Network-Enabled Platforms (NEP-2) Program
Progress Report – March 31, 2012.

Project NEP54: Open Orchestra
Appendix 1: Evaluation Report

Workstation Version Student User Survey Responses

Although users were encouraged to complete the survey immediately after trying the workstation, this was not compulsory and not all users did so. In all, 27 survey responses were received in the final round of testing from Feb. 26 to Mar. 29, 2012.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel comfortable using technology				13	14
2. The system was easy to use			3	19	5
3. The score on the screen was large and easy to see	2		4	10	11
4. I would have liked to have a brief tutorial on how to use the system before I began		4	9	12	2

Comment:
We have decided to add the tutorial.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5. I felt that I was in control of the experience		2	5	5	15
6. It was easy for me to interact with the recorded orchestra	1	1	4	14	7
7. The sound quality enhanced my learning	1		10	6	10
8. The video quality enhanced my learning	1	2	8	10	6
9. I would have learned more if the orchestra and I were in the same room		3	4	10	10

Comment:
We expected that users would rather be in the same room as the orchestra.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
10. I found the experience very enjoyable	1		1	13	12
11. This system had a positive impact on my learning	1		2	16	8
12. I would use this system again	1		1	11	15

13. **What would you change?**

General comments:
The following comments are from students, not from teachers, so some of what the students want may not be what the teachers want them to have.

Some comments indicated that the user did not know that some of the controls existed and they could benefit from an initial tutorial.

Some users noticed the continuing playback problems especially when the audio and video are slightly out of sync.

Users mentioned audio problems at one site.

Users mentioned not being able to hear themselves while playing or singing and not hearing the orchestra when playing back their recording.

There were also comments on other problems with the score that have since been fixed.

There was one person at the site with audio problems who mentioned the problems and gave the system the lowest ranking in almost every category.

Other comments:

"Did not know how to control the physical interface (volume controls) - really hard to reach for a cello player position."

"When the system shows only on page (sheet) of music, would be nice if the mixer did not cover all of the screen on one side... Or that the sliding panel was less big so that when I am hearing my recording it is not covering the piece of music. Or if you had a movable panel (mixer / recording) by touch."

"I had to put all the levels max to get to the level of sound that I wanted."

"Mixer: I would like to hear more of the band. I wanted to hear more of the drums, and not so much of the guitar or piano... So if I could have more individual tracks (instruments) in the mixer to control that would be very nice...Ability to mix my recording with the band."

"Change different views of the orchestra... See more or the orchestra, see more of the musicians and less of the conductor (Jazz)."

"The ability to annotate the music."

"Moving opera was not fun at all, it felt gimmicky."

"It would be really interesting to have a projection of the hall with or without audience. As a singer I would normally spend time before a performance standing in front of the hall for an hour... if I could practice this in advance it would be very useful."

"I would like to be able to skip to a given bar number while I am hearing my performance... as opposed to just a slider in the recording."

"Tuning and speed adjustment of the playback (repertoire) would be nice."

"I do not know how loud or quiet I was playing because everything is adjustable."

"It would be nice if you could adjust the size of the score (through a zoom gesture)."

"I would like to see more of the people I am plying with (on the left and right side) - because when you are playing in an actual ensemble you see their bodies, not only their heads."

"It would be nice to have a tuner, or have the band playing a tuning note to adjust with them."

"The digital mixer is good but it is annoying to have to open a window over the score... a good physical mixer next to the player would be great. That way you could change the mix easily while playing."

"I would really like to have a close up of the players... I would like to see what the expert is doing... If I am the trombone player, I would like to see the close up of the expert... so that I can see if I am doing something wrong."

"Having the rhythm section as one channel was not as useful as having separate channels (drums, guitar and piano independently)."

"I believe it could be of great help to the singer if there was a "warning" measure in the tempo of the piece."

"I would have a screen dedicated to the [opera] conductor, with the ambient orchestra on screens 2 and 3. The conductor is not prominent enough compared to real life."

"possibility to change the tempo"

"If the systems were as it is but without the bugs… I would find this really useful."

"I find easier here to find what I am doing wrong... Also, it is easier to be here and rehearse than with the rest of the orchestra and singers trying to figure out what they are doing wrong... Being able to hear my recording back again is really useful. It was a good learning experience hearing the other singers making mistakes... Because, Leporelo was late a few times... it keeps young your toes and it reminds you that you are listening to an ensemble and not just yourself."

