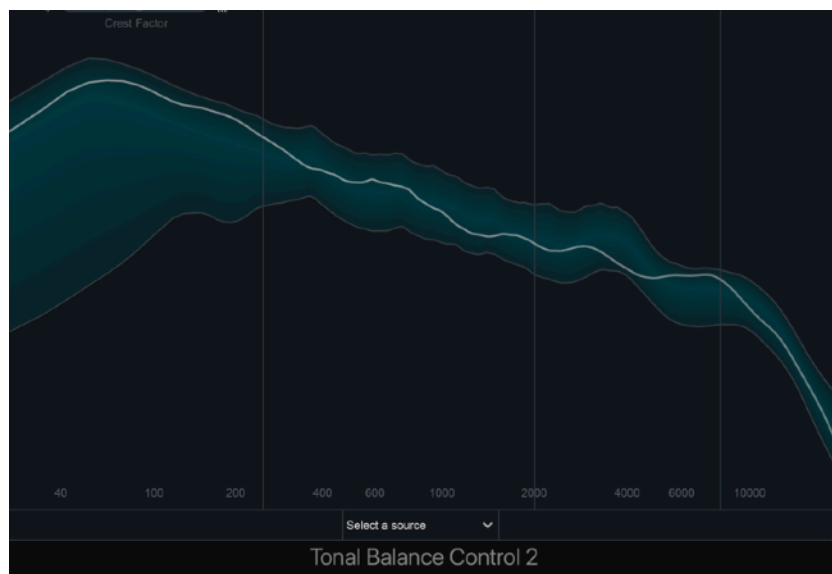
This is Real - Jax Jones

True Peak -	0.2
Integrated LUFS-	-9.9
Momentary -	-6 (Start of final Chorus)
LRA -	2.9
Average Peak -	-0.5 (Pre chorus -1, Chorus 0.1)
Average RMS -	-6.5 (Pre chorus -10, Chorus -6)



Dance

True Peak -	1.6
Integrated LUFS-	-9.5
Momentary -	-6.3 (Start of final Chorus)
LRA -	6.3
Average Peak -	0.5 (Pre chorus -0.2, Chorus 0.7)
Average RMS -	-7 (Pre chorus -11, Chorus -4.5)

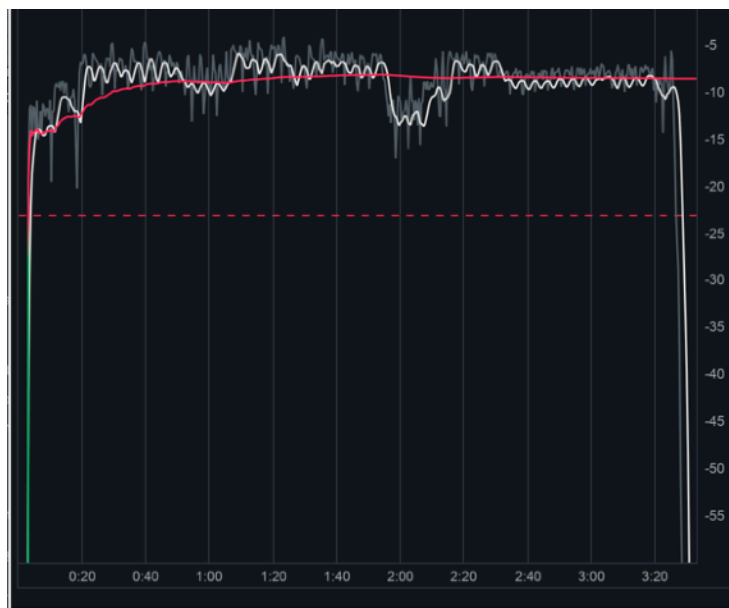
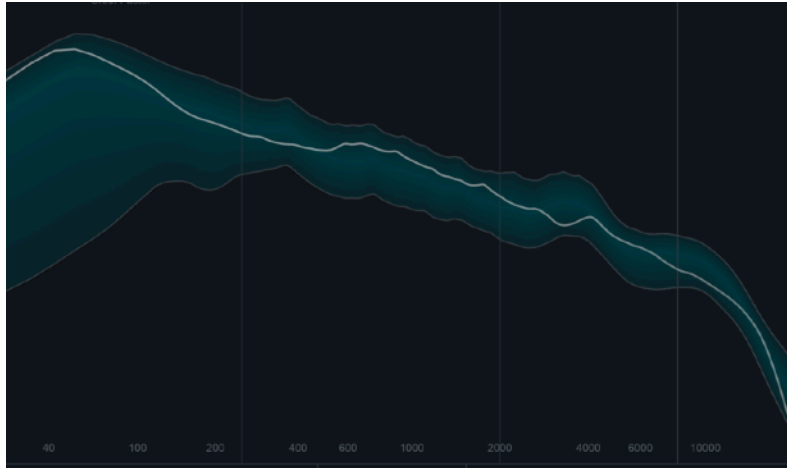


