Working for two bosses: Student interns as constrained labour in China

Chris Smith
Royal Holloway University of London, UK

Jenny Chan
University of Oxford, UK

Abstract
Based on interviews with students and teachers at one electronics company, we analyse the use of student interns to do regular manufacturing work in China. We argue that student workers need to be seen as a distinct category of constrained labour; part of a growing insecure workforce in China. We find that students enrolled in vocational schools are moved into internships, without their consent, to suit the needs of employers. This results in a misalignment between interns and their area of study that invalidates the basic principle of vocational education, which is to combine theory and practice within a sector or occupationally-focused education programme. Teachers in vocational schools follow their students into the factory and become ‘teacher-supervisors’, receiving a second salary for co-managing the utilization of student interns’ labour power. Thus, within such an unfree labour regime, student workers are subject to dual control in the workplace from managerial and teacher-supervisors.

Keywords
China, constrained labour, dual capitalist labour control, internship, local states, student workers, teacher-supervisors

Corresponding author:
Chris Smith, School of Management, Royal Holloway University of London, Egham Hill, Egham, TW20 0EX, UK.
Email: Chris.smith@rhul.ac.uk
Introduction

The continued role of China as a site for global just-in-time production, its increase of labour costs, and high labour turnover in the manufacturing sector give rise to the increased use of cheaper and younger temporary workers, such as student interns. Attention to the use of interns as a growing component of the Chinese workforce has been identified through labour and human rights non-governmental organizations (NGOs), notably Students and Scholars Against Corporate Misbehaviour (SACOM), Globalization Monitor and China Labour Bulletin, following the worker suicides at Foxconn and the strikes at Honda in spring 2010 (Chan, 2013; Chan and Pun, 2010; Pun et al., 2014). Many researchers noted the presence of interns at the Honda (Nanhai) factory but their research focus was about strikes and local government responses, not the organization of internship at the workplace level. As such, despite increased attention on the student workers, we still have very limited knowledge of the organization of internship and actual experiences of the participants. This article addresses this research gap by showing the process through which students were put on internship as a result of the coercive partnerships among institutional actors, including the provincial governments, employers and vocational schools.

The primary objective of this article is to further our understanding of internship by bringing in the voice of the participants – students who take on work placements and their teachers who follow them into the workplace. Unlike extant research that focuses mainly on explaining the expansion of interns and the rationale of employers for using interns, our article examines the experiences of students, their relationship with their teachers as internship supervisors and their attitudes towards the schools as recruitment agents for capitalist firms. The article also briefly explores the role of teachers and their attitudes towards managing the students in the factory setting. The stories of students and teachers offer an interior angle for us to understand the process of interaction between schools and employers in organizing the internship. Through these participants’ experiences, we are able to identify two distinctive features of student interns. On the one hand, the relationship between student interns, and their teachers and shop floor supervisors suggest that student workers are under ‘double control’ (of factory and school), which makes them a distinct source of the growing insecure labour force in China. On the other hand, the way student interns are organized has undermined the educational value of their internship as a path to skill development. Students are sent to factories to work, not to further their educational and training needs. Rather, they work for substandard wages and perform training-depleted work as regular general workers.

The research for the article is based on a detailed case study of the Taiwanese-owned electronics subcontractor, Foxconn Technology Group (hereafter Foxconn). The company is the biggest employer of interns, and exercises power over local authorities and vocational schools to provide interns on a mass or industrial scale. For example, Foxconn, noted that ‘interns comprise(d) 7.6% of our total employee population in China and at no time has this percentage ever exceeded 15% even during the summer peak seasons when more students want to enrol in the internship program’ (Foxconn, 2010). With a working population in excess of one million workers, this means Foxconn can have up to 150,000 student interns working in its numerous factories in China (Chan, 2014: 121). This is a
massive new segment of the insecure workforce. The article documents accounts of the process of hiring students, their experience of work and their struggle to reconcile the mismatch between their specialist vocational education and the routinized work they perform on the assembly line.

The rest of this article is structured into five sections, starting with a literature review of employment shifts in China and the contextualization of internships. We then describe our research methods and the results of our research, which we structure around the themes of the constrained choice students have in entering internships; the misalignment between the specialist vocational courses studied by students, and the generalist labour they perform in the factory. We then examine the control over student workers exercised by teachers, who act as managers not teachers in the workplace. Finally, we look at evidence of resignation and resistance by students towards their internship experience in the factory and conclude the article by suggesting the need for further research into this new category of labour in China.

**Literature review**

*Shifts in employment in China: The growth of temporary and insecure labour*

Many writers have described the move away from a state-centric to a more fragmented market-centric employment system in China and the processes of commodification and casualization of labour that ensued from such a transformation (Friedman and Lee, 2010; Gallagher, 2005; Kuruvilla et al., 2011; Lee, 2007; Sheldon et al., 2011; Zhang, 2008, 2010, 2011; Zhou, 2012). Employing the language of commodification and de-commodification from Polanyi (1944), Friedman and Lee (2010) identified some key changes in China’s labour market over the last few decades: increased mobility of labour with over 200 million rural migrant workers moving to urban settings; changes to the composition of the working class and altered relations between the individual and the state; and a move from centralized to more decentralized employment relations. The state has been an active force in this transition; it ‘attempted to institutionalize a labour rule of law, or to regulate employment relations through a series of labour legislations, all founded on the notion of the market-oriented, voluntaristic and individualistic labour contract’ (Friedman and Lee, 2010: 509).

Under such marketization, which some see as one part of a neo-liberal global wave (Harvey, 2005; Peck, 2011), workers have experienced not only a shift to the market but also to a more marginalized status with ‘employment in China becoming greatly informalized across nearly all sectors’ (Friedman and Lee, 2010: 510). As China remains a major manufacturing site in the chain of globalized production networks, we are witnessing rapid growth of the marginal segments of the workforce. There is a growing number of workers on casual contracts from employment agencies. Employment agencies send these workers, often referred to as ‘dispatched workers’, to employers in need of a highly flexible and highly exploitable workforce (Friedman and Lee, 2010: 512; Zhang, 2011). Dispatched workers are estimated to number about 60 million in 2011 and constitute one-fifth of China’s urban workforce (Jiang, 2011). In her studies of the auto industry in
China, Zhang (2011: 117) estimates that 20 percent of dispatched workers are student interns, but it is not clear how reliable this figure is and whether it only applies to the auto industry.

