Enhancing International Students’ Experience in the UK through the
Development of a Higher Education Co-opetition Framework:
An Examination into Welsh Universities’ International Collaboration and
Student Recruitment Activities

Thesis submitted to Cardiff Metropolitan University in partial fulfilment of the
requirement for the degree of Doctorate of Business Administration (DBA)

This research was undertaken under the auspices of
Cardiff School of Management | Cardiff Metropolitan University
Director of Studies: Dr Jason Williams | Supervisor: Professor Tom Crick MBE

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BEng (Hons) MBA (Dist) MRes CEng MIET

May 2018
DECLARATION

This work has not previously been accepted in any substance for any degree and it is not being concurrently submitted in candidature for any degree.

Signed ……………………………….. (Candidate)

Date …………………………………..

Statement 1

This work is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signed ……………………………….. (Candidate)

Date …………………………………..

Statement 2

I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

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Yn gyntaf, hoffwn ddiolch i’m cyfarwyddwr astudiaethau, Dr Jason Williams, a’r goruchwylwr, yr Athro Tom Crick MBE, am eich hyfforddiant, arweiniad a chefnogaeth aruthrol trwy gydol fy astudiaeth. Yn ail, hoffwn ddiolch i’r Athro Andrew Thomas, yr Athro Eleri Jones, Dr Richard Neil, Dr Claire Haven-Tang a’r tím cefnogi ymchwil yn Ysgol Rheolaeth Caerdydd am eich help a’ch cyngor gwych.

Hoffwn ddiolch yn arbennig i’m rhieni a theulu yn Tsieina, sydd wedi rhei i mi i gefnogi fy astudiaethau a’r gyrfa yn y DU. Hefyd, hoffwn ddiolch i fy ffrindiau a chydweithwyr, yn enwedig Irving Horne JP, John Sanchez Garcia-Gonzales, Dr Alexander Garcia, Leila O’Shea, Lee Bottrill a llawer mwy o unigolion. Mae eich cymorth a chefnogaethwedi wedi bod yn amhrisiadwy!

Yn olaf, diolch yn fawr i #MetCaerdydd. Dw i wedi cael saith mlynedd mor gofiadwy yma!

Yi He (Edward)
Dysgwr Cymraeg falch o #Tsieina 🇨🇳

Firstly, I would like to give my sincere gratitude to my director of studies, Dr Jason Williams, and supervisor, Professor Tom Crick MBE, for your coaching, guidance and tremendous support throughout my study. Secondly, I would like to thank Professor Andrew Thomas, Professor Eleri Jones, Dr Richard Neil, Dr Claire Haven-Tang and the research support team at Cardiff School of Management for your great help and advice.

I especially want to thank my parents and family in China, who have given me everything to support my studies and career in the UK since I left home at the age of 18. I would not have achieved what I have today without you! （在此真心感谢远在国内的我的父母和家人！没有你们，就没有我今天的所有！）

I would also like to extend my greatest gratitude to my friends and colleagues, particularly Irving Horne JP, John Sanchez Garcia-Gonzales, Dr Alexander Garcia, Leila O’Shea, Lee Bottrill, and many more individuals. Your help and support have been invaluable throughout my journey in the UK.

Finally, a huge thank you to #CardiffMet. I have thoroughly enjoyed my seven years here!

Yi He (Edward)
A proud Welsh learner from #China 🇨🇳
ABSTRACT

Co-opetition is an increasingly popular hybrid corporate strategy, combining cooperative competition and competitive cooperation (Bengtsson and Kock, 2014). It offers organisations five commonly utilised co-opetive models, namely strategic alliance, joint venture, franchising, licensing and co-branding, in which business partners work together to achieve mutual goals, as well as compete in a healthy marketing environment (Leitao et al., 2014). The core of co-opetition, known as the value net framework, provides organisations a guideline to create sustainable collaborative relationships with their external stakeholders and competitors, to provide enhanced services to their customers (Kotler and Armstrong, 2015).