From analysing the graphs and figures above I can see some similarities and differences to the professional Jax Jones track and Dance. In general I have similar integrated loudness and a similar maximum momentary LUFS. I have programmed in the tonal response of 'This is Real' and is shown via the blue area in the graph above. The white line shows my tracks response during the chorus and for a majority of the track I am within the limits of the reference track. So at first thoughts I believed the general tonal response would translate well on other systems due to a similar curve however this was not the case.

When looking in more detail I can see where my mix and master has some issues. From looking at the loudness history graphs, the reference track has clearly got a small range between the quietest and loudest parts of the track, hence an LRA of 2.9LUFS. Whereas my track has very large dips in the pre chorus as I am high pass filtering the vocals and have nothing else in the arrangement. This is then causing issues when I come to compress or limit the master buss and explains why I have such a high true peak. I have had to 'slam' the limiter to get the desired integrated loudness which has in turn caused some distortion and diminished sound quality.

Iris

True Peak -	0.8
Integrated LUFS-	-8.4
Momentary -	-3.9 (Start of final Chorus)
LRA -	5.7
Average Peak -	0.5 (Pre chorus 0, Chorus 0.7)
Average RMS -	-7 (Pre chorus -7, Chorus -7)

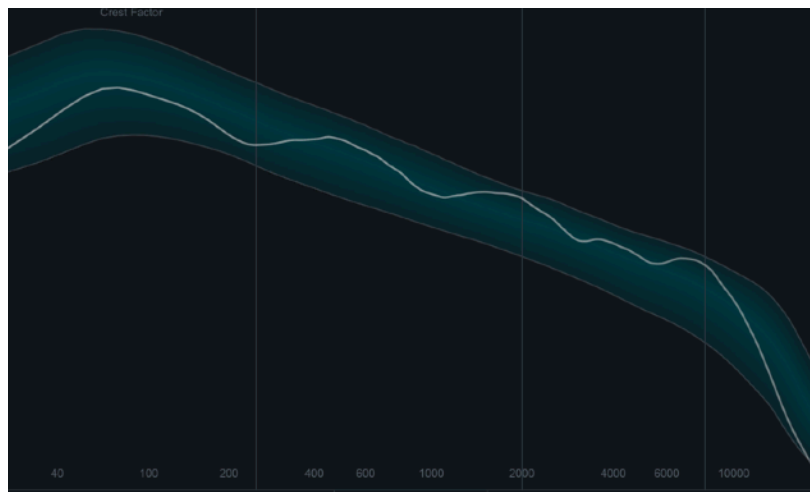
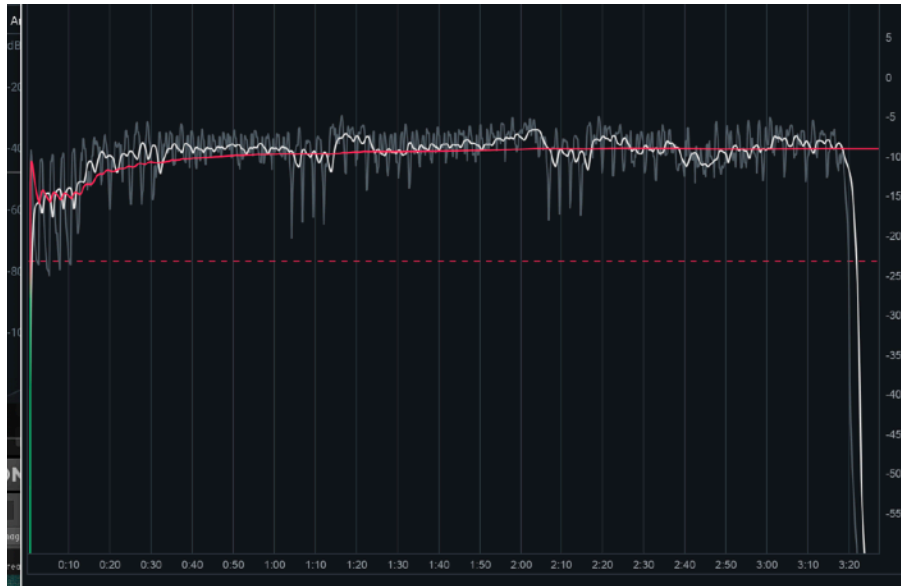