The 2008 Labour Contract Law, a response to the growing informalization noted above, has provided regular workers with some security where the law is enforced (Wang et al., 2009). Gallagher (2012) notes the increased employment of workers with formal contracts, despite continued segmentation between local and migrant workers. Some suggest that the new labour laws of 2007 have promoted the bargaining power of workers and growing confidence of a new generation of workers (Chan CKC, 2010; Cooney et al., 2013; Gallagher and Dong, 2011; Pringle, 2011). However, the impact of the new legal framework on work security needs qualification. As Gallagher (2012) noted, ‘employers have exploited loopholes and gaps in the law to evade some of the protections’. The labour law is poorly applied in practice and its administration varies across regions within China. Despite the passage of the first, codified national labour law in 1994 (effective 1 January 1995) and the significant labour laws in 2007 (effective 1 January 2008 and 1 May 2008 with regard to three major labour laws), workers’ rights remain largely unprotected. Most importantly, legal developments have pushed up the cost of employing long-term and regular workers. In the absence of effective legal frameworks and administration, the new segments of workers who are somehow exempt from these legal processes, such as student interns, become more attractive to employers (Zhang, 2010).

What remains unclear is how students are dispatched to the internships and how the arrangement of such work placements affects their education. School-run agencies are illegal because schools serve as educators, not private firms. Nevertheless, there is a growing trend for vocational schools to form collaborative partnership with private firms to fulfil the mission of ‘putting theory into practice’. The implications of vocational schools becoming the supplier and managers of this growing segment of the temporary workforce in China warrants further investigation.

Internships and vocational education in China

Vocational education in China follows the principle of ‘theory into practice’. A standardized three-year vocational education programme in China is made up by the first two years in structured and career-orientated classroom learning, followed by the final year in practice with a period of internship closely linked to the programme of study (Barabasch et al., 2009; Qiu, 1988; Su, 2010). This structure gives employers certainty that the students they received are pre-selected by the school, and that they are theoretically trained, job-focused and motivated. For the student it means a predictable and practical training with greater certainty of employment in their speciality at the end of the course: ‘Its aim is to prepare intermediary-level skilled workers with comprehensive occupational skills for the industrial, technology, and management sectors’ (Barabasch et al., 2009: 9).

The Chinese government has a mission to encourage workforce preparedness by expanding and regulating vocational training. One part of China’s contemporary educational reform emphasizes the expansion of vocational education and training (VET) in
the service of social and economic development. And student internship has become an indispensable component in this expansion (Durden and Yang, 2006; Murphy and Johnson, 2009). When interned in the workplace, students are not entitled to employment contracts. However, prior to an internship, the students, the school and the enterprise were obligated to sign a written agreement making clear each side’s responsibilities, rights and duties. Employers are also required to pay interns for their labour services (China’s Ministries of Education and Finance, 2007).

Today there is increased complexity in China’s VET system (Hansen and Woronov, 2013), and education reform in China has been moving in the direction of neo-liberalism, with privatization and decentralization, which has brought more actors into play. VET is increasingly decentralized and fragmented, combining public and private profit-seeking segments, which compete for students and teachers – many of the latter are poorly qualified and paid. Moreover, credentials obtained by students at some of these schools are not always nationally recognized, given China’s diverse labour market (Barabasch et al., 2009; Yu, 2005). Educational reform has closed many of these schools, and exposed those remaining to economic pressures to supply students to firms for economic returns. Li et al. (2011) report on the increased role of the private sector in VET teaching, the decline in central government support and the growth of partnerships between schools, local authorities and companies. ‘The state has deliberately devolved responsibility and power to local governments, local communities and other non-state actors by providing a necessary framework for educational development’ (Mok et al., 2009: 506). This follows a break with the certainty of employment in China, ‘as the state sector shrinks under reform-era privatization policies, far fewer vocational graduates are posted directly into iron rice bowl jobs. Instead, the majority must seek employment in the private job market’ (Woronov, 2012: 707).

More than 21 million full-time students were enrolled in vocational schools in 2012 (not including those in vocational colleges or adult vocational education) (China’s Central Government, 2010). In an urban school studied by Woronov (2012), the vocational school was funded by the local authority and had traditionally supplied skilled workers and technicians to the same local authority. Over time, the local school has focused on lower-skilled offerings, such as ticket sellers for the local subway. Nevertheless there was still job-linked study. She therefore argues that schools are commodifying education, selling courses to aspirational students (and their parents) such that ‘students thus become consumers, purchasing a promise for their future – that vocational education will be a kind of investment in their human capital, which they then can cash in by finding a decent job after graduation’ (2012: 708). It is not always possible to find an exact match between courses studied and the company or occupational preference of the student (Qiu, 1988). But Zhang’s (2011) research from the automobile industry reports the movement of vocational schools into the labour dispatch business. ‘Many vocational schools in China run labour dispatch services. They introduce their students to work at client firms, and charge 25–30 percent of student workers’ monthly wages as commission fees’ (2011: 117). Su (2010) highlights the shift from mutual training gains between technical schools and enterprises, to a situation of economic exchange of students for various rewards and resources for the schools. This developed gradually as the state gave up the old job assignment strategy, cut education subsidies,
encouraged private institutions and pushed technical schools to cooperate with enterprises in more instrumental ways.

The consequence is that vocational schools focused less on training and creating new skills, and more on the dispatching of vocational students as workers for routine jobs. However, there is limited information regarding the extent of this shift in the VET pattern, given the diverse nature of VET in China, and diverse employers and labour markets.

Vocational colleges are forced to expand popular courses as commodities to sell to students rather than as part of an integrated approach where educational credentials, training and expertise were managed by the college for the employer. Employers are increasingly prone to see student interns as a flexible reserve army of relatively unskilled labour rather than as potentially skilled employees. The demand for interned labour from large employers is evident. What requires further research attention is the growing involuntary nature of this exchange, the disconnection between the course and the work placement and the added layer of control over the student worker.

**Student interns as regular labour**

The expansion of using student interns as general labour has been reported by a number of researchers (Perlin, 2011). In China, Butollo and Ten Brink (2012) were an early academic team to write about Honda student interns. Brown and DeCant (2014) in a legally focused paper have usefully summarized evidence of the employment of interns, as well as suggesting that the current use amounts to forced labour under international law, in view of the involuntary recruitment of students and the tied nature of their placement with the employer – points we will return to later. Existing research has revealed the reasons for the increasing use of student interns as general labour, which we can now synthesize.