Facing the intensified Higher Education (HE) competition both domestically and from overseas, this research testified the relevance, application and benefits of co-opetition into the UK HE sector. It analysed, through case studies, how the five models of co-opetition have been developed by UK universities and what benefits they have already brought to their consumers (i.e. the students) and the wider community. International student recruitments in the UK have suffered significant falls from the EU (down by 7% from 2016 to 2017) and some major overseas markets (Indian and Pakistan student numbers dropped by nearly 41% from 2011 to 2016), due to Brexit and increasingly strict immigration rules. However, student intakes from China have seen a steady year-by-year increase (BBC News, 2016 and Universities UK, 2017). China sent over 108,000 students to the UK in 2016 alone, making China by far the most important international students market for the UK (UKCISA, 2017).

By applying co-opetition theory, this research successfully established a co-opetive value net framework specifically designed for UK HEIs. It linked individual HEIs with their competitors, customers, complementors and suppliers. This study demonstrated clearly that co-opetition could enhance international student recruitment, improve student experiences, and strengthen UK HEIs’ global competitiveness. This research offered a practical solution that enables HEIs to work with their competitors and external partners to deliver a more focused and personalised student service. It proved that co-opetition does not threaten the competitiveness of participating institutions. Instead, through this framework, HEIs can access shared resources and expertise more easily to support their development and offer better value for money for international students.
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NOMENCLATURE

FE(I)……………………………………………..………..……..Further Education (Institution)
GDP…………………………………………………………..……
Gross Domestic Product
HEFCE..........................................................Higher Education Funding Council for England
HEFCW......................................................Higher Education Funding Council for Wales
HE(I)……………………………………………..…….................Higher Education (Institution)
HESA..............................................................Higher Education Statistics Agency
HEA..............................................................Higher Education Academy
HNC/D...................................................................Higher National Certificate/Diploma
LSC.....................................................................London School of Commerce
ICWS.....................................................................International College Wales Swansea
IET.................................................................Institution of Engineering and Technology
NUS.....................................................................National Union of Students
PDP......................................................................Professional Development Portfolio
QAA ..................................................................Quality Assurance Agency for Higher Education UK
RWCMD.............................................................Royal Welsh College of Music and Drama
THE......................................................................Times Higher Education
UCAS....................................................................Universities and Colleges Admissions Service
UCU......................................................................University and College Union
UNNC..................................................................University of Nottingham Ningbo China
USW......................................................................University of South Wales
UKCISA..................................................................UK Council for International Student Affairs
UWTSD..................................................................University of Wales, Trinity Saint David
UKVI......................................................................UK Visa and Immigration
1. INTRODUCTION

1.1 A personal reflection of the research journey

After finishing my high school education in China, I decided to study the International Foundation course and then came to the UK for my Higher Education (HE) at the age of 18. My UK journey began in 2004, when I started my BEng (Hons) study at the University of Birmingham. Since graduating from my BEng (Hons) degree in 2007, my professional career has been in the engineering and manufacturing sectors first with Tata Steel in South Wales, and more recently with GE in the Aerospace Sector. During my 11 years professional career, I have also completed two part time Masters degrees, namely MRes (Master of Research) in Materials Engineering at Swansea University, as well as an MBA at the University of Wales Trinity Saint David (UWTSD) from 2009 to 2012.

Despite my engineering background, working for and with the HE sector, both academically and professionally, is not completely unfamiliar to me. First of all, my MBA final year research project, evaluated the large scale Higher Education reforms in Wales. During the study, I carried out a thorough case study for one of the largest university merger cases in Wales involving four HE institutions in the South Wales region. Based on business collaboration and acquisition theories, the study critically analysed the drive and motivation from different stakeholders for the change in Welsh HE, the obstacles and uncertainties, the impact to the students, the staff and wider communities. I had the pleasure of sharing the findings from my MBA research, as a guest speaker, at a management research conference in 2012 jointly held by Swansea Business School of UWTSD and the Chartered Management Institute (CMI). Copies of the presentation are given in Appendix 5 of the Professional
Development Portfolio (PDP). I had the desire to extend my research into the Welsh HE international development, hence I applied and enrolled for my part time professional doctorate study with Cardiff Metropolitan University in 2011.

