HELP! I Need New Instruments!
Creating the Five-Year Instrument Replacement Plan
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Quality school bands and orchestras are made up of given ratio of instrumentalists performing their specific functions in the ensemble in much the same way that a sports organization is made up of players who perform their specific tasks. In both cases, quality equipment in excellent condition is important to the goal of having "a winning team."

However, most principals, superintendents and school boards do not understand the importance of balanced instrumentation. Since you were chosen to lead the instrumental music program, it is thus up to you to draw up a clear, simple picture of the organization you want to build and this includes approximating the expenses involved in doing so. Since school boards are composed of community members who want programs built and organized on a sound foundation, the following steps are being provided to help in the preparation of a comprehensive proposal to update your equipment. This proposal will help your supervisors understand your request and hopefully lead them to appropriate the needed resources.

CREATING THE FIVE-YEAR REPLACEMENT PLAN: *Always be at a given point within a Five-Year Instrument Replacement Plan.*

Principals and department supervisors rely on data-driven information when it comes to allocating funds for equipment. If they underderstand the reason for purchasing a specific item, they are more likely to approve the purchase so it is essential to give them as much back-up as possible. The steps and templates provided in the appendices will assist directors in organizing this information so that it may be submitted as a complete package. Keep in mind that unless the decision-maker was also a music-maker at some point, it is likely that this information will be new so in addition to providing a summary of the needed items, be sure to include a rationale for the purchases.

Step 1. Inventory
Start by evaluating each of the instruments in your inventory for condition and current value. Prepare a list of school-owned equipment (inventory record) listing the make of the instrument, condition, approximate age and repairs needed then estimate its present value and replacement cost. (This value is the trade-in value on new equipment.) **HINT:** You will find your school music dealer to be of great assistance in performing this needs assessment with/for you. The *Inventory Record Template Guide* (See Appendix A.) may also assist with organizing a comprehensive list of the school-owned instruments.

Step 2. Priority List
From the inventory record that you have prepared, prioritize a list of the instruments that should be replaced within the next five years. Include instruments that students will require in coming years to allow for anticipated growth of the program. Another item to consider is the probable growth of repair and maintenance expenses as well as music supplies and other miscellaneous equipment. The *Typical Instrumentation for Bands of*

Various Sizes Guide (See Appendix B.) may help to determine the appropriate number of instruments needed to provide a balanced ensemble and help inform administrators of the specific needs of the program. A separate Equipment Standards List for Percussion has also been provided (See Appendix F.).

Step 3. Elements of the Plan
Write up the completed five-year plan in a clear and concise manner. The first section should be an explanation of your needs and the reason for the purchase (needs analysis) as well as how this purchase will help students. Present this rationale to the appropriate supervisor and be prepared to present it to others. The *Sample Rationale* below provides several items to be considered.

A. **The likely growth of the band over the next five years (while also considering the increasing numbers of students participating in the feeder programs)**
   - To provide for increased student participation, there will be (insert number) instruments in the band inventory at the end of this five-year plan.

B. **The additions that must be made to the inventory to satisfy the demand for instruments that will result from this growth**
   - To achieve a balanced instrumentation and offer maximum contribution to school and community activities, this plan would allow for the addition of the following instruments to the inventory:
     o 1 Piccolo
     o 1 Euphonium
     o etc.

C. **The instruments in the current inventory which need to be replaced**
   - To replace current instruments which are no longer playable, this plan provides for the replacement of the following instruments:
     o 1 Double French Horn
     o 1 Bass Clarinet
     o etc.

D. **What other materials will be needed in order to provide the students with a quality sequential music education program**
   - The overall expense for the first three years of the five-year plan is higher because there is an immediate need for a number of instruments. The last two years show a decline in spending. In making this investment, the school will be able to accommodate the needs of all students who choose to participate in the band program.

The body of the Plan will include templates that address expected life as well as depreciation for the various instruments. The *Estimated Annual Budget for Band* (See Appendix C.1.) *and Orchestra* (See Appendix C.2.) are model formats that could be used when presenting the Five Year Replacement Plan to the responsible administrator.

Step 4. Depreciation Chart
Using the *Depreciation Chart* (See Appendix D.) as a reference, add all new instruments to be purchased in the future. Each year, enter the amount of depreciation. The Expected Life & Depreciation Estimates for Band Instruments (Appendix E.) is provided to help determine the expected life of the instrument.