It would appear that the growth of student intern labour coincides with the rising wages, as well as the improved employment governance for workers in China after the Labour Contract Law of 2008. Student interns fall outside employment law, and are cheaper to employ. Vocational schools function as a ‘supply chain’ that enables firms to access this type of labour quickly, thus, interns are easier to recruit. And most of all, student interns can be flexibly deployed, a key consideration given the demand cycles in the electronics sector (such as new product model ramp-up and holiday sale seasons). And interns are easier to lay off. Unlike regular employees, interns can be laid off without 30 days’ prior notice, which maximizes company flexibility to respond to the ebb and flow of orders. Since interns are not legally defined as workers, they are barred from trade union membership and protection. Student interns in the case company were subjected to the same working conditions as regular workers including alternating day and night shifts and extensive overtime, defying the letter and spirit of the education law. With reference to the 2007 Regulations (Article 5, ‘Interns shall not work more than eight hours a day’) and the 2010 Education Circular (Clause 4, ‘Interns shall not work overtime beyond the eight-hour workday’), the common understanding was that the maximum eight-hour internship training ought to take place during daytime to ensure the intern students’ safety and physical and mental health. In reality, such as student experience reported below, interns’ employment and educational rights are not protected.
Second, student internship employment offers firms a secure workforce for the duration of the contract with the vocational school. In order to fulfil their vocational programme, students are compelled to remain with their intern-company, effectively in tied employment. The building of institutionalized supply lines creates functional dependencies between schools and companies, which allows student interns to be dispatched on a mass scale. In the face of persistently high labour turnover, employers make good use of economic power to negotiate with local governments to demand that schools supply interns to its production lines. In the case reported here, provincial and lower-level governments provide special funds for schools that meet the company’s labour quotas, and with teachers earning extra income for monitoring student interns, the ties between government, schools and the corporation were strong.

Finally, it is possible that recruiting student interns might reduce worker solidarity, segmenting the workforce by employment status. Students are seen (by workers) as students, or student interns, and not the same as themselves. There have been cases of student interns participating in mass industrial action (at Honda and Toyota factories), but the research reported below suggests students were disengaged with the workplace and fellow workers. Zhang (2011: 117) suggests that the injustice of the new dualism in workplaces in China (between those on temporary and more regular contracts performing the same work and often with the same educational qualifications and skills), meant temporary workers (including student interns) were now participating in rising labour activism. But this might be uneven and the school identity of interns inhibits such action. More research is needed here, before any definitive conclusions can be reached on whether interns play a ‘reserve army’ function, or a ‘new labour activist’ role. But together, these are plausible explanations for the growth of student internships. With few seeing the internship as a route into permanent employment in the company we examined, this also creates a detachment from work, and hence weakens the avenues to defend labour rights.

**Research methods**

During 2011 and 2012, one of the authors conducted six months’ fieldwork at two subsidiaries of Foxconn Technology Group in Guangdong and Sichuan provinces. She was initially introduced to several employees through labour rights advocates and university researchers from Hong Kong and mainland China. Building on these contacts, 38 student interns and 14 teachers were interviewed. The interns came from eight vocational schools from Sichuan, Henan and Guangxi provinces. They were aged between 16 and 18 years; a majority were in the first or second year of vocational study, while eight student interns were in their final year of the three-year programme. At the factories, they performed tasks including assembly (semi-finished and finished products), quality testing (functionality and audio/visual appearance), packaging, laser soldering, component cleaning, metal processing, polishing, label sticking and logo scanning.

The interviews with student interns were not conducted inside the factories, owing to access difficulties, but in internet cafes, street-side stalls, basketball courts, parks and private living rooms. The second author followed a similar checklist of questions which covered relations with co-workers and line leaders; involvement with individual and
collective labour struggles; wages and benefits, working hours, occupational health and safety, living conditions and opportunities of promotions.

All 14 teachers came from the same eight schools as their student charges and all were accommodated in the Foxconn factory dormitories, but in less congested accommodation. At the school as well as in the factory, teachers were responsible for teaching, administration, student counselling and career service advice. All the teachers had hands-on experience in leading school–business collaborative partnerships in general, and workplace-based student internships in particular. With the consent of the informants, all interviews were recorded.

Our research case is well known for the use of student interns, and therefore can be treated as archetypal (Yin, 2012), even if the scale of usage is much bigger than other companies. Analytically, the power relations among the company, local authority and vocational schools characterizes what we think are the typical power relations, and therefore we can see our case as representative of wider process of institutional organization of labour markets and labour processes for interned student labour in China.

Results

The main research findings include the feelings of restrained mobility, something that challenges the idea of free waged labour; the sense of misalignment between students’ classroom studies and their work in the factory, issues that relate to their continued identity as students, and the students’ relationships with the teachers and their schools within the factory context. In addition, a key theme was the sense of resignation and powerlessness experienced by the students, who appeared to lack the choices of resistance open to regular workers, and feel the double control of school and factory in their internship. We also report on the contradictions experienced by teachers who, as an additional layer of supervision and control, reinforce the narrow routines of the internship work, rather than demanding that the factories offer training aligned to study programmes. These themes are elaborated upon below.

The economics of employing student workers is clear. As the costs of migrant workers have risen with increased legislation, organization and pressures to raise wages owing to labour shortages, student workers’ exclusion from these processes made them cheaper to employ. Interns and entry-level workers had the same starting wage of 950 Yuan per month (US$150) in the company, but employees qualified for a skill subsidy of 400 Yuan per month (US$63), while interns were not entitled to skill assessment or wage increases throughout their internship. Moreover, student workers were not eligible for productivity bonuses or quarterly prizes, regardless of how well they performed their job. In terms of welfare benefits, the company claimed to have taken out collective insurance for all interned student workers. Empirically, all interviewed interns said they had not received information about an insurance policy. As interns, they were not legally entitled to government-administered, occupation-based social security, that covers five types of insurance (including old age pensions, medical insurance, work injury insurance, unemployment benefits and maternity insurance), plus a housing provident fund.

Students were required to do overtime work – an issue of central importance in contract manufacturing – and they earned between 1705 Yuan and 2480 Yuan per month.
(US$270–393), before deductions for food and lodgings. In total, student interns were paid approximately 400 Yuan less than regular workers and our findings echo other research that has reported on wage differentials for student workers doing the same work as core employees in the automobile industry (Butollo and Ten Brink, 2012: 426; Zhang 2011: 114–115).3

Constraining choice

The decision to place a student as an intern in a manufacturing facility rested with the vocational school rather than with the student. Liu Siying,2 18, who came from Sichuan’s Mianyang city, told the researcher how she became an intern at the Shenzhen Longhua factory in the 2011 fall semester:

This is my final year in electronics and mechanical engineering. I really enjoy my studies and have been studying very hard. I even review coursework in the school library during summer vacation. My original plan was to seek an internship at Huawei Technology but our teacher persuaded my whole class of 42 students to intern at Foxconn. He emphasized that Foxconn has a worldwide customer base including Huawei and that the company is investing billions in high-tech research. In short, he stressed that we’d learn a lot through the internship.

Although we cannot verify if the internship programme offered by Huawei Technology would have been any better than that at Foxconn, she regretted her inability to choose her internship site:

During the night shift, whenever I look out in that direction [pointing to the west], I see the big fluorescent sign of Huawei* shining bright red, and at that moment, I feel a pain in my heart. (*Huawei and Foxconn headquarters are on opposite sides of the Meiguan Expressway in Longhua Town, Shenzhen).