"While it is nicer to have an orchestra in the same room, it takes a lot of time and money... So that is the reason of having this system that you can do this by yourself anytime... With this you can start learning right away with the orchestra and the singers; you do not get this until close to performance day."

"It is fascinating for me to see where we are going with technology... I would choose this over just rehearsing on my own... It is going to be helpful to have a conductor... plus it is more fun... You hear the harmony, the notes, that helps a lot..."

"If I have to play these pieces with the band tomorrow, I would definitely feel that I have learned something, or I would feel more prepared to play with the band in real life... I am making this comparison with just me learning on my own..."

Home Version Student User Survey Responses

Although users were encouraged to complete the survey immediately after trying the workstation, this was not compulsory and not all users did so. In all, 9 survey responses were received, 4 who tried the Home Version first and 5 who tried the Workstation Version first.

Users Who Tried the Home Version First	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel comfortable using technology				2	2
2. The system was easy to use				2	2
3. The score on the screen was large and easy to see					4
4. I would have liked to have a brief tutorial on how to use the system before I began		1	2	1	
5. I felt that I was in control of the experience				2	2
6. It was easy for me to interact with the recorded orchestra			1	3	
7. The sound quality enhanced my learning				3	1
8. The video quality enhanced my learning		1	1		2
9. I would have learned more if the orchestra and I were in the same room					4
10. I found the experience very enjoyable				1	3
11. This system had a positive impact on my learning				3	1
12. I would use this system again					4

Users Who Tried the Workstation Version First	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel comfortable using technology				3	2
2. The system was easy to use				4	1
3. The score on the screen was large and easy to see				3	2
4. I would have liked to have a brief tutorial on how to use the system before I began			3	2	
5. I felt that I was in control of the experience				2	3
6. It was easy for me to interact with the recorded orchestra			1	2	2
7. The sound quality enhanced my learning			1	1	3
8. The video quality enhanced my learning			2	1	2
9. I would have learned more if the orchestra and I were in the same room			1	2	2
10. I found the experience very enjoyable				2	3
11. This system had a positive impact on my learning			1	3	1
12. I would use this system again				2	3

13. **What would you change?**

General comments:
Two users mentioned the audio problems at one site and being unable to hear themselves while playing.

For various reasons, there were negative comments on the grey highlight bar to show the place in the score.

There were also comments on other problems with the score that have since been fixed.

Users Who Tried the Home Version First
"Have different camera options, different views."

"I had no trouble reading the music, but first I wanted to see the whole chart top to bottom."

"It would be really neat if the mixer was accessible all the time."

Users Who Tried the Workstation Version First
"Maybe give the option to change the size of the screen and the score. I found that the score was a little bit too narrow for me."

"I would include the band playing a tuning note at the start of the piece. A lot of the time, west coast musicians tend to tune slightly sharper than those on the east coast and as a result, I felt out of tune with the band quite a bit of the time."

"multiple players, loop some sections of the score, improvisation open to the user"

14. **Please compare the 3 screen and single screen versions.**

Users Who Tried the Home Version First
"The three screens are way more fun.... there are more options... I would not use the home version if I have the option to use the three screen one. I guess I would not use the home version either even if that was the only option."

"I did not find the three screens help that much. I did not need my peripheral vision that much. Would be nice if I could see the other instrumentalist and look around. I did not see much difference between both of them... I did not miss much with the one single screen."

"I would for sure use the 3 screens system over the one screen one. Seeing the people playing is nice, makes you feel a bit more connected.

Also, I would like to see more of the people playing (less of their heads)."

"Would be nice if in the home version I could have the option either to see just one part of the music part as it is, or see two pages as it is here in the 3 screens version."

"The 3 screen version definitely felt more like an ensemble rehearsal, more immersive... The home version was really easy to use because there was less to look at... It is not necessarily a better experience, but a bit easier..."

Users Who Tried the Workstation Version First
"I found that there were less technical issues with the single screen version and that it ran smoother and was easier to follow. On the other hand however, I really liked being able to look at the other members of the group in the three screen version."

"The gain provided with the 3 screens is not significant."

"It is definitely way cooler to use the 3 screens."

"I like the 3 screen because it forces you to look outside the score-screen, the main screen is closer to a stand… The three screens could be split in three parts (three players)."

"Having the three screens allows you to feel more with the band... I think it is important because you see the others, you feel you are more there when you see the band... it feels more like in a rehearsal than just by yourself (in the home version)."