Depreciation for each instrument is figured by:
    A. At top of page, refer to the **Average Life** column next to the appropriate instrument.
    B. At bottom of page, determine the **Age of Instrument in Years**. Multiply the original cost of the instrument times the percentage shown in the correct **Estimated Life of. . .** column just to the right of the age of the instrument. Subtract the resulting product from the original cost of the instrument. That will give you its current value.

An example is provided in the first entry of the *Depreciation Chart* (See Appendix D).

CONSIDERATIONS:

    1. Longevity depends greatly upon the quality of the instruments when new. The better-made instruments will stand up and last over a longer period of time.
    2. The amount of use and care students give the instruments will have a bearing on the length of usability.
    3. Keeping the instrument in good condition through continual minor repairs and periodic overhauls will add to its longevity

Directors who walk into a new position and find adequate equipment in good shape should consider themselves lucky. Thus, the majority of directors must, at one point or another in their careers, be prepared to propose some sort of budget for needed instruments and equipment. Decision-makers including principals, superintendents, and school board members respond more favorably to a purchasing plan that has been well-organized and based on the needs of the students. A Five-Year Instrument Replacement Plan will show that the director has done due diligence in assessing, researching, and organizing the needs of the program to meet the needs of its current and future participants.

Special thanks to the Music Achievement Council, Bob Malone and Dave Gerhart at Yamaha Corporation of America, and string educator, Bernadette Scruggs, for their invaluable input in the writing of this article.

07.31.17

Appendix A. Instrument Inventory Record Template

Instrument	Inventory Number	Make	Serial Number	Date Purchased	Present Value	Present Condition*	Remaining Life

*Condition could be defined as (E) Excellent,(G) Good,(NR) Needs Repair, or NRp) Needs Replaced

Appendix B. Typical Instrumentation for Bands of Various Sizes

Instrument	Size of Band				
	35-40	40-50	50-60	60-75	75-90
Flute	4(d)	6(d)	7(d)	10(d)	12(d)
Oboe	1	1	2	2(e)	3(e)
English Horn	1	1			
Bassoon	1	1	2	2	2
B-Flat Clarinet	8	10	12	16	20
Alto Clarinet	0	1	1	1	1
Bass Clarinet	1	1			
Contra Bass Clarinet	3	5	6	8	9
Alto Saxophone	3	5	6	8	9
Tenor Saxophone	1	1	1	2	2
Baritone Saxophone	1	1	1	1	1
Cornet-Trumpet	6	8	8	8	10
French Horn	4	4	4	5	6
Trombone	3	4	4	6	7
Bass Trombone	1	1	1		
Baritone Horn (Euphonium, Sousaphone)	2	2	3	3	4
Tuba	2	2	2	2	3
Percussion (Including Timpani)	3	4	4	5	6
TOTAL	40	50	60	75	90
(d) One doubling Piccolo (more for marching bands)					
(e) One doubling English Horn					
Instrument	Size of String Orchestra (Approximate)				
	35-40	40-50	50-60	60-75	75-90
Violin (First & Second)	18	24	28	34	40
Viola	9	12	14	17	20
Cello	8	9	12	16	20
Bass	5	5	6	8	10
	40	50	60	75	90

Appendix C. 1. Estimated Annual Budget for Band Program

Schedule A: Instruments (Add to List as Needed)		No.	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr
EX: Trumpet: Manuf. _____ Model # _____		2	$X,XXX.00				
C Piccolo:							
Oboe:							
Bass Clarinet:							
Bassoon:							
Tenor Saxophone:							
Baritone Saxophone:							
French Horn:							
Euphonium:							
Tuba:							
Add							
Add							
Add							
Percussion Equipment Standards Recommended	**MS**	**HS**	**1st Yr**	**2nd Yr**	**3rd Yr**	**4th Yr**	**5th Yr**
Bells, Orchestra 2-1/2 Octave Keyboard with Case:		1 Ea					
Bells, Orchestra 2-1/2 Octave Keyboard with Case:		1 Ea					
Blocks, Temple Granite w/Mount:		1 Ea					
Chimes, 1-1/4" Diameter Chrome Tubing w/Full Drop Cover:	1 Ea						
Chimes, 1-1/2" Diameter Chrome Tubing w/Full Drop Cover:		1 Ea					
Cymbals, Suspended Medium 20":	1 Ea						