Having studied at one English university (Birmingham) and three Welsh universities (Swansea, UWTSD and Cardiff Met), from my own experience, I feel that there are similarities but also notable differences between English and Welsh HE. There are some distinct differences for Welsh HE compared to elsewhere in the UK, in terms of different cultural setting, governance (i.e. devolution), institution sizes and the unique Welsh language experience (Kelly et al., 2015).

However, studies (CEC Wales, 2015 and Visit Britain) suggest that Wales lacks a strong branding internationally. The awareness of Welsh brands and products are less established than English and Scottish ones. The weaker Welsh branding recognition abroad not only impacts on the Welsh tourism industry, but also the manufacturing and agriculture export sectors, as well as the HE sector. International students made up 16% of university student population in Wales in 2016/17, compared with 19% in England and 22% in Scotland (UKCISA, 2017). Furthermore, universities in Wales have suffered the largest decrease in student enrolments from outside the EU, a sharp 13% drop from 2015/16 to 2016/17, compared with an 8% decrease in Scotland, a 10% decrease in Northern Ireland and a 0.7% increase in England (HESA, 2017).

I have greatly benefited from my HE studies and qualifications from the three Welsh universities (and one English university). I feel passionate to carry out this doctorate research focusing on the Welsh HE sector, in accessing its competiveness, and establishing fresh
business models in enhancing its international development and recruitments. Being an international student myself, I also share similar concerns and challenges many international students face while study in this country, for example loneliness, language and culture barriers, study difficulties and difficulties in making new friends etc (British Council, 2017). Throughout this research project, it is my desire to gain a thorough understanding of international students’ behaviours and needs, and develop a sustainable HE collaboration model that can provide better services to them and help Welsh universities maintain their competitiveness in the international HE market.

Table 1.1 summarises the key milestones of my research journey, as well as lists the learning and reflection throughout the course. This research journey started in November 2011. It has taken much longer time to complete than initially planned. I originally planned to complete it in 2015/16. This was largely caused by the significant distraction from the redundancy from my former employment in 2013. I became unemployed for a short period of time and had to relocate from Swansea to Leicester for the new job.

Table 1.1 – The research journey and reflection

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<thead>
<tr>
<th>Milestones</th>
<th>Learning &amp; reflection</th>
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<tr>
<td><strong>Year 1: 2011 – 2012</strong></td>
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<tr>
<td>1. Three-day &quot;Contextualizing Professional Change and Development (CPCD)&quot; course</td>
<td>First formal module of this DBA study. The three-day course allowed me to understand what exactly this DBA course is about and how I could use my industrial skills to assist the academic aspect of this change project. Importantly, it made me draw a clear plan for the change project I initially agreed with the business.</td>
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<td>2. Seminar presentation of research proposal and research concepts to the supervision team and peers</td>
<td>The 20-minutes presentation outlined my proposal and timeframe for this research project. It allowed me to define each key stage and goals and objectives of this project.</td>
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<td>3. Assignment &quot;Reflective narrative re personal development&quot;</td>
<td>At the beginning stage of this project, this assignment gave me to opportunities to understand what skills and qualifications I already have and how I could transfer</td>
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these skills into the academic research. It also enabled me to think and reflect what additional skills I need to develop. I also had the opportunity to discuss with my supervisors to identify what sort of training courses, workshops and conferences which could help my professional and academic development.