The other dance track 'Iris' had a higher perceived loudness but a lower True Peak. Again similar to Dance, the LRA is large over twice the range of Jax Jones. The loudness also reduces as the track progresses as you can see in the history graph. This would need to be rectified in the mix by improving the riding of faders and taking more care in the meters during the initial mix.

The tonal balance is again inside the reference tracks area however it looks as though the very low frequencies around 40Hz is too high. This would have a big impact on the limiter I am using on the master as the low frequencies will trigger the compression much earlier than needed on the higher frequencies. What I can do to avoid this is using a multi band compressor to ensure the lower frequencies are compressed separately to the rest of the track allowing for a crisper sound.

First Met You

True Peak -	-0.1
Integrated LUFS-	-8.8
Momentary -	-4.6 (Start of final Chorus)
LRA -	3.8
Average Peak -	-0.1 (Pre chorus -0.1, Chorus 0.1)
Average RMS -	-4.8 (Pre chorus -11, Chorus -5.5)



When analysing the hiphop tracks I believed that the 'First met you' track had a full sounding mix. It does include more elements, which help, but it also had a nice shine to it that I liked. When I received feedback from one of my peers, Amit Dhiman, he also picked this as my best mixed track from all 9.

Looking at the figures and graphs I can also see reasons to why this may sound more professional. The true peak does not go over 0db which means I have good sound quality from the master. Also the LRA was the lowest of all my tracks at 3.8LUFS. The tonal balance was within the standard target area and all the other loudness figures are close to the reference track.

There are still issues which I can easily identify from looking at the history, where my LRA was the best out of my tracks, it is still away from the 2.9 target and the overall graph just isn't as

compact as a professional mix/master. I believe this is because I am not using enough compression within the mix or master. Compression is used to lower the peaks and bring up the lower levels so it is much more compact sound. The skill here is to know the correct amount of compression and make up gain to use where the audio is not distorted and still have good dynamics.

Also by looking at the history the same maximum momentary loudness is hit at the start of first verse, mid first chorus, start of second chorus, mid second chorus and after break. Ideally I would like to gradually increase these in small stages. This could be done by riding the master fader as mentioned in The Dave Pensado Mix Setup video ([YouTube.com](https://www.youtube.com/watch?v=JmJmJmJmJm), 2015) . This is definitely something that I need to put into my future productions and for when I remix these tracks.

Feedback:

I received a lot of feedback for my portfolio, a lot was focused on my clashing of frequencies. Tom Fuller made me see the importance of compression and how this is used to flatten out the mix. Also saturation and how this helps push each sound forward and thicken. Parallel compression was mentioned a lot and he says he uses this on almost everything. This was a technique I had only just been made aware of but can see how this technique can be used a lot to beef up a sound.

When speaking to Tom about the wideness on my tracks, he explained this is much easier to accomplish during the arrangement of a project. By panning certain sounds at the correct timings to ensure the stereo image is utilised to its fullest. Stereo widening could also be done via other methods, for instance using a mid side EQ on the mix buss, when boosting the highs and attenuating the lows on the side. This had to be done with caution as too much of either could damage the mix.