Appendix C. 1. Estimated Annual Budget for Band Program

Cymbals, Suspended Medium 18":		1 Pr					
Cymbals, Crash Concert 20" w/Pads, Straps, Bags:		1 Pr					
Cymbals, Crash Marching 18" W/W Pad, Thongs, Pouch:		2 Pr					
Drum, Bongo Set of Two 1 Large, 1 Small Complete w/Stand:	1 Ea	1 Ea					
Drum, Concert Bass 16" x 32" w/Suspended Stand:	1 Ea						
Drum, Concert Bass 16" x 36" w/Suspended Stand:		2 Ea					
Drum, Outfit Medium Duty Middle School w/Cymbals & Cases:	1 St						
Drum, Outfit Medium Duty High School w/Stand:		1 St					
Drum, Set Conga and Tumba, (Wood) Shell, 6 Tension Lugs:		1 St					
Drum, Snare Concert 5-1/2" x 14" Metal Shell w/Heavy Duty Stand:	1 Ea	1 Ea					
Drum, Snare Concert 6-1/2" x 14" Maple Wood w/HS Case & Stand:	1 Ea	1 Ea					
Drum, Marching Quint Set, 6" 8" 10" 12" 13" w/ Carrier, Case:		4 Ea					
Drum, Marching Tonal Bass, 18 x 14"" w/ Carrier, Case:		1 Ea					
Drum, Marching Tonal Bass, 20" x 14" w/ Carrier, Case:		1 Ea					
Drum, Marching Tonal Bass, 22" x 14" w/ Carrier, Case:		1 Ea					
Drum, Marching, Tonal Bass, 24 x 14" w/ Carrier, Case:		1 Ea					
Drum, Marching, Tonal Bass, 28" x 14"" w/ Carrier, Case:		1 Ea					
Drum, Snare Marching 14" x 12":		6 Ea					
Drum, Stereo, Drum Machine, 16-Bit:		1 Ea					

Appendix C. 1. Estimated Annual Budget for Band Program

Gong, 32" Complete w/Stand:	1 Ea	1 Ea						
Marimba, Concert 4-1/3 Octave A25-C76 Full Size Acoustalon W/Cover:	1 Ea	1 Ea						
Marimba, Concert 5 Octave C16-C76 Full Size Rosewood w/Cover:		1 Ea						
Stand, Cymbal Medium Weight Floor Type Adjustable Height Tilt:	1 Ea							
Stand for Temple Blocks, Medium Weight, Single Brace:		1 St						
Tambourine, 10" Single Row Beryllium Copper Jingles:	1 Ea	1 Ea						
Timpani, Set of 4 (23", 26", 29", 32") Pedal Type, Polished Copper with Long Covers:	1 Ea	1 Ea						
Triangle, Symphonic 6" w/Clip & Set of 6 Beaters:	1 Ea	1 Ea						
Vibraphone, 3 oct, Silver Bars F33-F69, w/Cover:	1 Ea							
Vibraphone, 3 oct, Glossy Gold Bars F33-F69, w/Cover:		1 Ea						
Xylophone, Acoustalon Portable 3-1/2 Octave F45-C88 w/Cover	1 Ea	1 Ea						
Bass Drum Mallet, General	1 Ea	1 Ea						
Bass Drum Mallet, Roller , Pair	1 Ea	1 Ea						
Bass Drum Mallet, Staccato		1 Ea						
Timpani Mallets Soft Staccato		1 Ea						
Timpani Mallets Medium Staccato	1 Ea	1 Ea						
Timpani Mallets General Purpose	1 Ea	1 Ea						
Gong Mallet, General	1 Ea	1 Ea						
Chime Mallet, Rawhide	2 Ea	2 Ea						
Mallet Stick Bag	1 Ea	1 Ea						
		Schedule A Subtotal:						

Appendix C. 1. Estimated Annual Budget for Band Program

Schedule B: Expenses other than instruments	No.	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr
Misc. Repairs:		$	$	$	$	
Overhauls:		$	$	$	$	
Supplies:		$	$	$	$	
Music		$	$	$	$	
Add		$	$	$	$	
Add		$	$	$	$	
Add		$	$	$	$	
	Schedule B Subtotal:					
	Schedule A+B TOTAL					