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<td>4. In-depth review of relevant literature, through studies from relevant academic papers, publications, journals and other textbooks</td>
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<td>This developed and established theoretical foundation and conceptual framework for this research, through studying the existing literature and existing researches. The evaluation on the external and internal marketing environments for the UK and Welsh HE provided me with a clear understanding of the status quo. Study on best business practice gave me ideas of what I want to achieve from this project.</td>
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<th>Year 3: 2013 – 2014</th>
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<tr>
<td>5. Study and choose the research design and methodology</td>
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<tr>
<td>Research and literature study for appropriate research methods for the doctorate level study. Detailed assessment and comparison between different research approaches and their advantages and disadvantages</td>
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<th>Year 4: 2014 – 2015</th>
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<td>6. Identify effective secondary data collection analysis and carry out secondary data collection</td>
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<td>Reviewed and identified the case study is the most effective approach to gather evidence and practice of Co-opetition in the Welsh HE sector. After completing this stage, all the common formats of Co-opetition, as well as their benefits were identified across all Welsh HEIs.</td>
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<th>Year 5: 2015 – 2016</th>
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<td>7. Design questionnaires and complete questionnaire data collection and analysis</td>
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<td>The aim is to understand international students’ needs, expectations, experiences and satisfaction rate in Wales. The large response rate from international students from different Welsh HEIs can provide a clear indication of student satisfaction and understanding of their study progress in Wales.</td>
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<tr>
<td>8. Design and carry out the semi-structured interviews with identified policy and decision makers, and key stakeholders of Welsh HE</td>
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<td>Through this data collection stage, it will test the new collaboration model proposed by the researcher, and verify its contributions to both theory and practice</td>
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<th>Year 6: 2016 – 2017</th>
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<td>10. Analyse all the data and amend thesis work as per supervisors’ suggestion</td>
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<tr>
<td>The draft work for the first six Chapters have been reviewed by the supervisors. The aim is to complete the amendments and submit final draft in June 2017.</td>
</tr>
<tr>
<td>11. Completing and submitting all taught module assignments.</td>
</tr>
<tr>
<td>There are four modules for this professional doctorate course. The aim is to submit all required assignment for marking before the May 2017 exam board.</td>
</tr>
<tr>
<td>12. Final data analysis and review and thesis writing up</td>
</tr>
<tr>
<td>Final draft for supervisors’ review: August 2017; Submission for examination: November 2017.</td>
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Year 7: 2017 – 2018


Despite the difficulties, I have thoroughly enjoyed this course at Cardiff Met. I have had the opportunity to meet and work with key stakeholders of the Welsh HE sector, from a range of organisations. Studying this DBA course is largely due to personal expectation and career aspiration. By completing this course, apart from achieving doctorate level academic and research skills, I am also keen to develop certain level of expertise in the Welsh HE field, especially in the areas of international marketing, student recruitment, HE globalisation and collaboration. Hence, this qualification could be a great platform for a potential career change, with the following possible options that I have considered for the future career.

- Senior Officer at relevant Government Departments (e.g. HE Division)
- Senior Officer at International Office or Marketing Department of Welsh / Chinese Universities
- Civil servant working in developing and improving international collaboration opportunities for Wales and China
- Diplomat working for enhancing UK-China relations and HE links
- Policy Advisor (especially for International Education Collaboration) for the education authorities, universities and education agencies in Wales/UK or China
- Self-employed business for providing services for International Student services in Wales (including student recruitment)
1.2 Overview of the UK Higher Education system

The UK is recognised to have one of the world’s leading Higher Education (HE) systems, which has been developed and expanded over the centuries. Each aspect of UK HE is managed by its respective body with monitoring systems in place to check their performance and quality (the IET, 2016). For example, the Universities and Colleges Admissions Service (UCAS) is responsible for the applications to the vast majority of undergraduate courses in this country (UCAS, 2017). The independent Quality Assurance Agency for Higher Education UK, known as the QAA, monitors and inspects the quality and standard of all HE courses offered by UK universities and Higher Education Institutions (HEIs) (QAA, 2017). Whereas the government and the individual HE funding councils are responsible for the majority of direct university funding (Higher Education Funding Council England (HEFCE), 2016).