Tom also mentioned my kick and bass were masking in a lot of the tracks. Where I initially mentioned using a side chain compressor on the bass to ensure the kick would cut through when played together, he suggested that this should always be a last resort and I should be reaching for the EQ first to try and sculpt the sounds into their own areas, generally reducing the bass frequencies around 160 Hz (or wherever the kick is sitting) will help. He also said that if a sound doesn't fit I should look at removing it and replacing with a different sound. The reason for this is to ensure all the sounds have their natural frequencies already in the mix without needing any help. This ensures a good separation of instruments.

Tom also spoke a lot about the layering of my sounds. He said some of my arrangements are quite sparse, with is not a bad thing, however each sound should be made as big as possible. It was very obvious to him which tracks I hadn't layered a kick and which ones I had. When I go back to the mix I should look at layering all the sounds to make them thicker, wider, bigger which will help make the track sound big.

My fellow peer Amit Dhiman listened to my tracks a lot and gave very helpful feedback. He noticed that a lot of my tracks were a bit harsh in the high end frequencies and questioned if I had boosted them. What I had done is over boost the high frequencies with an air EQ on the master channel, this was to counteract the poor playback I had on the car stereo system. However what I came to learn is that you should only really be doing 0.5-1 dB boosts or cuts on the master as it effects the overall mix massively. From this feedback I was able to reduce these boosts and improve the final mix for submission.

He also noticed some tracks were missing some low end. These were due to a poorly layered kick drum. I was able to add a nicer subby kick which brought out those lower frequencies in the tracks.

What I found is once Amit had mentioned something I could hear it to. I believe this was due to ear fatigue. I was working on tracks for a long period of time, sometimes for days at a time on multiple tracks, ([izotope.com](https://www.izotope.com), 2019). This then meant I was not hearing the mix correctly. Once I sent the tracks for feedback I had a few days break and then went back to the tracks with the necessary feedback and it was very obvious. This has taught me the importance of regular breaks, and listening to the mix the following morning before sending off to a client.

Apart from professionals and fellow peers, I also got feedback from the general public. These were non musicians, producers, singers. These are the people that would be listening to music on a day to day basis for the enjoyment and their feedback is the most important to me. Apart from the odd laugh at my attempts to sing I had comments like:

"I prefer that to the original" in regards to Iris remix
"That sounds like it could be on the radio" Iris remix
"It's very chilled for a dance track" Iris remix
"Bit repetitive" Sky Surf
"I Like that" Do you like that

These were mainly nice comments, however as they were people I knew I could not guarantee they were not just trying to be nice. I posted snippets of my tracks online to get some feedback from people who didn't know me, but were involved with music, either production, artists etc. There was similar constructive criticism to Tom where they can hear frequency clashing and the mix needs addressing. This confirmed that I still have a long way to go in regards to mixing a track professionally.

Good points were people asking where they can get the track from to play out in clubs as they DJ. This was regarding 'Do you like that'. Only a small clip was put up and it was the last half of a chorus going into the first half of second verse. The DJ has contacted me multiple times to see if it is finished. This I feel is the most positive feedback I have received regarding my music. I feel this relates more to the songwriting, as it is a catchy hook and melody which has stuck in someones mind.

Mixing and mastering:

As this project was to be focused on my mixing and mastering skills I felt I had to look at other reasons why I may be creating poor mixes. And there are a few!

Firstly you need the correct equipment. Professional studio monitors are required to ensure a good mix that can translate well on any playback system. The top quality ones are very expensive but ensure that a flat response is given. What also affects this is the environment you are listening to them in. Room acoustics must be addressed to ensure the response heard is a true reflection of the audio. Rooms can enhance certain frequencies and walls can create reflections that can change the perceived stereo image.

To mix at a professional level these 2 things must be perfect. So investing in a good pair of monitors and room acoustics is mandatory. There is a science to the room acoustic set up to ensure a true response. Reflections can be stopped by placing absorption panels on the walls each side of the speakers at an angle that the sound waves would bounce directly into the users ears. You can also use a dispersion panel on the back wall to help minimise the sound waves all coming back in the same direction. Bass traps should be used in the corners to absorb the large low frequency waves. General floor and wall surfaces should also be a material that does not easily reflect sounds, like carpet.

Once the environment and equipment is of a high standard, ear training can then be utilised to practice hearing exact frequencies. There are techniques using EQ that can help determine certain issue frequencies but you still need to use the ears to know what you are hearing. This can take years of experience to get right, and is why the best engineers can charge a high price.

