

## Paper 1: Questions 1 and 2

1. A) The author presents the idea that driverless cars are already reality which he supports through evidence that these "...driverless cars have already navigated the Italian city of Panama and driven from Italy to China almost unaided..." as well as the example that displays that "...a Google car has recently driven a blind man to an American fast food outlet for a take-out."

B) The author claims that one of the benefits of driverless cars is that it will "remove the need for driving restrictions related to age and ability". Thanks to driverless cars, those who are underage and who have disabilities may be able to have more independence and freedom in their daily lives. Additionally, the author claims that driverless cars will help to "increase road safety". With human error being the main cause of all traffic accidents, the technology presented by driverless cars may help to majorly decrease the number of injuries and deaths caused by unsafe driving conditions.

2. The evidence presented in Document 1 is relatively strong to support the claim that driverless cars are "already a reality" and are "moved on by their huge benefits". The author of the piece, Emma Poole, includes various pieces of evidence in order to support her claims. One piece of evidence shown to support the author's ideas includes that a "...mining company Rio Tinto had self-driving trucks at an iron ore mine". The example presented talks specifically about trucks and not cars, as the author's conclusion discusses, which questions the direct correlation of the material to the author's argument as trucks can often have different operating systems than cars do. They are simply not the same type of vehicle, and as such do not operate in the same manner. Additionally, there is so much that the evidence fails to provide the reader about the specific situation such as the years it took place in, if it still continues to go on today, what the trucks actually do at the facility, and if their usage was even a success. The reader would have to make assumptions of the positive nature of this piece of evidence in order for it to increase the strength of the author's argument. However, this example demonstrates that there are driverless vehicles already being used, and not only on the roads but in dangerous environments such as around mining which can often involve very unreliable working conditions. In addition, trucks are often much bigger than cars which indicates that if people in the technology industry can successfully manage large trucks, then cars may not be as big of a hurdle. One must see though that with no information regarding the source of this evidence, besides the fact that it occurred in Australia, this decreases the credibility of the evidence- therefore, decreasing Poole's argument. Ultimately, when assessing the strengths and weaknesses of the evidence presented, one can see that the lack of source information and a direct correlation to driverless cars hinders the credibility and usefulness of this particular source, and thus the author's argument.

Another piece of evidence presented states that, "Shuttle buses in the Netherlands use dedicated bus lanes". This piece of evidence suggests that there are changes being made for specific types of vehicles which may put forth a good path for driverless cars, thus making them more likely to be a reality. Despite the evidence's positive implications, it is ultimately not talking about driverless cars or their current uses. The shuttle buses are not driverless and is not actually a car itself, implying even less correlation to the main argument at hand. Furthermore, similar to the

previous piece of evidence, there is no information on the source from which this evidence come. This lack of source as well as no explanation on when this system came into place, if it still continues to be in place today, and whether or not it was even a successful program only further derails the credibility of this example. Overall, the lack of direct correlation to the argument of driverless cars as well as the non-existent information regarding the background and source of the evidence, weakens the evidence and provides no further support for the idea of driverless cars being a reality.

Additionally, the author provides a survey from *The Economist* in order to support her claims. With roughly 175 years of experience and anonymously written articles, *The Economist* proves itself to be a reliable source despite its slight leaning to the left in its media bias. The results of the actual survey do support the author's conclusion with over 2/3 of the magazine's readers agreeing to the idea of self-driving cars being a reality in the near future. This suggests that there are heavy implications of success or already actual examples of success that have lead the readers to support the notion that self-driving cars will become a reality. The source from which the evidence was gained as well as the statistics from it both assist in bolstering the author's argument. Although, there are many positives to this piece of evidence, it also has some downsides. There is no information on how many people actually took the survey and who took the survey. This suggests that this data could be coming from only a handful of people who could potentially not have any experience with driverless cars or the industry itself. In addition, the actual question asks the reader about the reality of driverless cars in the future instead of the present which creates a lapse in connection from the evidence to the conclusion. An assessment of the strengths and weaknesses of the argument solidifies the notion that despite the lack of specifics of the survey's information on its participants, the source's general reliability and the evidence's supposed majority support lead to the overall reinforcement of the author's conclusion.