According to Universities UK (2014), universities in the UK have generally been instituted by the Royal Charter (subject to the approval of the Privy Council), or for many newly established institutions, by an Act of Parliament or secondary legislation. One of the most notable modern-day UK HE changes was the implementation of the Further and Higher Education Act 1992, which allowed 35 Polytechnics and HE technical colleagues to formally become universities (HEFCE, 2016). Ali (2015) suggests that these post-92 universities are often seen as socially engaged, entrepreneurial and skills / industry-focused institutions. They have delivered mass HE and widened HE access through vocational and industrial relevancy, which was not widely available at traditional UK universities prior to 1992.

Both HEIs and universities deliver HE courses recognised by the UK Government or devolved national governments in Scotland, Wales and Northern Ireland (UK Government,
Traditionally, an Institute of Higher Education would not have degree awarding powers. Their courses would normally have to be accredited by a partnered university, which awards the degree to students who have successfully completed their studies (HEFCE, 2015). In recent years, the majority of former Higher Education Institutions (HEIs) across the UK have successfully applied to the Privy Council for the University title and degree awarding powers. As such, many HEIs have gradually become universities (QAA, 2016). For instance, The former Bolton Institute of Higher Education gained the university title and become the University of Bolton in 2004, whilst the former North East Wales Institute of Higher Education followed the same procedure and became Glyndŵr University in 2008 (Glyndŵr University, 2018 and University of Bolton, 2018).

In general, HE in the UK begins at the age of 18 after students complete their secondary education and achieve Advanced Level General Certificates of Education, commonly known as A-Levels, or their national and international equivalents (UK Government, 2017). The UK Higher Education Academy (HEA, 2015) states that the length for full-time undergraduate degrees is normally three years; whereas postgraduate degrees including master's degrees either taught or by research, can take one or two years respectively to complete. The higher research degrees, i.e. doctorates, would take at least three years. Many universities also offer various ranges of specialist degree qualifications, such as Bachelor of Laws (LLB), Postgraduate Certificate in Education (PGCE) and Doctorate of Engineering (EngD) to meet emerging social and industrial needs (Universities UK, 2015).

Table 1.2 lists the number of HEIs and universities in the UK by nations and their student enrolments in the academic year 2016/17. According to the Higher Education Statistics Agency (HESA, 2016) and the UK Council for International Student Affairs (UKCISA,
in addition to these 165 listed HEIs in Table 1.1, a further 150 accredited institutions, such as Further Education (FE) colleges and private HE providers, also offer HE courses. A total number of approximately 3.1 million students, including students from UK and many other countries, have enrolled on various forms of HE courses in the UK in 2016/17. These courses are delivered on full-time, part-time, online and distance learning basis.

Table 1.2 – Universities and HEIs in the UK by nation and enrolments in 2016/17 (HESA, 2016 and Universities UK, 2016)

<table>
<thead>
<tr>
<th>UK Nations</th>
<th>Universities</th>
<th>HEIs</th>
<th>% of HEIs</th>
<th>Student enrolments</th>
<th>% of Enrolments</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>89</td>
<td>131</td>
<td>79.39%</td>
<td>1,844,095</td>
<td>81.38%</td>
</tr>
<tr>
<td>Scotland</td>
<td>14</td>
<td>19</td>
<td>11.52%</td>
<td>232,570</td>
<td>10.26%</td>
</tr>
<tr>
<td>Wales</td>
<td>8</td>
<td>10</td>
<td>6.06%</td>
<td>132,965</td>
<td>5.87%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>2</td>
<td>5</td>
<td>3.03%</td>
<td>56,445</td>
<td>2.49%</td>
</tr>
<tr>
<td><strong>UK (in total)</strong></td>
<td><strong>113</strong></td>
<td><strong>165</strong></td>
<td><strong>100%</strong></td>
<td><strong>2,266,075</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Universities UK (2016) states that the UK HE has made significant and positive contributions in every respect of the society and beyond. With 1% of the world’s population, UK contributes 12% of the world’s citations of research citations and 14% of the most highly-cited papers. In 2016, UK universities contributed over £80 billion to the UK economy, representing nearly 3% of the country’s GDP (Lock, 2016). Over half million full-time jobs are directly employed by the HE sector, with a further half million in HE-serving industries (HEFCE, 2016). A total number of 1,262 new businesses have been created as a direct results of university researches, with 18,000 new jobs being created and turnover nearly £2.1 billion in 2016 (British Council, 2016 and HEFCE, 2016).
Although HEIs in the UK are regulated as charitable and not-for-profit organisations, with a clear and long-term public mission, institutions today are run in a similar way as private commercial enterprises, in terms of management, structure, communication and marketing operations (Professor Burnett, 2017). Universities compete with each other to attract students and staff, industrial sponsorship and collaborations, private funding and research opportunities, locally, nationally and internationally. Additionally, the historical financial reliance on international student recruitment has also made the UK HE sector considerably commercialised in their recruitment activities and marketing strategies (Annandale, 2015 and British Council, 2016). However, fundamentally different from the private sector, there are strict regulations which limit the commercial activities universities in the UK can undertake. The vast majority of UK universities are registered as non-profit making organisations. As such, there are robust regulation and monitoring systems in place that ensure the revenues generated by the university are to be invested in their facility, infrastructure developments and/or in improving student services (HEFCE, 2017).