I am certain that I would never mix or master any of my own productions that I am looking to release. There will always be someone with more experience than me in that field and I would want the best possible mix and master for my tracks going into the world. This would increase the chances of the tracks becoming successful and also boosting my career as a producer.

Song comparisons list:

From my proposal I created a list that I felt should be included to make a track successful. I have used 2 reference tracks that were big hits. I have then completed for my 6 productions.

Jax Jones- Y/N. Flo rider - Y/N. Track 1 - Y/N. Track 2 - Y/N. Track 3 - Y/N. Track 4 - Y/N.
Track 5 - Y/N. Track 6 - Y/N

1. Good lead voice YYYNNYYN
2. Good Story YYYNNYYY
3. Is there 1 or more hooks YYYNNYYY
4. Repetition used but not over used YYYNNYYN
5. Harmonic structure YYYNNYYY
6. Original sample or sound used NYYNNNNY
7. No average lyrics YYYNNYYY
8. Strong bass line YYYNNYYN
9. Syncopation utilised YYYNNYYY
10. Interesting intro YYYNNYYY
11. Interesting instrument used YYYNNYYY
12. Has a modern production technique been used NYYNNYYY
13. Does the track appear loud YYYNNYYY
14. Is there good stereo spread YYYNNYYN
15. Is each verse different musically YYYNNYYN

Once I had analysed all the tracks for the above points the first thing I noticed on the reference tracks was that Jax Jones hit had quite a few N's. When going back over these points they mainly focus on interesting sounds and instruments. However the vocal is so powerful, this has become the interesting sound. So these were changed to a yes. There was no apparent modern production technique that I could make out, just the whole production is very tight with the vocal production carrying the track with its clean, perfect tone. The Flo rider had all these points and shows why was such a big hit.

When comparing my tracks to the list I can see that I have the same points not being hit. The good lead voice would be an artist so I am not worried about that for this stage in the productions. The concerns are as follows:

- Repetition
- Original Sounds
- Strong Base line
- Loudness
- Stereo spread
- Verses different musically

I feel that this is a relatively small list compared to what I would have scored if I had done this before the course had started. The loudness and stereo spread will come from more experience in regards to mixing, mastering and the arrangement of my projects. The repetition should be an easy fix, I believe due to how I create my music, I get stuck on a loop and focus on other things. When producing a track I need to leave it for a day once I have the main arrangement down, and then have a session purely on making changes in each section to ensure it is not repetitive. Also music theory will help with chord changes as I tend to keep the same chords throughout the whole track which Tom Fuller picked up on in my feedback.

With the sound design, I need to make time to search my synths and samples for unique interesting sounds and save them into a separate bank. This will then give me something to pick out during the production process. Generally when I am in the songwriting zone I don't want to search for hours finding a sound. However I am now able to go back through the tracks and sub out one of the sounds for something more interesting and lift the track that way.

The strong bass line is present in half of the productions, but some are a bit 'wishy washy' in the background and lost in the mix. I need to go back to these tracks and either change the sound completely, or layer with a more interesting sound or groove.

Conclusion:

In conclusion, unfortunately I have not achieved what I had set out in my proposal. My productions are not at a high enough standard to be included in a portfolio of works. I do feel however that I have much more of an insight into how far my productions are away from being at a suitable level, and also where I want to be as a producer in the industry.

Initially I went into this project wanting to improve my mixing or mastering skills to allow myself to take on work in this area alongside my own personal productions. This could be something I can do in the future but I definitely need more experience, training and practice. I am now even more focused on improving my own personal productions and investing in experienced engineers to get my productions to the necessary level.

One of the main pieces of feedback I received prior to starting this project was my production was dated and I feel from modernising my productions slightly I can see an improvement in my tracks.

I feel the time constraints also affected my final submissions. Ideally I would like to be able to spend as much time as necessary on my productions. Maybe using 2 months to create one or two productions instead of 6. I felt at some points I had to rush or leave things at a level I was not happy with. I am now in a position to focus as much time as I need to ensure the productions are perfect. Also its possible that when I get my tracks mixed and mastered professionally, it may help inspire me to make even better productions.

