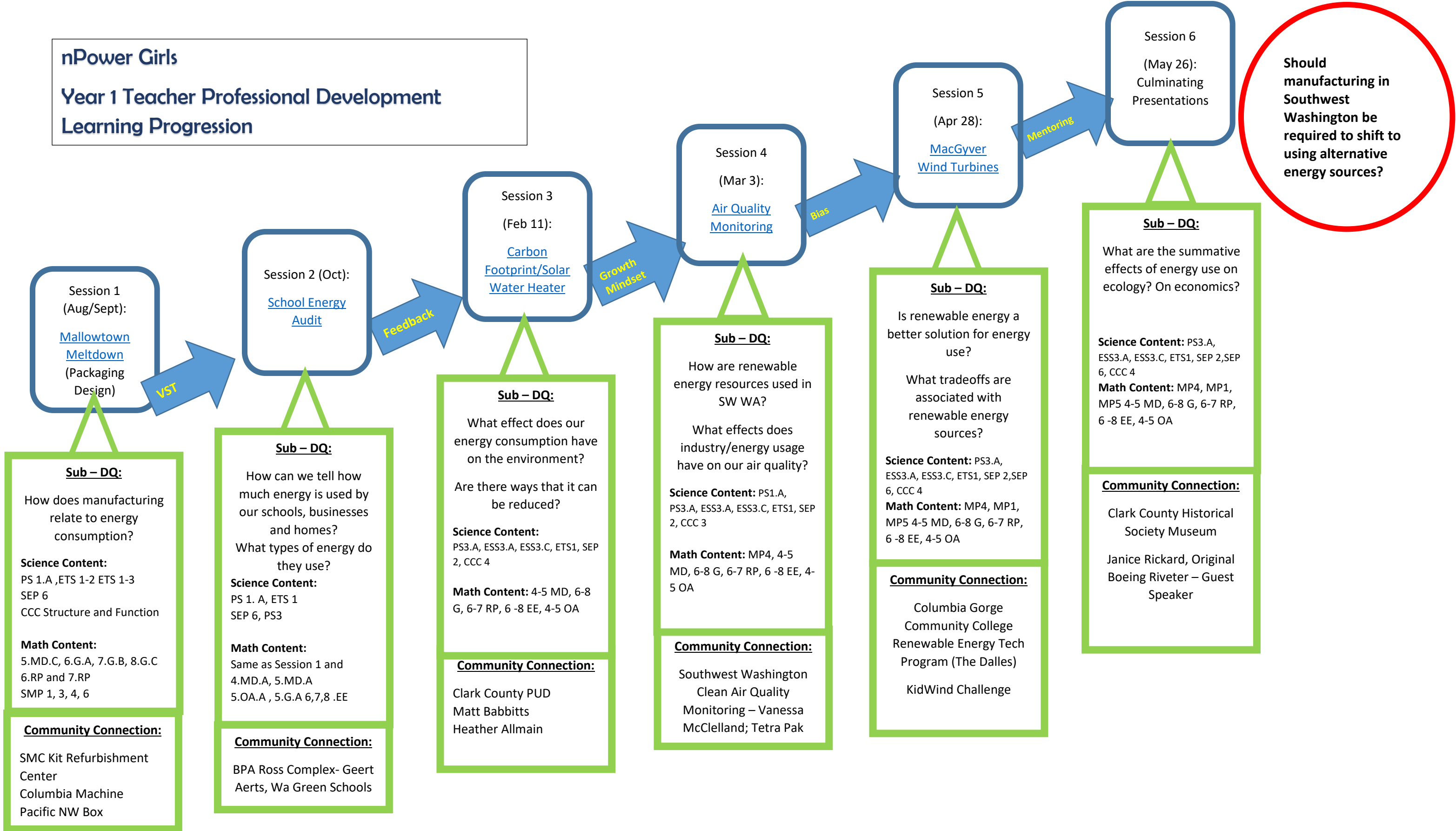


nPower Girls
Year 1 Teacher Professional Development
Learning Progression



Session 1
(Aug/Sept):
[Mallowtown Meltdown](#)
 (Packaging Design)

VST

Sub – DQ:
 How does manufacturing relate to energy consumption?

Science Content:
 PS 1.A ,ETS 1-2 ETS 1-3 SEP 6
 CCC Structure and Function

Math Content:
 5.MD.C, 6.G.A, 7.G.B, 8.G.C
 6.RP and 7.RP
 SMP 1, 3, 4, 6

Community Connection:
 SMC Kit Refurbishment Center
 Columbia Machine
 Pacific NW Box

Session 2 (Oct):
[School Energy Audit](#)

Feedback

Sub – DQ:
 How can we tell how much energy is used by our schools, businesses and homes?
 What types of energy do they use?

Science Content:
 PS 1. A, ETS 1 SEP 6, PS3

Math Content:
 Same as Session 1 and 4.MD.A, 5.MD.A
 5.OA.A , 5.G.A 6,7,8 .EE

Community Connection:
 BPA Ross Complex- Geert Aerts, Wa Green Schools

Session 3
(Feb 11):
[Carbon Footprint/Solar Water Heater](#)

Growth Mindset

Sub – DQ:
 What effect does our energy consumption have on the environment?
 Are there ways that it can be reduced?

Science Content:
 PS3.A, ESS3.A, ESS3.C, ETS1, SEP 2, CCC 4

Math Content: 4-5 MD, 6-8 G, 6-7 RP, 6 -8 EE, 4-5 OA

Community Connection:
 Clark County PUD
 Matt Babbitts
 Heather Allmain

Session 4
(Mar 3):
[Air Quality Monitoring](#)

Bias

Sub – DQ:
 How are renewable energy resources used in SW WA?
 What effects does industry/energy usage have on our air quality?

Science Content: PS1.A, PS3.A, ESS3.A, ESS3.C, ETS1, SEP 2, CCC 3

Math Content: MP4, 4-5 MD, 6-8 G, 6-7 RP, 6 -8 EE, 4-5 OA

Community Connection:
 Southwest Washington Clean Air Quality Monitoring – Vanessa McClelland; Tetra Pak

Session 5
(Apr 28):
[MacGyver Wind Turbines](#)

Mentoring

Sub – DQ:
 Is renewable energy a better solution for energy use?
 What tradeoffs are associated with renewable energy sources?

Science Content: PS3.A, ESS3.A, ESS3.C, ETS1, SEP 2,SEP 6, CCC 4

Math Content: MP4, MP1, MP5 4-5 MD, 6-8 G, 6-7 RP, 6 -8 EE, 4-5 OA

Community Connection:
 Columbia Gorge Community College Renewable Energy Tech Program (The Dalles)
 KidWind Challenge

Session 6
(May 26):
 Culminating Presentations

Should manufacturing in Southwest Washington be required to shift to using alternative energy sources?

Sub – DQ:
 What are the summative effects of energy use on ecology? On economics?

Science Content: PS3.A, ESS3.A, ESS3.C, ETS1, SEP 2,SEP 6, CCC 4

Math Content: MP4, MP1, MP5 4-5 MD, 6-8 G, 6-7 RP, 6 -8 EE, 4-5 OA

Community Connection:
 Clark County Historical Society Museum
 Janice Rickard, Original Boeing Riveter – Guest Speaker