1.3 Higher education in Wales

Following the 1999 devolution referendums in Scotland, Wales and Northern Ireland, the Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly were established respectively in these UK nations. The responsibility for education, health, transport, housing and local government and various other areas have been transferred from the UK Parliament to these devolutions legislatures (UK Government, 2015). Although according to the Welsh Government (2016), HE in Wales operates in a similar way as England, it has different structures and arrangements from governing, legislating, funding to
supervision. Table 1.3 shows the structure and key stakeholders for Welsh HEIs. Most of these organisations are the division from their UK body and have separate management system.

Table 1.3 – The structure and key stakeholders of Welsh HE

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Main responsibilities</th>
</tr>
</thead>
</table>
| Welsh Government | ➢ Governing and legislating bodies for the sector;  
|                | ➢ Set and deliver policies and legislations and take overall responsibility for the delivery of HE in Wales;  
|                | ➢ Directly fund the HE sector through HEFCW and other arrangements (Welsh Government, 2016). |
| Higher Education Funding Council for Wales | ➢ A Welsh Government sponsored body that distributes funds for HE, research and HE related activities for Welsh HEIs. It also funds HE courses at Further Education colleagues (HEFCW, 2017). |
| QAA Wales | ➢ The Wales division of the Quality Assurance Agency for Higher Education UK;  
|             | ➢ Work with various bodies and institutions to monitor, evaluate, report and assure the quality of HE and HE activities in Wales (QAA Wales, 2016). |
| Universities UK | ➢ The Wales division from the Universities UK, representing and protecting the interests of all Welsh HEIs;  
|               | ➢ Providing expert resource and support to HE in Wales and represents member institutions to the National Assembly, UK Parliament, political parties and European institutions and bodies (HEW, 2016); |
| Higher Education Academy | ➢ Undertaking a variety of learning and teaching enhancement work for the Welsh HE sector;  
|                  | ➢ Working in partnership with Welsh HEIs and key Welsh HE organisations to support the development of policy and enhance practice in learning and teaching in HE in Wales (HEA, 2016). |
| University and College Union (UCU) Cymru | ➢ Working closely with various bodies, University and College Union (UCU) Cymru represents both FE and HE members in Wales;  
|                  | ➢ Every FEI and HEI in Wales has a UCU branch and a branch officer (UCU, 2016); |
| National Union of Students (NUS) Wales | ➢ Recognised and respected by government, industry and other organisations, National Union of Students (NUS) Wales works in partnership with every student’ unions across Wales and protects and promotes the interests of students in both FEIs and HEIs (NUS Wales, 2016). |
The Welsh Government has the power to implement and change HE polices in Wales, which can differ from the rest of the UK, to suit its own educational, social and economic needs. It also has the authority to set university funding and tuition fee arrangements for students via HEFCW (National Assembly for Wales, 2016). Following the significant changes to university funding in 2012 in England, where English universities were allowed to charge undergraduate students up to £9,000 per annum (p.a), the Welsh Government introduced a different funding structure for Welsh students (BBC News, 2016). Although further changes are planned, as of the 2017/2018 academic year, Welsh HE students still only need to pay £3,810 a year for their HE courses (Wales Online, 2017). Further details about Welsh HE policy and the funding variations between different UK nations are explained in more detail in Chapter 2 (Section 2.3.2), as part of the analysis for the competitiveness of Welsh HE.