The recruitment of interns at Foxconn is not a one-off practice but continues through to the present day, based on follow-up interviews in 2014 with labour organizers and service providers to Foxconn workers and interns (interview with coordinator of Shenzhen-based Labour Education Community Centre, 22 June 2014). Between September 2011 and January 2012, Foxconn’s new factory at Chengdu, the provincial capital of Sichuan, more than 7000 students were working on the production line, and their teachers attended the Zone C office inside the manufacturing complex. In December 2011, Foxconn Chengdu Human Resources manager Zhu Xi, a 31-year-old college graduate with seven years of work experience in a small state-owned factory, explained:

Over the past year, I’ve had monthly meetings with local government leaders responsible for the ‘Number One Project’ tailored for Foxconn Chengdu. Indeed, the fulfilment of student internship targets has become a government priority. We’ve been discussing the detailed timetable and the scale of the Foxconn internship programme, alongside the second-phase construction projects of factory dormitories.
The scale of student workers required by Foxconn meant they often put pressure on local governments and vocational schools for sourcing student interns. Schools had to send whole classes of students to the company. Zhang Lintong’s teacher announced that all vocational schools in the central China’s Henan province had to cooperate with local government to send students to Foxconn through the internship programme. Lintong said that: ‘Unless we could present a medical report certified by the city hospital that we were very ill, we had to depart immediately’. With a contract to fulfill with Foxconn, the role of the teacher in the school was to sell the virtues of the internship to entire classes and overcome student objections.

**Misalignment between theory and practice**

As the interview data make clear, there was no relationship between the majors taken in school by the students and the tasks they performed at Foxconn. The 38 Foxconn interns were studying arts, graphic design, automotive repair, petro-chemistry, Chinese herbal medicine, horticulture, agriculture, secretarial services, computer science, business management, accounting, textile and clothing, sales and marketing, electronics and mechanics and many more subjects (see Appendix 1 for details). For the interviewed student interns, assembly work was irrelevant to their studies and they were keenly aware that what they were doing breached the idea of internships as an integral part of their overall training. From the beginning of her internship, Siying was ‘tied to the PCB [printed circuit board] line attaching components to the [product] back-casing’. In her words, it ‘requires no skills or prior knowledge’. Another student, Sun Junyi, who majored in computer-assisted tool making, was sent on the line for his internship doing ‘trivial tasks like checking product screens and cleaning the LCD [liquid crystal display] surface’. He was frustrated at ‘repeating the same boring work all day’.

Student interns were assigned to a one-size-fits-all ‘internship’ that involved factory work completely divorced from their studies and interests. In a typical response, Lintong a 16-year-old student explained:

> Come on, what do you think we’ve learned standing for more than 10 hours a day manning the machines on the line? What’s an internship? There’s no relation to what we study in school. Every day is just a repetition of one or two simple motions, like a robot.

Some students were assigned an internship before they had completed sufficient classroom study. Li Wei, a 17-year-old student said how he and his classmates were ‘tricked’ into interning at Foxconn immediately after the first year exam in June 2010. He had enrolled in the course of automotive repair at a vocational college of traffic technicians in September 2009. ‘In our first semester we studied Auto Body and in the second semester we studied Automatic Transmission’, he said. The misalignment between his studies and the internship, and the disruption to his studies by being channelled into an early internship, both compounded his sense of powerlessness and anger. His career development was compromised (not reinforced) by doing a misaligned internship that, in turn, produced additional complexities for his continued studies:
Before we departed for Foxconn, our teacher pledged that after the internship was completed, he’d make up any remaining specialized classes. In January 2011, we finally completed our internship and returned to school. In the new semester in February 2011 [the second semester of the second year], the school started teaching a class on motors. But then in April, the school began to arrange internships at auto plants for graduates. The school had still not finished teaching our specialized classes, and they began making internship assignments. We’ve yet to complete even the core classes of our specialization, nor have we learned the basic skills of automotive repair. How’re we going to do an internship?

A valuable period of seven months ‘was completely wasted’, sighed Wei. Joining hands with dozens of fellow classmates, he mustered courage to talk to their teacher, but their efforts were futile. ‘After that, we sought out the senior school administrator who told us that we’d have to extend our studies by paying one more year’s fee for ‘a higher diploma’ before studying the remaining specialized curriculum’. He continued:

We’re depressed. We’d followed the rules and paid for three years of tuition, but we haven’t completed professional training. The school violated the most basic agreement, contradicted the student recruitment brochure, arbitrarily changed the students’ curriculum, treated its students’ future like a plaything, and failed in its responsibility to students. We students didn’t attain sufficient knowledge in our education, and come time for employment, we’ll have no competitive advantage. This is the consequence of the school’s irresponsibility.

The internship at Foxconn constrained Wei’s future career and mobility, putting him at a disadvantage by prolonging his studies, but his grievances against the company were all directed at the school, highlighting the continued strength or over-laying of school relations in the factory context. A similar story was repeated by the majority of the students interviewed.

**Control by teachers**

There are two roles played by teachers: one is enforcer to ensure interns follow factory rules; the second is as emotional manipulators, counselling and deflecting students from feeling dejection at their work and employment situation and the risks of resistance and self-harm that could flow from this. After describing the way teachers are rewarded, we explore their interaction with interns through their two roles.

Foxconn paid teachers to co-supervise the interning students. In addition to their school salary, the teachers received 2000 Yuan/month (US$320). Teachers were requested to report for duty to the administrative office between 9 a.m. and 5 p.m. weekdays (they were not required to work overtime on weekends or at night even though some of them did provide ‘emotional support’ to anxious students throughout the internship). The main duty of teachers was to monitor the attendance of their students. They had access to student attendance records via the company intranet, which listed the students’ punch-in time at the start of the work shift, after meals, overtime work and punch-out times at the end of the shift. Such information allowed teachers to react swiftly to cases of ‘missing students’. Teachers had the authority to check on the sickness of students, to issue written
warnings to students and to pressure them into completing the internship with the company. In this way the authority of the teacher and the objectives of the company tended to coalesce.

In some circumstances, teachers checked students’ sick leave applications and decided whether to approve them. Student interns perceived teachers as ‘part of factory management’. One respondent explained:

The real reason our teachers are here to guide us is out of fear that we will want to quit. So they will work with those of us who are moody and advise us to stay. They also come forward to fix behavioural or disciplinary problems. We have a troublemaker [in our group]. A boy came from our school; he loved to go online, you know 24 hours on his PlayStation, at the dorm. He went online, played the video games, and didn’t go to work for two days. Our teacher thought that he was sick but then caught him. He received a written warning.

The students’ view of ‘teachers as supervisors’ was confirmed by the managers, especially teachers’ roles in managing students’ emotions and controlling absenteeism.

