

HÖHERE TECHNISCHE BUNDESLEHRANSTALT HOLLABRUNN

Datum: 29.10.15	Art der Leistungsfeststellung: 1. Schularbeit		Wertung	Bewertung
Klasse: 5 BHEL	Gegenstand: Englisch	I	40	34,86 6 +
Zeit: 150 min.	Lehrer: Simon-Gorke			
Note: fuk	Name des Schülers: Nötz Florian	II	30	20,25
	00 - 50 Nicht genügend	III	30	20,25
	51 - 62 Genügend			
	63 - 75 Befriedigend			
	76 - 89 Gut			
	90 - 100 Sehr gut	Σ	100	81,36

I. READING COMPREHENSION B2

1. Coping with traffic problems
2. Kids addicted to technology
3. When Big Brother is watching Sydney
4. Robotic legs for wheelchair users

WRITING TASK 1

You have just returned from your first work placement abroad. As part of your vocational training you need to write a report on this work placement that will show your experience and qualifications to a future employer.

In your **report** you should:

- provide some background information about your placement
- explain what the job involved
- summarize what you gained professionally

Divide your report into **sections** and give them **suitable headings**. Write around **250 words**.

WRITING TASK 2

A business magazine wants to find out how young people feel about the qualifications and skills required in the world of work in the 21st century. For this reason it has organized an article competition. It is promising attractive internships in the most successful companies.

You have decided to send in an **article**.

You should:

- describe what types of skills youth in your country need to get a decent job
- analyze why young people drop out of school or break up their apprenticeship
- suggest what can be done to fix the mismatch between skills (taught in schools) and the demands of the labour market.

Give your **article** a suitable **title**. Write about **300 words**.

Writing Task 1:

From: Florian Mötz

To: Tailored Apps

Date: October 29, 2015

Report on the work placement at Apps4You ✓

Introduction

The aim of this report is to provide information about the work placement in England at the company Apps4You in 2015 and what my job there was. Moreover it should state my personal profits of that job.

VOC

Work placement

The company wanted to give young Austrian students the ability to work abroad at software projects. The work placement offered to develop mobile applications for Android smartphones for customer projects.

VOC

ou

/ prep.

Because of my knowledge about developing applications, the company immediately involved me in their current projects. ✓

Working

For 3 months, I ~~have~~ developed solutions for multiple projects, where smartphone applications should make the handling of different tasks easier. These applications should be easy to use and nice looking.

Gr.

Therefore I ~~have~~ helped ~~planning~~ the applications and their design and developed major parts of the code.

Gr. / Gr.

Personal profits

From this work placement I have gained a lot of experience in developing apps and working together in groups. Furthermore I ~~have~~ been involved in the whole developing-cycle of an application, from the concept to the finished application.

Gr.

Furthermore I spoke English all day long which settled my English-skills. Moreover I have learned a lot of the English lifestyle and culture.

VOC

about

Gr./p rep.

Conclusion

At this work placement I have gained a lot of practical knowledge for developing Android applications. Moreover, I have learned how a software-developing project is done from the planning phase to the final release. Furthermore, I have increased my English-skills and have also gained experience about the English culture and lifestyle.

2

experience

241 words

significant errors! Tenses!

TA: 9

O: 8

R: 6

A: 4

That skill-mismatch in Austria

In Austria, not everyone wants to stay in school longer than needed. Those who do not may apply for an apprenticeship as a mechanic or hair-dresser. The problem is that our labor market is full of people with the 'standard' apprenticeship skills, but just some people want to do an apprenticeship that is not that common. ✓

Also more and more people in school start to realize, that they do not want to gain that much, partly useless, theoretical knowledge and want to start working. These people do not have any learned skills and mostly take any work place they get, which *often* doesn't need many skills. *require* ?

So we have the people with the standard apprenticeship, and the people that stayed in school. The problem is, that the school can't feed the market, that needs people from not so common apprenticeships, so we have a kind of a skill-mismatch *what's that?* *provide suitable workers for...*

To fix that mismatch, so we can teach people in technical, social and medical fields, we either change the school system *and teach* into teaching the skills we really need *on/in* at the labour market, or we get more people into taking an apprenticeship in different skills.