I have included a personal development plan in Appendix B to show what my plans and goals are following this masters degree.

Appendix A

Lyric idea for 'Dance'

I got dance, On my mind

And I sing, Gotta find you near

Oo Ooh, yeah eaa

I'm Finding, a wa a a ay

Oh, That time of the year

I'd gone away

I got eir r r r

Everything, I'm your king

Yea, Dancing

Appendix B

Personal Development Plan

After I have completed an MA in music production I would like to achieve the following:

- I would like my own music production company.
- I would like the company to earn enough for me to focus on music full time.
- Income earned through selling beats, offering production services, Game music, Sync Licenses, gigs and releasing tracks.
- Have a track in the top 40.

I will measure my goals in relation to the revenue my company can turn over in a year. I would like to earn a minimum of £30000 profit before I will quit my current job in the hospitality sector. After the first year I would measure the like for like growth of the company with the aim of growth each year.

I would need to complete the following tasks for this to be possible:

- Own a website advertising my services - this would be part of the start up costs of the business. It needs to be user friendly, simple, clearly advertises all products and services, easy to make payments and download beats or tracks.
- A marketing campaign to get knowledge of my services out into the world. This will have a large budget and will be a lot of Facebook adverts. I will also advertise unique services in local papers and magazines that will appeal to a wider audience.
- I need to increase my network of producers, artists, managers etc.
- I need to invest in professional singers, studios, mix engineers, song writers etc to ensure my tracks have a chance at the top 40.
- I need to create a producer tag to incorporate into my beats, this will also be a form of advertisement for the company
- I need to begin piano lessons to understand music theory more and improve my songwriting ability

I believe these are all realistic goals, the success will come down a lot to marketing the products and getting the work coming in. I have some unique ideas that could entice anyone to use my company which could help get the sales to where I want.

My specific deadlines from 1st January 2021 are:

First 6 months -

- Begin creation of website
- Pay for the URL dickdollarproductions.com,
- Create new social media platforms for DDP
- Send my productions off to get mixed and mastered
- Create videos for mastered tracks and release
- Make new beats, roughly 4 or 5 new beats a week
- Begin a new major production
- Work on a previous production that needs improving

6-12 months -

- Website to go live
- Marketing campaign to begin
- Visit networking events monthly
- Look for local talent
- Continue with beats and productions

1 year and onwards -

- Monitor revenue, when high enough ensure profits are put back into the company with the following in mind:

- Staff to look after social media and marketing strategies
- Improved equipment and studio
- Bigger marketing strategies
- Better music videos
- Better musicians and vocalists
- Better Mix and mastering engineers

I am quite confident all the above is achievable, however I am aware that doing this with a full time job and 2 children will be challenging and time frames will be longer than for someone who only works part time and has no dependants. This of course does not mean it can't be done.

I would like to further my personal development in music theory, I feel this is the key to much more professional productions. I will look at completing this via an online course for ease of completion due to my hectic timetable.

Bibliography

[www.izotope.com](http://www.izotope.com/en/learn/what-is-the-difference-between-mixing-and-mastering.html), (2019), What is the difference between mixing and mastering, [online], available from www.izotope.com/en/learn/what-is-the-difference-between-mixing-and-mastering.html [accessed 18th November 2020]

[www.rebootrecording.com](http://www.rebootrecording.com/how-to-fix-clipped-audio/), How to fix clipped audio, [online], available from www.rebootrecording.com/how-to-fix-clipped-audio/, [accessed 1st December 2020]

Webb, J, (1998), *Tunesmith - inside the art of songwriting*, Boston, Hatchett Books

Pensado, D, (2015), The Dave Pensado Mix Setup - Pensado's Place 201 [online], available from www.youtube.com/watch?v=ghTXxylMwDk, [accessed 22nd November 2020]

Dixon, D, (2019), How to Prevent Ear Fatigue When Mixing Audio, [online], available from www.izotope.com/en/learn/how-to-prevent-ear-fatigue-when-mixing-audio.html, [accessed 2nd December 2020]

Katz, B, (2007), *Mastering Audio, the art and the science, second edition*, Oxford, Elsevier

Owsinski, B (2006), *The Mixing Engineers Handbook, Second Edition*, Boston, Course Technology