Appendix C.2. Estimated Annual Budget for Strings Program

Schedule A: Instruments (Add to List as Needed)	No.	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr
EX: String Bass **Manuf.** _____ **Model #** _____		**$X,XXX.XX**				
Violin:						
Viola:						
Cello:						
Stringed Bass:						
Guitar:						
Add						
Add						
	Schedule A Subtotal					
Schedule B: Expenses other than instruments		**1st Yr**	**2nd Yr**	**3rd Yr**	**4th Yr**	**5th Yr**
Misc. Repairs:		$	$	$	$	$
Overhauls:		$	$	$	$	$
Supplies:		$	$	$	$	$
Music:		$	$	$	$	$
Add						
Add						
	Schedule B Subtotal	$	$	$	$	$
	Schedule A+B TOTAL	$	$	$	$	$

Apendix D. Depreciation Chart

Instrument	Inv. No.	Current Value	Original Purchase Price Yr 1	Less 20% of Original Value Yr 2	Less 15% of Original Value Yr 3	Less 12% of Original Value Yr 4	Less 10% of Original Value Yr 5	Less 10% of Original Value Yr 6	Less 8% of Original Value Year 7	Less 8% of Original Value Year 8	Less 6% of Original Value Year 9	Less 6% of Original Value Year 10	Less 5% of Original Value Year 11
EX: Instrument #1 (est. life of 10 yrs)	123456	$ 330.00	$ 1,000.00	$ 800.00	$ 650.00	$ 530.00	$ 430.00	$ 330.00	$ 250.00	$170.00	$ 110.00	$ 50.00	$ -

Appendix E. Expected Life Depreciation Estimates for Band Instruments

Expected Life & Depreciation Estimates for Band Instruments:			For Stringed Instruments:	
Instrument	Should Have an Average Life of:	Should Have a Complete Overhaul Every:	Instrument	Should Have an Average Life of:
Flute	15 Years	4 Years	Violin	15 Years
Oboe, Bassoon, English Horn	15 Years	5 Years	Viola	15 Years
Clarinet	10 Years	4 Years	Cello	15 Years
Alto & Bass Clarinet	15 Years	5 Years	Bass	15 Years
Saxophone	15 Years	5 Years	Guitar	5 Years*
Cornet & Trumpet	10 Years	10 Years	*10 w/Hard Shell Case*	
French Horn	10 Years	10 Years		
Trombone	10 Years	10 Years		
Baritone	15 Years	10 Years		
Tuba & Sousaphone	15 Years	10 Years		
Drums	10 Years	10 Years		
Depreciation Schedule for Band and Stringed Instruments:				
Age of Instrument in Years	Estimated Life of 10 Years*	Estimated Life of 15 Years*		
1	20%	20%		
2	15%	15%		
3	12%	10%		
4	10%	8%		
5	10%	7%		
6	8%	6%		
7	8%	6%		
8	6%	5%		
9	6%	5%		
10	5%	4%		
11		4%		
12		3%		
13		3%		
14		2%		
15		2%		

These estimates assume that instruments are well-maintained and used repeatedly during the course of the day by various students within the program.