Teachers interacted with production management, and were particularly concerned with ‘suicide’ risks of pressured students, given the widespread publicity surrounding the cluster of employee suicides at Foxconn (Chan, 2013; Pun et al., 2014). When asked if student workers were any different from migrant workers in their emotional behaviour, one production manager said: ‘If a student is found emotionally unstable or seriously ill, we can ask the responsible teacher to “take back” the student. In this way we avert the risk of suicide and monitor the labour conditions with the assistance of teachers’. Teachers were clearly playing the role of ‘emotion managers’ – seeking adjustment to, but not improvement in, the working conditions of their students, or in enhancing the utility of their internship experience as a training experience.

Maintaining a high retention rate of the students was a primary criterion for judging teacher performance. Hendrischke (2011: 61) reported that in factories in the Yangzi Delta region, rising wages for regular workers had meant companies recruiting students, who entered the factories together with their ‘school teacher from their own town to help enforce their “commitment” to stay’. In an unambiguous statement, teacher Chong Ming said: ‘We don’t educate our students about labour rights; otherwise, we won’t be able to keep them’.

In cases where students were in fact ill, owing to overwork and stress on the line, neither company supervisors nor teachers seemed to be available for help when interning students most needed it. During the internship, student applications for sick leave were routinely rejected even when there were compelling reasons. Wang Meiyi, 16, suffered menstrual disorders when she was assigned to the packaging workshop at the Chengdu plant. On a chilly morning in December 2011, she asked if the second author could take her to see a doctor as they walked in the local neighborhood shopping strip. She recalled: ‘I used to have relatively regular menstrual periods, but this time my period was delayed until the first week in October. I was frightened. I had cramps so severe that I was covered with sweat on the line, where it’s air-conditioned’. In November and December, Meiyi’s irregularity and pain persisted. Her line leader was a young man with whom she did not feel comfortable talking about a ‘girl matter’. Further, ‘I also did not report my
sickness to Teacher Tan... for the same kind of embarrassment’. She went on: ‘at school, we only have six classes a day, and I got good rest. But here [at the factory] it’s different: we don’t have breaks whenever we’re behind on the production targets. And it’s no use to complain to my teacher’.

Teachers tried to motivate their students to work. For example, a teacher allayed the fears of students who were exposed to a radioactive environment at work:

I explained to my students that the radioactivity at the company is well within safety standards, it’s just like the modest [radioactive] level of a cell phone. It’s not dangerous. Take a moment to think about the selflessness of the scientists and the medical teams when Japan reported the tragic radiation leak this March [2011]. None of the Japanese withdrew from rescue work. So, every one of us should take responsibility for the good of humanity.

With their own teachers slighting basic dangers such as radioactivity, interns found it difficult to report incidents of work-related injuries and diseases.

A teacher had some students who were reluctant to go to work during the first week at the company and he patiently counselled them:

I asked my students to manage their emotions. Calm down. Think carefully if you want to leave – won’t your parents be disappointed? I visited my students in the dorm to see if they felt okay on Tuesday night. They answered ‘not too bad’. I met them again on Friday night. They said ‘fine’. They’ve gradually got used to the work rhythm. Finally I asked if they want to go [home]. They replied ‘no’.

Thus, the ‘dormitory labour system’ (Smith, 2003; Pun and Smith, 2007; Pun and Chan, 2013) replaced a freer school environment with a high-pressure factory regime.

Instead of acquiring useful knowledge towards their vocational specializations, the interns were placed on the line for long shifts of 10–12 hours, dealing a blow particularly to those who had ambitious career objectives. The repetitive manual tasks were mind numbing. On several assembly lines, verbal insults towards the interns by line leaders only made the situation worse. An entire month of night shift work in October 2011, and the interns’ subjection to forced overtime on six to seven days a week was simply ‘too much’.

Only one of the teachers interviewed expressed any criticism of the internship system. Teacher Tian, a Sichuanese in his forties, was a Chinese literature teacher with more than 20 years of experience: ‘My daughter is 17 years old, my only daughter. She’s now preparing very hard for the national college entrance exam. No matter what the result is, I won’t let her come to intern, or work, for this company’.

And yet he said that ‘the paid internships at Foxconn’ was the main attraction for students attending his school. But he admitted that ‘the short-term gain is worthless’. He added that: ‘There’s no real learning through an integration of classroom and workshop. The distortion of vocational education in today’s China is deeply rooted. It’s unlike that in Hong Kong, isn’t it?’.

In a lengthy interview he referred to the interns as ‘contract labour’ and said the origin of the practice of involuntary factory labour could be traced back to the 1930s, when
labour contractors recruited rural, poverty-stricken, female workers for foreign-invested cotton mills in exchange for labour management fees. Teacher Tian saw himself as a labour contractor in contemporary circumstances. He was self-aware that he was taking ‘a cut’ from the labour of his students by receiving a monthly salary from the factory. This observation both verifies students’ complaints and shows that someone outside the student population believes the system is useless in terms of education and training.

For teachers, there is the welcome attraction of earning a second salary, but the media and public opinion have highlighted the conflicted image of educators being transformed into factory supervisors, as this is seen to transgress professional esteem, status and identity (Gao, 2008: 155). Moreover, students expressed disillusionment with their particular teachers, who were ‘too close’ to factory management, and did not look after their interests as students. Teachers act to support their students, but also supervise and cajole them into factory work. Teachers, therefore, play out their own dual roles: although internships should be about training, should signify putting ‘classroom theory into practice’, it was not the quality of training and learning that animated teachers, but rather ensuring the habituation of students to work as though they were regular workers. Tensions for teachers within this divided identity remained unresolved.

**Resignation and resistance**

Student workers experience dual control – from teachers and production managers – but it is the relationship with their teachers that they have highlighted in the interviews. This is because their identity, although divided as worker and student, is institutionally reinforced as student – by internship educational and management laws, the temporary nature of their stay in the workplace and the continued link to their teacher in the factory setting. Resistance was often directed to the school. A student protest took place at a College in Henan province, where students rioted against forced internships. On 17 June 2010, they vented their anger by setting papers and blankets ablaze and throwing fire-balls onto the ground of the student dormitory. The cause was that some 1000 of the 5000 students were told they would have to intern at the Shenzhen plants of Foxconn, where they were to receive ‘training’. The internship was scheduled to begin on 27 June 2010 and last until 22 January 2011, a seven-month period. The students who eventually complied with the school order, in their first year, argued that internships at the electronics factory had no relevance to their fields of study, and that the internship came too early in their studies.

Another incident actually happened in the workplace, not in the school of the students’ pre-departure. The collective incident involved conflict between rival schools and groups of interns. On 1 November 2011, Han Chinese and Tibetan student interns got into a mass brawl during working hours. By breaking the factory discipline and rules during working hours, students set themselves free from forced and meaningless internships. All were laid off, while some others, fearing retaliation, left on the grounds of personal security. The mass labour incident sounded an alarm, so that a vice principal from one vocational school (in Pujiang county, southwestern Sichuan) arrived at the scene the next day to ‘look after his students’. This reveals the integrated control function of school and factory management. Foxconn demanded that the school immediately
‘take back the bad students’. The dual control over the interning students exercised by school and enterprise became transparent in the course of managing the crisis.