So my recommendation is that the government should *offer incentives* give profits to the people that *wc* are willing to learn and work in Austria in the needed fields of the labour market, such as the social or medical fields. *sectors.*

271 words

you never address your reader ?!

not all content points (BP 2, BP 1) dealt with

TA: 5

O: 7

R: 7

A: 8

ANTWORTBLATT

Coping with traffic problems

0	A ☐	B ☒	C ☐	D ☐
1	A ☐	B ☐	C ☒	D ☐
2	A ☐	B ☒	C ☐	D ☐
3	A ☒	B ☐	C ☐	D ☐
4	A ☐	B ☐	C ☐	D ☒
5	A ☐	B ☐	C ☒	D ☐
6	A ☐	B ☐	C ☐	D ☒
7	A ☐	B ☒	C ☐	D ☐

Von der
Lehrperson
auszufüllen

richtig falsch

☒	☐
☒	☐
☒	☐
☒	☐
☒	☐
☒	☐
☒	☐

7 / 7 P.

1

Kids addicted to technology

	T	F	First four words
0	☒	☐	<i>It turns out her</i>
1	☐	☒	<i>I was impressed that</i>
2	☒	☐	<i>I admit, I needed</i>
3	☒	☐	<i>At home, somehow, the</i>
4	☐	☒	<i>But those cases of</i>
5	☒	☐	<i>Closer to home, my</i>
6	☐	☒	<i>we have pretty strict</i>
7	☒	☐	<i>My twin daughters are</i>
8	☒	☐	<i>The lure of technology</i>

Von der
Lehrperson
auszufüllen

richtig falsch

☒	☐
☒	☐
☒	☐
☒	☐
☒	☐
☒	☐
☒	☐
☐	☒

7 / 8 P.

2

ANTWORTBLATT

3

When Big Brother is watching Sydney

0 G	1 L	2 A	3 I
4 D	5 B	6 J	7 E
8 C	9 F		

Von der Lehrperson auszufüllen

richtig	falsch	richtig	falsch	richtig	falsch	richtig	falsch
		1 ☒	☐	2 ☒	☐	3 ☒	☐
	4 ☐	5 ☒	☐	6 ☒	☐	7 ☐	☒
8 ☒	☐	9 ☒	☐				

7 / 9 P.

4

Robotic legs for wheelchair users

0	walk again
1	robotic legs
2	mothers were in wheelchairs
3	self transfer
4	mothers were in wheelchairs
5	self transfer
6	social interaction
7	once a day
8	at their general health

Von der Lehrperson auszufüllen

richtig	falsch
☒	☐
☐	☒
☐	☒
☒	☐
☒	☐
☒	☐
☒	☐
☒	☐

6 / 8 P.

Read the text about measures to cope with traffic problems in a Chinese city, then choose the correct answer (A, B, C or D) for questions 1-7. Put a cross (☒) in the correct box on the answer sheet. The first one (0) has been done for you.

Coping with traffic problems

China's teeming cities, home to millions, are blanketed in smog. The country is now trying to fight air pollution and traffic chaos by expanding public transportation.

China's rapidly growing cities are grappling with massive pollution. At the start of the year, Beijing made headlines around the world with images of the Chinese capital blanketed in a cloudy haze.

Yet the city is just one of many urban centers in China where air quality has drastically plummeted. As the country's middle class continues to grow, so too, has the demand for cars. China has the highest number of new car registrations in the world. In 2011, 14.5 million new cars were registered – a stark contrast from some 600,000 vehicles in 2000.

With so many new cars, air quality has deteriorated rapidly and roads are badly congested. Local governments and city planners are looking for ways to relieve the traffic and pollution by providing eco-friendly, sustainable transport.

Too often, say analysts, developing countries end up copying the car-based transportation concept they see in industrialized countries. "Instead of reducing individual transit and expanding public transportation, officials focus too much on building up infrastructure and easing the flow of traffic," says Jüren Perschon, an expert at the European Institute for Sustainable Transport (EURIST), in a strategy paper.

Guangzhou BRT – fast, green and clean

But there are signs of progress - take Guangzhou, for example. Located on the Pearl River in southern China, the city is an important manufacturing hub for everything from textiles to high-tech electronics and auto parts. Booming industries have attracted millions of people to Guangzhou, and the city – which is already home to some nine million people – is growing rapidly.