Appendix. F.
HS and MS Percussion Equipment

Item	MS	HS	Yamaha Product No.	Other Manufacturer No.
Bells, Orchestra 2-1/2 Octave Keyboard with Case	1 Ea		YG-1210	
Bells, Orchestra 2-1/2 Octave Keyboard with Case		1 Ea	DG-1590A	
Blocks, Temple Granite w/Mount		1 Ea		Latin Percussion LP1210
Chimes, 1-1/4" Diameter Chrome Tubing w/Full Drop Cover	1 Ea		DG9160AC	Adams BK3003
Chimes, 1-1/2" Diameter Chrome Tubing w/Full Drop Cover		1 Ea	DG9190AC	Adams BK3003
Cymbals, Suspended Medium 20"	1 Ea			
Cymbals, Suspended Medium 18"		1 Pr		Zildjian 0439
Cymbals, Crash Concert 20" w/Pads, Straps, Bags		1 Pr		Zildjian Symphonic Viennese Model ZI0449
Cymbals, Crash Marching 18" W/W Pad, Thongs, Pouch		2 Pr		Zildjian A. Cudtom Z-MAC ZI20708
Drum, Bongo Set of Two 1 Large, 1 Small Complete w/Stand	1 Ea	1 Ea		Latin Percussion M201 with LP330 stand
Drum, Concert Bass 16" x 32" w/Suspended Stand	1 Ea		CB7032CS7 (includes stand and cover)	
Drum, Concert Bass 16" x 36" w/Suspended Stand		2 Ea	CB9036CS (includes stand and cover)	
Drum, Outfit Medium Duty Middle School w/Cymbals & Cases	1 St		Stage Custom	
Drum, Outfit Medium Duty High School w/Cymbals & Cases		1 St	Live Custom	Pearl Prestige Session SMX924HP/D840 Throne
Drum, Set Conga and Tumba, (Wood) Shell, 6 Tension Lugs		1 St		Latin Percussion LP552X, LP559X, LP290B
Drum, Snare Concert 5-1/2" x 14" Metal Shell w/Heavy Duty Stand	1 Ea	1 Ea	CSM1450AIISWC (Drum w/ stand and hard case)	
Drum, Snare Concert 6-1/2" x 14" Maple Wood w/HS Case & Stand	1 Ea	1 Ea	CSM1465AIISWC (Drum w/ stand and hard case)	
Drum, Marching Quint Set, 6" 8" 10" 12" 13" w/ Carrier, Case		4 Ea	MQT68023AWC w/Pinstripe	
Drum, Marching Tonal Bass, 18 x 14"" w/ Carrier, Case		1 Ea	MB-8318AWC w/ Smooth White Head	
Drum, Marching Tonal Bass, 20" x 14" w/ Carrier, Case		1 Ea	MB-8320AWC w/ Smooth White Head	
Drum, Marching Tonal Bass, 22" x 14"" w/ Carrier, Case		1 Ea	MB-8322AWC w/ Smooth White Head	
Drum, Marching, Tonal Bass, 24 x 14"" w/ Carrier, Case		1 Ea	MB-8324AWC w /Smooth White Head	
Drum, Marching, Tonal Bass, 28" x 14""" w/ Carrier, Case		1 Ea	MB-8328AWC w/ Smooth White Head	
Drum, Snare Marching 14" x 12"		6 Ea	MS-9314AWC w/ Falam Head	
Drum, Stereo, Drum Machine, 16-Bit		1 Ea		Alesis SR-16
Gong, 32" Complete w/Stand	1 Ea	1 Ea		Wu Han #WU-007-32 w/WU-322A
Marimba, Concert 4-1/3 Octave A25-C76 Full Size Acoustalon w/Cover	1 Ea	1 Ea	YM2400C	
Marimba, Concert 5 Octave C16-C76 Full Size Rosewood w/Cover		1 Ea	YM5100AC	
Stand, Cymbal Medium Weight Floor Type Adjustable Height Tilt	1 Ea		CS755	
Stand for Temple Blocks, Medium Weight, Single Brace		1 St	CS740	
Tambourine, 10" Single Row Beryllium Copper Jingles	1 Ea	1 Ea		Jingles Grover T1/BC10
Timpani, Set of 4 (23", 26", 29", 32") Pedal Type, Polished Copper with Long Covers	1 Ea	1 Ea	TP6304CL	
Triangle, Symphonic 6" w/Clip & Set of 6 Beaters	1 Ea	1 Ea		Grover TR-6
Vibraphone, 3 oct, Silver Bars F33-F69, with cover	1 Ea		YV2700C	
Vibraphone, 3 oct, Glossy Gold Bars F33-F69, with cover		1 Ea	YV2700GC	
Xylophone, Acoustalon Portable 3-1/2 Octave F45-C88 w/ Cover	1 Ea	1 Ea	YX-500FC	Musser M51

Assorted mallets for Bass Drum, Gong, Chimes and Timpani			
Bass Drum Mallet, General	1 Ea	1 Ea	CBM-300M
Bass Drum Mallet, Roller , Pair	1 Ea	1 Ea	CBM-500R
Bass Drum Mallet, Staccato		1 Ea	CBM-200S
Timpani Mallets Soft Staccato		1 Ea	YTM-3
Timpani Mallets Medium Staccato	1 Ea	1 Ea	YTM-4
Timpani Mallets General Purpose	1 Ea	1 Ea	YTM-2
Gong Mallet, General	1 Ea	1 Ea	YGM-2
Chime Mallet, Rawhide	2 Ea	2 Ea	DCM-11002
Mallet Stick Bag	1 Ea	1 Ea	YMB-150