As we did not observe the labour process directly, there are restrictions on what can be said with regard to subtle forms of resistance employed by the interns in the factory. However, it is almost certain that students were able to slow down the line. Hidden, everyday forms of resistance, such as playing video games all night and not working hard, or losing interest and motivation to be punctual were reported to the researcher. As interns could not be promoted and had no long-term interest in the factory, there may be few incentives to display workplace discipline. But like regular workers, interns were all yelled at. They were equally demanded to work at full speed, and the intensity of work did not differ at all for all production workers. Logically, then, interns are also hostile to management, and even more so because they are underpaid. However, from interviews with students it was despondency, powerlessness, fatalism and acquiescence that seemed more prominent than resistance. The pressures on students are considerable when mobility power and effort power (Smith, 2006) are controlled by the dual agencies of managers and teachers. Such pressures may lead to extreme outcomes – such as interpersonal violence, suicides and self-harm. Students turn inwards, if the legitimated forms of resistance (quitting, voice and effort restraint) are closed off. It is this institutional context that renders student workers marginalized and detached from ‘internship’ or work.

Discussion

Waged labour has a formally voluntary character, although the idea that capitalist labour markets facilitate free circulation of labour based on mutually agreed rules of exchange is an ideal. Against the backdrop of China’s liberalization of the labour market, the lack of agency from student workers in terms of entering, resisting and exiting the labour process in our case is significant. Not only does the internship infringe the ideal rules of capitalism, but also breaching the principle of consent in the employment relationship builds resentment and disillusionment. Based on the experiences of students and their teachers, three important characteristics of student interns can be summarized.

First, contractual employment relations and de facto work relations are separated. Interns perform labour relations at the point of production (but under the Chinese labour law interns are not recognized as employees). Their work is chosen by the school as part of fulfilling the attainment of educational credentials. Interns are collectively dispatched and perform the role of a worker in the factory without possessing legal worker status. Leaving the internship is difficult without termination of the contractual relations with the school. As the internship agreement between schools and factories is fulfilled and repeated, this separation between contractual and work relations allows student workers to be dispatched on a large scale without their consent. Hence, the freedom of student workers to enter or exit work relations is greatly constrained.

Second, our findings suggest that teachers in vocational schools support the interests of employers and not those of their students. Student workers are collectively supervised by the teachers who followed them into the factory and were paid to enforce on-site discipline. They are also responsible for detecting, monitoring and ‘correcting’ misbehaviour at and sometimes beyond the workplace – in factory dormitories, for example.
The threat of blocking graduation is there as a sanction to discipline the student workers if they refuse to engage in an internship or fail to meet the assessment criteria. We therefore argue that the internships illustrate a dual process of capitalist social relations reaching inside the classroom, transforming students into workers, and teachers into supervisors; and student–teacher relationships following students into the factory to intersect workplace relations. Grievances in the workplace are overlaid by school relations in the factory context, such that authority, resistance and conflict at work finds expression between students and factory-based teachers, rather than between student workers and their production supervisors. The latter call on teachers to manage students, thus reinforcing teacher–student identities and relations, and strengthening waged labour-employer economic relations. Student workers are therefore enmeshed in dual controls at work, obscuring work relations.

Finally, the internships described here, reproduces students as a category of generalist workers. Student workers enter factory labour processes independent of their vocational and educational training or specialization. Individual’s employment preferences or their specialized areas of study are discounted when the school decides a student’s work placement. They work alongside regular workers, who in the particular workplace had secured the job without the need for an internship. Contrary to standard practice, such internships add limited employability or economic value to the student’s ‘labour power’, something vocational educational credentials are designed to provide. As such, internships are not part of pre-employment experience necessary for human capital building. Instead, internships involve simple work experience irrelevant to the academic specialization of the students. Learning and training time is lost for the students, while their physical labour power is consumed. Thus, their experiences run counter to the Chinese government’s aims to upgrade the country’s human capital via vocational education.

Firms have economic incentives to use student interns as a source of temporary and flexible workforce. However, it is the organization of internship and collaboration between institutional actors (firms, local states, vocational schools) that ensure firm interests overrule the interests of education. Separation between work and employment relations constrained the students (and teachers) and allocated them to the generalist jobs, which are not essentially connected to vocational education.

Conclusion

We have argued that the use of student interns as employees is a form of constrained labour in China. Through our interviews with student interns and teachers of vocational schools who were working at two subsidiaries of Foxconn, we articulate the lived experience of both teachers and students. Given institutional linkages between vocational schools and firms, students are involuntarily assigned to regular jobs at companies without any connection to their educational qualifications or vocational training. State institutions often support and encourage this process, seeking to provide corporations with reasons to stay in or relocate to their regions. We suggest a range of advantages of this form of constrained labour to corporations. Students can be recruited quickly on a mass scale; they are cheaper; they can be flexibly employed and deployed; they fall outside traditional employment law; they are likely to be more compliant, and their compliance
is ensured by the unique role played by vocational education teachers who supervise and manage their students inside the factory. In effect, the student interns work for two bosses – their teachers and vocational schools, as well as for the corporations where they do their internship.

Reform and privatization of vocational education have reduced the dependence of vocational schools on state institutions for funding, thereby creating the space for private corporations to step in and influence local authorities and schools to provide them with student interns in exchange for their investment in schools. In this way, vocational schools play a crucial role as a supplier of cheap, generalist labour.

There are several reasons to believe that such a model of constrained labour will not be sustainable in the long run. Students will increasingly look for vocational education schools that provide training and job opportunities in their specializations. Parents are likely to increasingly question these operations. And at a larger level, the state itself might step in to resolve the ambiguity (i.e. the meeting of short-term unskilled labour needs at the cost of long-term skills development). However, regional divisions in China, and the movement of capital to the interior, might be because capital is able to seek out supplies of cheaper and more flexible labour, such as student workers. Our research complements the work of others such as Su (2010) who highlights the ‘moral crisis’ these internships pose for vocational schools, and the inadequacy of workplace-based training in terms of quantity and quality (Li and Sheldon, 2010: 2179; see also Cooke, 2005). The Fair Labor Association (2013) suggests firm-level remediation action by Foxconn, such as freedom of interns to leave internships, alignment between the internship and the intern’s field of study, and auditing of skills learnt during the internship experience, are possible. But as noted above, reports on the ground suggest such changes have not been implemented. Brown and DeCant (2014: 156) advocate bringing interns into regular labour law in order to reduce substandard wages and overcome the absence of legal protection. Our concern here would be that this would not address the central problem of internships being devoid of education value – the primary problem with current practice. Given the demand for provision of labour from students described here, we do not expect a voluntary transformation in the internship practice. But, we believe the situation to be dynamic and hence further and on-going research is required to evaluate developments.

