

Devices like iPods are expensive.

>relevance? Should say what project is. iPod not mentioned again. Later issue is too many knobs—not a problem with iPod. They do too many things and there to complicated for high school students for ordinary learning, and individual use.

>"there" is misspelled, "to" is misspelled, comma before first "and" is missing, "things" is vague, and entire statement is false—students use iPods all the time.

So I will build a better device that teachers can buy for students and do electronics.

>Sounds like the project is to build a new iPod. Will the teacher buy it, or will the school buy it? "do electronics" is oddly worded and seems to dangle. Avoid starting with "so". Avoid using "I". The end of the statement is vague—will the teacher or the students "do electronics".

>This paragraph fails in its primary purpose of concisely stating what the project is.

High schoolers want to learn about electronics but they have classes now that just talk about math and physics and lose the interest of students who want something more exciting, and more interesting assignments.

>Sentence is too long: drop last phrase, (which dangles), and use a comma before "but". Sentence is too negative about math and physics—it could say something more positive about electronics. "high schoolers" is too informal. Sentence could

say what the students do want, thereby conveying useful information in the same number of words.

They use things that students aren't ready for, with too many knobs and features and that cost a lot.

>The knobs cost a lot? "cost a lot" is too informal. Sentence could be specific, using "equipment" not "things". What is "they", and *why* aren't students ready for it? Sentence doesn't follow subject of last sentence; sentence is disjointed, causing a flow problem. "aren't ready for" shouldn't end with the word "for". The last "and" should be deleted.

Only one at a time can use them.

>Who is "one", and what is "them"? If "them" meant an oscilloscope, a possible rewrite would be "Only one student at a time is able to use an oscilloscope."

In one catalog a power supply is \$300.

>So what? Give several examples. Are we building a power supply?

That's too much.

>Too informal. Why is it too much?

Students want to be involved too.

>Involved with what? The thoughts don't flow. The subject jumps from "students who want something more exciting" to the cost of the "power supply"—then back to the "students" again.

They don't want to just watch the teacher doing experiments.

>Too informal. Could take out "just". Avoid using not and no; use "un" instead of "not".

>This paragraph has no common subject. It should give motivation for next paragraph, but it failed to do so. It should have covered existing solutions to a clearly stated problem, and it should set up solution in next paragraph.

This problem is solved by a new circuit.

>What problem? It probably should say "will be solved". The sentence is too vague—what kind of circuit is it?

The 10-bit A/D channel has enough bits for 3 digits of accuracy.

>This technical and detailed statement completely lacks context. What goal does having this particular A/D achieve?

The CR032 supplies 3V.

>What is a CR032? What is the context? This information is much too detailed. 3V for what? Who cares? From a technical standpoint, if we were concerned about the battery, we might be more interested in how much power the battery can supply.

The display is 128 x 32 with a 30 mA white-LED backlight.

>So what? Do the numbers refer to pixels? Is this an LCD display—or what? Does white matter? If so, why? What is the context?

Unless the display works with serial bits, the processor will have to have a lot of outputs though.

>Eliminate "though". The writer is questioning his own proposal; avoid uncertainty in proposals.

There will also be books for the students and protoboards with parts later on.

>Suddenly the scope of project has greatly increased. It now seems too large. What kind of "books"? What will the students do with the protoboards?

The circuit will measure voltage and probably current and AC waveforms for circuits using different kinds of math.

>Make this a list. Be more specific: what kinds of math? Avoid "probably", (lacks confidence). Replace "kinds of math" with "mathematical subjects". Sentence conveys two separate

thoughts—one about circuits, and one about "kinds of math"—that don't seem to go together.

Everything might fit on one board.

>Delete "might". Why even write this sentence?

>This paragraph raised more questions about what the project is than it answered. Consequently, the reader will conclude that the writer has no idea what they are going to build, (let alone how they will build it).

The measuring circuit will be low cost.

>How low? Is this the project—a measuring circuit? What is the justification for this statement? Why is important for the circuit to be low cost?

I will work hard on it during the summer and have it done before fall semester starts.

>Not credible: the project is ill-defined and open-ended when it comes to the "books" and "protoboards with parts" for students, yet the student is promising to finish it in three months or less.

Avoid using "I".

High school students will learn a lot from it.

>Fluff. Delete.

It will open doors in schools everywhere for engineers who want to improve the world.

>Does the circuit open the door? This is fluff, and a bad attempt at that. Delete.

>This paragraph did address the issue of cost and the project schedule, but it was vague and unrealistic.