How 3D Printers Work

By

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EGR120

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# Initial OUTLINE

1. Introduction
2. Open w/ problem, “Broken appliance component, not sold separate” or other
3. Discuss Pre–3d Printer Options
   1. Buy new one (thousands)
   2. MacGuyver new one (has to be replaced often, unreliable)
      1. Show brief clip of MacGuyver making some crap
4. Discuss Post–3d Printer Options
   1. Show picture or scan of object Sam will print
   2. Show Sam’s printed object
      1. Make this whole section seem easy breezy
5. Survey – Quick Informal
6. 3d printing IS the future
7. Touch on usage by major companies, push for commercial market, etc
8. Despite that, it’s still treated like a novelty
   1. Survey question / humbling moment – “How many of you know how to configure a paper printer? Or how it works?” pause for affect, follow up “Yet how many of you know how to use/have used a 3d printer?”
9. Specific Purpose
   1. “When you leave today, you will know How 3D Printers Work” - - Quietly add “or be well rested from a 10-minute nap” (yay humor)
10. Hardware
11. Sam adds Hardware Outline here
12. [Detail of the information]
13. [Detail of the information]
14. [Second supporting information for the sub-topic]
15. [Detail of the information]
16. [Detail of the information]
17. Software
18. Rae adds software outline here
19. [Detail of the information]
20. [Detail of the information]
21. [Second supporting information for the sub-topic]
22. [Detail of the information]
23. [Detail of the information]
24. Uses
    1. Megan adds Uses here
25. [Detail of the information]
26. [Detail of the information]
    1. [Second supporting information for the sub-topic]
27. [Detail of the information]
28. [Detail of the information]
29. Cost Efficiency
30. Macro Cost
31. Still a misconception on cost
    1. List original prices for 3d printers
    2. List current prices for 3d printers of better quality
32. Compare to SSD Memory
    1. Original prices of SSD vs evolution prices
    2. Stats for lag on consumer purchases
    3. Show similar stats for 3d printer purchases
33. Micro Costs
34. Show cost comps for each discussed scenario
    1. Introduction appliance scenario
    2. One of Megan’s more compelling or expensive uses
    3. One of Megan’s more fun uses
35. Large scale averaged cost of a perishable compared to re-purchases
36. Conclusion

In the introduction, we discussed how common the knowledge of paper printer usage is versus it’s more dimensional successor. Some of you (or all of you) may have thought, “Well duh! Of course we know how to use printers! We need them every day!” without considering something. We live in a digital age, where the desire to be unencumbered with hard copy prints is only surpassed by the desire to be green and overpay for effective marketing at Whole Foods. Yet we’re still using paper printers! The incredulity shown toward 3d printing should really be directed at its predecessor, which has been rendered moot by technology but still [somehow] holds sway. Sure, this is partially due to aging University Professors who tout Academia and how smelling paper somehow helps them grade more efficiently [wink at Prof. Scalea], but it’s mainly because we don’t like to ask questions. We don’t like to upset the status quo because it’s easy. Despite the fact that 3d printers no longer cost much more than paper printers, or that they are eminently more useful, their eventual acceptance will be delayed because we are afraid of having to learn something new. Our genuine hope is that our presentation today will shed some of the misconceptions, and teach you enough to be excited to learn more.

[Your Name]

Instructor: John Scalea

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# How 3D Printers Work

Click here to type the body of your report. All paragraphs are indented and double-spaced.

# Works Cited

**Citation.** The text begins at the left margin of the paper. Lines are double-spaced. When the entry is longer than one line, the second line is automatically indented.

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# Checklist

1. The outline
2. The introduction states the main topic or idea of the outline, and the conclusion summarizes it.
3. Each sub-topic describes the main idea for a paragraph.
4. Supporting information and details for a sub-topic are listed under the sub-topic, with each piece of information listed separately.
5. When supporting information is listed under a sub-topic, there are at least two pieces of information listed. If there is only one piece of information to support a sub-topic, the information is included in the sub-topic.
6. The paper
7. The paper follows the organization of the outline.
8. Each paragraph in the paper matches a sub-topic in the outline, and presents the information and details listed under the sub-topic.
9. Each paragraph includes a topic sentence that summarizes the main idea of the paragraph.
10. Every sentence begins with a capital letter.
11. Every sentence ends with a period, question mark, or exclamation mark.
12. All words are spelled correctly.
13. There are no missing words.
14. Works cited
15. Every source has a specific reference in the paper. Include only the sources that are mentioned in the paper.
16. Each entry follows the correct format for the type of reference.
17. Entries are listed in alphabetical order, according to the author’s last name.

# Tips for Writing Your Report

1. Create a schedule
2. Identify the tasks you need to do.
3. Arrange the tasks in the order you’ll need to do them.
4. Estimate how long each task will take. Be sure to allow enough time for editing and making changes.
5. Identify the date the report is due, and then set a schedule showing what work you’ll need to do each day in order to have your report ready on time.
6. Add interest
7. Use graphs and charts to illustrate an idea.
8. Add a picture, photo, or drawing.
9. Include a map.
10. Find a quotation and use it to make your point.
11. Make every word count
12. Choose words your reader will understand. Remember that you want to communicate your ideas to the person reading your paper.
13. Avoid clichés.
14. Use a thesaurus to replace overused words and find new ways to express your ideas.