Acknowledgements

We are grateful for the three referees and the excellent editorial advice of Guest Editors Sarosh Kuruvilla and Eli Friedman. Yu Zheng provided great editorial advice on the organization of the article, and we thank her for this work. Jenny Chan especially thanks the independent University Research Group and SACOM (Students and Scholars Against Corporate Misbehaviour) for their assistance during fieldwork in China.

Funding

This research has been supported by a University of London Reid Research Scholarship (2009–2012) and grants from the Great Britain-China Educational Trust (2013–14) and the Hong Kong Research Grants Council (ref. no. B-Q33R).
Notes

1 We may say that Lu Zhang in her fieldwork during the mid-to-late 2000s was the China researcher who first pointed out the large number of technical school trainees on the line. But it may well be a normal practice in the auto sector (though the group of students are not her focus). The Honda headline-hitting news in 2010 was actually about strikes, not abuse of student interns.

2 The names of interns and teachers are pseudonyms.

3 In the surveyed foreign-invested, state-owned and joint-ventured auto factories, interns or trainees – in auto majors – may gain trade skills through guided learning. But the researchers’ focus was not about student interns’ skill acquisition during the internship. Interns’ conditions are briefly mentioned when they are compared with co-workers, whether they are migrants or locals, core or temps.

References

Barabasch A, Huang S and Lawson R (2009) Planned policy transfer: The impact of the German model on Chinese vocational education. Compare: A Journal of Comparative and International Education 39(1): 5–20.

Brown EV Jr and deCant KA (2014) Exploiting Chinese interns as unprotected industrial labour. Asian-Pacific Law & Policy Journal 15(2): 150–195.

Butollo F and ten Brink T (2012) Challenging the atomization of discontent: Patterns of migrant-worker protest in China during the series of strikes in 2010. Critical Asian Studies 44(3): 419–440.

Chan CKC (2010) The Challenge of Labour in China: Strikes and the Changing Labour Regime in Global Factories. London: Routledge.

Chan J (2013) A suicide survivor: The life of a Chinese worker. New Technology, Work and Employment 28(2): 84–99.

Chan J (2014) The Labour politics of global production: Foxconn, the state and China’s new working class. Unpublished PhD thesis, Royal Holloway University of London, London.

Chan J and Pun N (2010) Suicide as protest for the new generation of Chinese migrant workers: Foxconn, global capital, and the state. The Asia-Pacific Journal 37(2): 1–50.

China’s Central Government (2010) Outline of China’s national plan for medium and long-term education reform and development 2010–2020. Available at: http://www.gov.cn/jrzg/2010–07/29/content_1667143.htm.

China’s Ministries of Education and Finance (2007) The regulations on the management of vocational school student internship. Available at: http://www.chinabaike.com/law/zy/bw/gw/jtb/1341463.html.

Cooke FL (2005) Vocational and enterprise training in China: Policy, practice and prospect. Journal of the Asia Pacific Economy 10(1): 26–55.

Cooke FL (2012) Human Resource Management in China: New Trends and Practices. London: Routledge.

Cooney S, Biddulph S and Zhu Y (2013) Law and Fair Work in China. London: Routledge.

Durden GR and Yang G (2006) Higher vocational education in China: A preliminary critical review of developments and issues in Liaoning province. Journal of European Industrial Training 30(8): 622–638.

Fair Labor Association (2013) Second Foxconn verification status report. Available at: http://www.fairlabor.org/sites/default/files/documents/reports/second_foxconn_verification_status_report_0.pdf#overlay-context=.
Foxconn Technology Group (2010) Foxconn is committed to a safe and positive working environment. Available at: http://regmedia.co.uk/2010/10/12/foxconn_media_statement.pdf.

Friedman E and Lee CK (2010) Remaking the world of Chinese labour: A thirty year retrospective. *British Journal of Industrial Relations* 48(3): 3–17.

Gallagher ME (2005) *Contagious Capitalism: Globalization and the Politics of Labour in China*. Princeton, NJ: Princeton University Press.

Gallagher ME (2012) Written statement for the Congressional Executive Commission hearing on working conditions and worker rights in China: Recent developments. Available at: http://www.cecc.gov/sites/chinacommission.house.gov/files/documents/hearings/2012/CECC%20Hearing%20Testimony%20-%20Mary%20Gallagher%20-%207.31.12.pdf.

Gallagher ME and Dong B (2011) Legislating harmony: Labour law reform in contemporary China. In: Kuruvilla S, Lee CK and Gallagher ME (eds) *From Iron Rice Bowl to Informalization: Markets, Workers and the State in a Changing China*. Ithaca, NY: Cornell University Press, 36–60.

Gao X (2008) Teachers’ professional vulnerability and cultural tradition: A Chinese paradox. *Teaching and Teacher Education* 24(1): 154–165.

Hansen MH and Woronov TE (2013) Demanding and resisting vocational education: A comparative study of schools in rural and urban China. *Comparative Education* 49(2): 242–259.

Harvey D (2005) *A Brief History of Neoliberalism*. Oxford: Oxford University Press.

Hendrischke H (2011) Changing legislative and institutional arrangements. In: Sheldon P, Kim S, Li Y and Warner M (eds) *China’s Changing Workplace: Dynamism, Diversity and Disparity*. London: Routledge.

Jiang YZ (2011) Official statistics reports a total of 60 million ‘dispatched’ employees, the All-China Federation of Trade Unions urges to modify the ‘Labour Contract Law’. *Economics Observer*, 25 February. Available at: http://www.eeo.com.cn/eeo/jjgcb/2011/02/28/194384.shtml.

Kuruvilla S, Lee CK and Gallagher ME (eds) (2011) *From Iron Rice Bowl to Informalization: Markets, Workers and the State in a Changing China*. Ithaca, NY: Cornell University Press.

Lee CK (2007) *Against the Law: Labour Protests in China’s Rustbelt and Sunbelt*. Berkeley, CA: University of California Press.

Li Y and Sheldon P (2010) HRM lives inside and outside the firm: Employers, skill shortages and the local labour market in China. *The International Journal of Human Resource Management* 21(12): 2173–2193.

Li Y, Sheldon P and Sun JM (2011) Education, training and skills. In: Sheldon P, Kim K, Li Y and Warner M (eds) *China’s Changing Workplace: Dynamism, Diversity and Disparity*. London: Routledge.

Mok KH, Wong YC and Zhang X (2009) When marketisation and privatisation clash with socialist ideals: Educational inequality in urban China. *International Journal of Educational Development* 29(5): 505–512.

Murphy R and Johnson D (2009) Education and development in China – Institutions, curriculum and society. *International Journal of Educational Development* 29(5): 447–453.

Peck J (2011) *Constructions of Neoliberal Reason*. Oxford: Oxford University Press.