To keep traffic from spiraling out of control, officials introduced the Guangzhou BRT (Bus Rapid Transit) in February of 2010. The buses now transport nearly a million passengers a day, far more than most of China's subway systems.

Guangzhou constructed a special corridor with designated bus lanes in the middle of the street that are exclusively for the BRT. Hoping to inspire residents to leave their cars behind, the city also introduced a bike sharing program that boasts 15,000 bicycles at some 200 stations.

"When you organize transportation, you have to think about the people, not about the cars," says Karl Fjellstrom, the regional director at the Institute for Transportation and Development Policy, which helped design and plan the Guangzhou BRT project.

What's more, the city has also opened the Donghaochong Greenway alongside the bicycle path. The lush network of green spaces, parks and playgrounds offers residents a peaceful oasis in the heart of the city.

The measures have helped Guangzhou not only to ease its traffic chaos, but also to cut its greenhouse gas emissions. Thanks to the bus system alone, the city cut carbon emissions by around 45,000 tons in 2010. And it's aiming to save another 86,500 tons each year over the next 10 years.

- 0 China wants to cope with environmental problems by
- A slowing down economic growth.
 - B increasing transport services.
 - C employing environmental experts.
 - D introducing new technologies.
- 1 The high number of new automobiles in China is caused by
- A rapid urbanization.
 - B car imports from abroad.
 - C people with money to spend.
 - D the removal of trade barriers.
- 2 This many new vehicles has led to
- A new speed limits.
 - B more traffic jams.
 - C protests by residents.
 - D cuts in public transport.
- 3 The traffic policy of less developed states is mostly influenced by
- A developed nations.
 - B ecological experts.
 - C local requirements.
 - D existing infrastructure.
- 4 The population growth of Guangzhou can be put down to
- A political activities.
 - B resettlement programmes.
 - C urban traffic management.
 - D expanding businesses.
- 5 Guangzhou's BRT system is more successful than China's
- A rail companies.
 - B highway busses.
 - C underground networks.
 - D state-run airlines.
- 6 People who design urban traffic systems must consider the needs of
- A automobiles.
 - B local infrastructure.
 - C environmentalists.
 - D city residents.
- 7 Guangzhou's transport policy has led to an increase of
- A road building.
 - B air quality.
 - C subway passengers.
 - D traffic problems.

Read the text by a New York-based writer and mother about the influence of technology on modern family life. First decide whether the statements (1-8) are true (T) or false (F) and put a cross (☒) in the correct box on the answer sheet. Then identify the sentence in the text which supports your decision. Write the first 4 words of this sentence in the space provided. There may be more than one correct answer; write down only one. The first one (0) has been done for you.



Kids addicted to technology

This summer a mom I know told me her 12-year-old bookworm daughter regretfully handed back her Kindle Fire, saying she couldn't handle the temptation to play games rather than read. Her mom was stunned. She assumed that all of those hours on the Kindle were being spent pouring over the school summer reading list. It turns out her daughter couldn't resist *Doodle Jumping* her days away.

I was impressed that a young girl could admit this growing addiction and hand over her Kindle, but she's the exception, and not the norm. Most parents are slowly recognizing that what starts out as an innocent distraction and fun way to integrate tech into our lives can easily turn into a full blown addiction to the games and gadgets that our kids now have access to all the time.

One of the reasons I chose my daughters' overnight camp this summer was because of their "no electronics" rule. No gadgets are allowed – and there's no electricity in the bunks. I admit, I needed them to be completely unplugged, and it's much easier to do that in a place where there are literally no plugs. At home, somehow, the one hour of allowed screen time easily morphs into two or three.

When a Taiwanese 18-year-old died in July after playing *Diablo 3* for 40 straight hours, the Internet was abuzz with tales of the dangers of prolonged gaming. But those cases of extreme use aren't what most modern parents are dealing with. Closer to home, my Facebook wall and real life chatter have been lighting up with tales of kids addicted to *Minecraft*, glued to their iPod Touches, and clocking in the hours watching YouTube videos or playing *Angry Birds* and *Temple Run* on iPads. One friend announced she was cutting off her son cold

turkey from *Minecraft* after he had a temper tantrum at 7:00am because she wouldn't let him play as soon as he woke up.