Furthermore, the author discusses the "Google Self-Driving Car Project" and all of its advancements with driverless cars. Working since 2009, this project, while having many of the top experts in the field working on the project, has only been working for a short period and may have a vested interest in overcalculating its success in order to assist with funding and recognition. There has also proven to be issues with the actual navigation of the vehicles over various types of terrain as well as the fundamentals of paying tolls on the road which may lead to issues in the future when this may be used for the common individual. However, this project has shown to already have "completed over 700,000 test kilometers" indicating the project's quick success in a short period of time. These test cars have also navigated both long distances as well as closely-packed cities, exemplifying not only their success, but also their versatility. Despite the company's potential bias and forthcoming issues, this piece of evidence clearly displays the success of driverless cars over long trips and many types of landscapes, furthering Poole's conclusion.

The evidence from the Boston Consulting Group was another presented piece. A world renown company with over 50 year of experience, the Boston Consulting Group has a very positive reputation that contributes to its reliability as a source. The actual source, while originally confirming the existence of functioning driverless cars, also supports the idea that there are already solutions in the works regarding the problems that have started to come up in various test runs. This source suggests that the not only are there actually self-driving cars, but companies are

already at the stage of tweaking any issues that have come up. Despite this, the actual quote provides no specifics as to what those solutions may be and how the programs may go about it. There is also no information about what companies are investing and how much they plan to invest. With no specifics about the investments of these companies and their actual plans of contribution, there is no furtherment of the author's argument despite the source's reliability and supposed confirmation of potential solutions.

In addition, Exane BNP Paribas is offered as an example as to how the benefits of self-driving cars will lead to their further success. The company supports the notion that the benefits for other fields will help to push forward the success of driverless cars indicating that businesses will see these cars as an opportunity to further support their own companies and follow the path of successful development of new technology. As for the company itself, while they may have some knowledge to benefit their statements due to their investments in similar fields, that same investment in the company may lead to an overrepresentation of the potentials and successes of the product at hand. With the company being founded so recently, in the year 2004, it suggests that the company is too new to have any lasting experience in any field of investment, much less this specific one. The evidence provided is also lacking in specifics as to how beneficial the investment of time and energy to this cause may be which leads to an unclear sense of benefits from this particular opportunity. The company's lack of specifics and potential invested interest lead to the unsuccessful support of Poole's claims even though the company may have some experience in investing their field.

One other piece of evidence shows how Google has already gained from their investment in driverless cars. This piece of evidence suggests that major financial benefits have been reaped from this opportunity which may inspire other companies to begin investing. Google's program has only been running for a short period which may only further spur investors and companies to pour more work and time into these endeavors. However, the source does not specify in how, or rather how much, Google has benefited from their early investments. Their early investments and size as a company may also intimidate others from actually investing and /or reaping benefits from these opportunities. Despite the lack of specifications, the source overall indicates that the original success of Google will help to further companies' involvement in these projects, and thus propelling the reality of self-driving cars.

There was another piece of evidence presented about a Google car driving a blind man. This piece of evidence not only displays a seemingly working driverless car, but also investigates how this man, previously hindered by his disability, was able to have freedom. This potential independence as well as supposed success further the author's conclusion that the benefits of driverless cars would push forward the production of these vehicles. Despite this, there was no indication as to whether or not the event was actually successful and if it went off without any issues. Overall, even though there was a lack of clarity in the results of the car's attempts, the example confirmed the facts of a working driverless car alongside showing the benefits it can reap, once again solidifying the author's arguments.

A final piece of evidence presented discussed the reasons for traffic accidents and how driverless cars may be able to help. With no source on where the statistic came from, its accuracy cannot be determined. Nevertheless, the evidence proves the idea that the implementation of driverless cars will lead to an "increase in road safety" through the specifics mentioned about the functioning of

these vehicles awareness. While the first half of the evidence provides no source and cannot ultimately be used in support of the author's argument, the second half provides a great amount of specificity on the functions of a self-driving car in comparison to a human's error that assists in backing the author's ideas.