Perlin R (2011) *Intern Nation: How to Earn Nothing and Learn Little in the Brave New Economy*. London: Verso.

Polanyi K (1944) *The Great Transformation*. Boston, MA: Beacon Press.

Pringle T (2011) *Trade Unions in China: The Challenge of Labour Unrest*. London: Taylor & Francis.

Pun N and Smith C (2007) Putting transnational labour process in its place: The dormitory labour regime in post-socialist China. *Work, Employment & Society* 21(1): 27–45.
Chris Smith is Professor of Organization Studies and Comparative Management, Royal Holloway, University of London, UK. His research interests are in labour process theory, knowledge transfer through the transnational firm, comparative analysis of work and employment and professional labour. He is currently researching the organization of the labour process in Chinese factories and the Chinese Business Model abroad. He has been active in the International Labour Process Conference for many years. Recent publications include: Working Life: Renewing Labour Process Analysis with Paul Thompson (Palgrave, 2010); Creative Labour – Working in the Creative Industries with Alan McKinlay (Palgrave, 2009); Remaking Management: Between Global and Local with Brendan McSweeney and Robert Fitzgerald (Cambridge University Press, 2008); and Assembling Work with Tony Elger (Oxford University Press, 2005). [Email: Chris.smith@rhul.ac.uk]

Jenny Chan joined the faculty of the School of Interdisciplinary Area Studies at the University of Oxford, UK in September 2014. Educated at the Chinese University of Hong Kong (BSc in
Appendix 1. Profile of student interns (38 persons).

| Name          | Gender | Birth-year | Native-place | ‘Major’                | Vocational school                  | Internship job in case company       |
|---------------|--------|------------|--------------|------------------------|------------------------------------|--------------------------------------|
| Zhang Lintong | M      | 1994       | Henan        | Arts                   | Technical school (1), Henan        | Assembly                             |
| He Linzhu     | M      | 1994       | Henan        | Arts and design        | Technical school (1), Henan        | Assembly                             |
| Li Wei        | M      | 1993       | Henan        | Automotive repair      | Technical school (1), Henan        | Assembly                             |
| Yang Quan     | F      | 1993       | Henan        | Automotive repair      | Vocational school (2), Henan        | Quality control                      |
| Huang Shuo    | M      | 1992       | Henan        | Automotive repair      | Vocational school (2), Henan        | Quality control                      |
| Yang Xue      | F      | 1993       | Sichuan      | Secretarial services   | Vocational school (3), Sichuan      | Assembly                             |
| Huang Lifang  | F      | 1994       | Sichuan      | Secretarial services   | Vocational school (3), Sichuan      | Assembly                             |
| Liu Siying    | F      | 1992       | Sichuan      | Electronics and mechanics | Vocational school (3), Sichuan | Assembly (printed circuit boards)  |
| Fang Tiantian | M      | 1993       | Sichuan      | English                | Vocational school (4), Sichuan      | Packaging                            |
| He Gaoxue     | F      | 1992       | Sichuan      | Textile and clothing   | Vocational school (4), Sichuan      | Packaging                            |
| Liu Yedan     | F      | 1993       | Sichuan      | Textile and clothing   | Vocational school (4), Sichuan      | Assembly                             |
| Zhang Yundong | F      | 1994       | Sichuan      | Hotel and tourism      | Vocational school (4), Sichuan      | Assembly                             |
| Lin Qiang     | M      | 1994       | Sichuan      | Hotel and tourism      | Vocational school (4), Sichuan      | Quality control                      |
| Xiao Hui      | M      | 1993       | Sichuan      | Hotel and tourism      | Vocational school (4), Sichuan      | Quality control                      |
| Wang Meiyi    | F      | 1994       | Sichuan      | Sales and marketing    | Vocational school (5), Sichuan      | Assembly                             |
| Chen Jifeng   | M      | 1994       | Sichuan      | Sales and marketing    | Vocational school (5), Sichuan      | Assembly                             |
| He Pingping   | M      | 1993       | Sichuan      | Sales and marketing    | Vocational school (5), Sichuan      | Assembly                             |

(Continued)
| Name, gender, birth-year, native-place | ‘Major’ | Vocational school | Internship job in case company |
|---------------------------------------|---------|----------------|-------------------------------|
| 18. Zhang Xubi M, 1992, Sichuan       | Agriculture | Vocational school (5), Sichuan | Assembly |
| 19. Wang Xiaodong M, 1992, Sichuan    | Horticulture | Vocational school (5), Sichuan | Assembly |
| 20. Li Duanyi M, 1992, Sichuan        | Horticulture | Vocational school (5), Sichuan | Assembly |
| 21. Shen Yong M, 1993, Sichuan        | Electronics and mechanics | Vocational school (5), Sichuan | Assembly |
| 22. Jin Qiu M, 1993, Sichuan          | Electronics and mechanics | Vocational school (5), Sichuan | Assembly |
| 23. Xiao Li M, 1994, Sichuan           | Automotive repair | Vocational school (6), Sichuan | Quality control |
| 24. Han Biqi F, 1993, Sichuan          | Automotive repair | Vocational school (6), Sichuan | Quality control |
| 25. Zhang Yanrong M, 1994, Sichuan     | Automotive repair | Vocational school (6), Sichuan | Assembly |
| 26. Chen Leshan M, 1992, Sichuan       | Electronics and mechanics | Vocational school (6), Sichuan | Assembly |
| 27. Li Hanwen M, 1993, Sichuan         | Electronics and mechanics | Vocational school (6), Sichuan | Assembly |
| 28. Chen Weida M, 1994, Sichuan        | Accounting | Vocational school (7), Sichuan | Assembly |
| 29. Liu Shihan F, 1993, Sichuan        | Accounting | Vocational school (7), Sichuan | Assembly |
| 30. Sun Meiling F, 1994, Sichuan       | Accounting | Vocational school (7), Sichuan | Assembly |
| 31. An Qing F, 1993, Sichuan           | Computer science | Vocational school (7), Sichuan | Packaging |
| 32. Yu Baijie M, 1992, Sichuan         | Computer science | Vocational school (7), Sichuan | Packaging |
| 33. Chen Ji M, 1994, Sichuan           | Computer science | Vocational school (7), Sichuan | Quality control |
| 34. Jia Dexiong M, 1995, Sichuan       | Chinese herbal medicine | Technical school (8), Sichuan | Quality control |
| 35. Li Ming M, 1993, Sichuan           | Petro-chemistry | Technical school (8), Sichuan | Laser soldering |
| 36. Peng Ying F, 1994, Sichuan         | Petro-chemistry | Technical school (8), Sichuan | Laser soldering |
| 37. Yang Xiqing F, 1993, Sichuan       | Petro-chemistry | Technical school (8), Sichuan | Quality control |
| 38. Tan Huaizhong M, 1992, Sichuan     | Petro-chemistry | Technical school (8), Sichuan | Quality control |