So what is a digital parent to do? We have pretty strict rules in our house – no screen time during the week at all, and the supposed one hour a day on the weekends. I had a fantasy that when my daughters returned from camp they would eschew the computer. And, they tried. But the lure was too great. They had virtual pets to check up on, stats to look at, and basically, their online world has become an extension of their normal world. Part of assimilating back into post-camp world was getting back into their tech groove too. Like most aspects of parenting, balance is key. Technology is an incredibly positive part of our lives, and our kids should be able to create and use it to their benefit. My twin daughters are 10 years old and they need to use a computer for school. By the time most kids reach middle school they will need to conduct research, write papers and, if their school is moving into the 21st century, they'll most likely have classroom blogs, assignments and school communication online as well. This is where it gets more difficult. Just as adults have a difficult time shutting off the email when they get home – kids will need rules to merge their “work” and home lives with technology.

There are all sorts of ways to set tech rules inside the house. In our family, it's no cell phones at the dinner table, or in bedrooms. Laptops are kept in the kitchen or living room. I do know first hand the hard part is having everyone follow the rules. The lure of technology in our lives is so strong; the goal has to be to figure out how to teach our kids to master technology and not let technology master them.

0	A game on an e-book reader kept a girl busy.
1	Children are realizing that they are over dependent on technological devices. F I'm as impressed that
2	The author felt that her children needed a break from technology. T I admit, I needed
3	The author does not always insist her children follow the family's rules. T At home, somehow, the one
4	Nonstop computer gaming is a problem concerned parents face everyday. F But those cases of
5	Parents exchange information about which games their children are hooked on. T Closer to home, my F
6	The author's children are not allowed to use any gadgets at home anymore. F We have pretty strict
7	Nowadays, children need technology for school work. T My twin daughters are
8	It's not easy for anybody to cut down on modern technology in their free time. T The lure of technology

Read the text about how Sydney is monitored for various problems. Parts of the text have been removed. Choose the correct part (A-L) for each gap (1-9). There are two extra parts that you should not use. Write your answers in the spaces provided on the answer sheet. The first one (0) has been done for you.

When Big Brother is watching Sydney

All around the city, tucked away in soundproof, blast-proof, high-security rooms, teams of men and women (but mostly men) (0) ____, monitoring, correcting, fixing, tweaking and handling crises large and small. Day and night they each play their vital role in a real-world, high-stakes version of *The Truman Show*.

These are Sydney's control centres. From water, traffic, buses and trains to planes, electricity, bushfires and security, these rooms (1) L and most of us don't even know they are there.

If Sydney were a living creature, they'd be the organs (2) A that keep it alive.

At the Sydney Transport Management Centre (TMC) in Eveleigh, about 18 specialists sit at desks staring at horseshoe arrays of four or five computer screens. Most of the wall at one end of the room is taken up by a vast video screen split into 20 or more smaller screens showing camera footage of rush-hour traffic around the city, (3) I.

Bus, rail and ferry specialists sit alongside operators monitoring traffic lights and congestion, each concentrating on their little piece of the transport jigsaw and working together to solve problems that (4) D.

At any moment they are ready to deal with anything from a car (5) B to a collapsing crane, as happened in Broadway in November.

"You never know what you're going to get in this place," spokesman Dave Wright says. "You've got to keep your cool. Everyone knows their job and everyone is an expert in their field. I've been here for three years and I've never seen anyone lose it. We just do the best with what we've got. There is a lot of pressure and assertiveness and after a major incident, we all go home pretty exhausted."

The minute level of control the operators have is astonishing. From manually tweaking the phasing of a particular set of traffic lights to ease traffic flow to shifting the median strips on the Harbour Bridge with the flick of a joystick, they are truly masters of all they (6) J.

But regardless of how much the technology puts them in control, they are still at the mercy of natural events – particularly the weather – which can (7) E throughout the whole complex system.

While it's not quite the flapping of a butterfly's wing in the Amazon causing a tornado in China, rain can cause traffic problems right around the city simply because (8) C passengers take that much longer to get on and off buses.

The TransGrid control centre in Eastern Creek is a smaller version of the TMC with the video of streams of traffic replaced by a huge diagram of the state's electricity network, rendered in pleasing tones of white, green and purple. And here the weather is also a major preoccupation for the three operators sitting at their terminals, (9) F in the right places to meet demand.

"If nothing is going on, it can be a deadly boring job because they are sitting there, waiting for something to happen," says Lionel Smyth, the manager in charge of the network. "They are constantly looking at what happens next. What's the weather doing? Are there storms or wind? And they are looking at the load [demand], which is dependent on the weather."

And what happens when everyone switches on the kettle at half-time during the grand final? Smyth says it barely registers. It's the weather – particularly all those air conditioners – that drives demand above everything else.

A	controlling all the vital processes
B	inconsiderately left in a clearway
C	fiddling with umbrellas means
D	have enormous knock-on effects
E	pop up minute to minute
F	providing the right amount of power
G	stare intently into banks of computer screens
H	checking the computer systems
I	interspersed with maps and bar charts
J	survey on their screens
K	find an appropriate solution
L	touch almost every aspect of our daily lives

Read the text about how the field of robotics can change the life of wheelchair users. Complete the sentences (1-8) using a maximum of 4 words. Write your answers in the spaces provided on the answer sheet. The first one (0) has been done for you.

Robotic legs for wheelchair users

When Hayden Allen was spinal cord injured five years ago, he became a full-time wheelchair user and doctors told him he'd never walk again. Today a revolutionary product developed by Auckland-based company Rex Bionics has enabled Hayden to walk again.

Hayden has been one of the first people in the world to use Rex, the Robotic Exoskeleton, which is most easily described as a pair of robotic legs that supports and assists a person who usually uses a wheelchair, enabling the person to stand, walk and go up and down steps and slopes.

"I'll never forget what it was like to see my feet walking under me the first time I used Rex," says Hayden, who is 6'4" (193cm) tall when standing. "People say to me, 'look up when you're walking' but I just can't stop staring down at my feet moving."

Being up out of his chair and on his feet again allows Hayden many more options on a day to day basis, increasing opportunities for employment and recreational activities by providing access for him independently to go places previously inaccessible to him. For example – up stairs!

Rex users self-transfer from their wheelchair into Rex, strap themselves in and control their movements using a joystick and control pad. Rex is powered by a lightweight, long-life, rechargeable battery. Rex is the brainchild of two childhood friends, Richard Little and Robert Irving – co-founders of Rex Bionics. "Both of our mothers are in wheelchairs so we are aware of some of the obstacles and access issues faced by many wheelchair users," says Richard.

Robert's Multiple Sclerosis diagnosis seven years ago was the catalyst for these men to put their engineering skills to use to develop a practical, standing and walking alternative to wheelchairs.

The founders are quick to point out that Rex is not a replacement for a wheelchair, but a complement that offers a range of options not currently available anywhere else in the world. It is potentially suitable for manual wheelchair users who can self-transfer and operate hand controls.

Dr Richard Roxburgh, Auckland neurologist and medical adviser to the Muscular Dystrophy Association says, "For many of my patients Rex represents the first time they've been able to stand up and walk for years. There are obvious immediate benefits in terms of mobility, improved social interaction and self-image. There are also likely to be major long term health and quality of life benefits through reducing the complications of being in a wheelchair all the time. I think that this will also enable people to stay well longer; this means that those who

have conditions where disease modifying treatments are coming over the next five to ten years will be in better shape when those treatments finally arrive."

Each Rex is built onsite at the Rex Bionics' Auckland plant. It has been designed to be practical, lightweight, portable, safe and simple to use and sufficiently powered for a typical day of use. Potential customers must complete a medical appraisal including checks with their own physician to ensure their general health and suitability before they can begin the process of fitting and training. This process typically takes around two weeks with Rex Bionics' team of technicians, based at the Rex Centre in Auckland.

Rex has undergone thorough testing during its seven-year development including engineering validation and clinical trials, with the approval of the New Zealand Ethics Committee, in conjunction with disability and rehabilitation advisors.

0	Thanks to an invention, Hayden Allen can ____.
1	The device functions like ____.
2	Hayden has now got more chances for ____. (Give <u>one</u> answer.)
3	People can use this device without ____.
4	The inventors know about potential problems because their ____.
5	Patients can use the device if they are able to ____. (Give <u>one</u> answer.)
6	Over a longer period of using the device, patients can improve ____. (Give <u>one</u> answer.)
7	The device only has to be recharged ____.
8	People wanting to use the device have to get proof of ____. (Give <u>one</u> answer.)