1.4 International students in the UK

1.4.1 Key statistics

Universities UK (2016) states that the UK ranks second in the world, after the USA, in terms of international student enrolments. Nearly 19% of all UK HE students are from outside the EU. They generate nearly one third of the revenue for the entire HE sector. This income source has been recognised as incredibly important for the financial stability and the future of UK universities (British Council, 2016). A report from UKCISA (2017) shows that in 2016, there were 438,010 international students from over 150 countries and regions studying in the UK for HE qualifications.
Table 1.4 shows the total student enrolments and international student figures in different nations of the UK in 2016. As can be seen from the table, Scottish HEIs have the largest percentage (22%) of international students. Wales only has 16%, which is below England (19%) and the UK average (19%). The number of international students in Wales has dropped from 25,270 in 2015 to 22,190 in 2016/17, a decrease of 12% (UKCISA, 2017).

Table 1.4 – International students from different UK nations in 2016/17 (UKCISA, 2017)

<table>
<thead>
<tr>
<th>UK nations</th>
<th>Total student enrolments</th>
<th>No of international students</th>
<th>% international students</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>1,893,342</td>
<td>359,735</td>
<td>19%</td>
</tr>
<tr>
<td>Scotland</td>
<td>231,477</td>
<td>50,925</td>
<td>22%</td>
</tr>
<tr>
<td>Wales</td>
<td>130,529</td>
<td>22,190</td>
<td>16%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>57,333</td>
<td>5,160</td>
<td>9%</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td><strong>2,312,682</strong></td>
<td><strong>438,010</strong></td>
<td><strong>19% (UK average)</strong></td>
</tr>
</tbody>
</table>

In general, international students in the UK have been largely welcomed by the government, the universities, the wider community and beyond, and generate substantial revenue and create many job opportunities for the local and national economy (British Council, 2016). Universities UK (2016) state that international students pay a much higher fee to study HE courses in the UK when compared to home (UK) and EU students. Whilst the tuition fees in England are around £9,000 for home students, the annual fee for them can be normally between £13,000 and £18,000 p.a. For certain specialised courses, such as law and medicine, the fees can be up to £42,000 p.a.

The income generated from non-EU students from HE tuition fees and associated revenue exceeded £9.7 billion in 2016, which contributed nearly one third of all UK universities’
income (HEA, 2016). According to Universities UK (2017), the spending from international students are estimated to be £7.9 billion p.a. and are supporting 206,600 jobs across the country. The financial contributions from international students, their accompanying relatives, visitors and friends, are critical to the stability of local and national economy. Maintaining a healthy proportion of international student enrolments is important for the financial sustainability of the UK HE industry and the wider UK economy (Financial Times, 2017).

1.4.2 Dominance of international students from China

As can be seen from Figure 1.1, 43% of non-UK domiciled students at UK HEIs are from Asia, making this region a key market and income stream for many UK HEIs. Students from Europe represent 33% of non-UK students in the UK. Both Africa and North America respectively contribute 9% of international students to the UK. The remaining 6% are from the rest of the world (UKCISA, 2017). In particular, China, which sent over 91,000 students to the UK in 2016, is by far the largest single international student contributor to the UK with continuous year by year increase (UKCISA, 2017).

Figure 1.2 shows the number of international students from the top 10 sending countries / regions to the UK from 2014 to 2016. Including students from Hong Kong, the total number of students coming from China to the UK in 2016 alone was nearly 108,000, which is more than the rest eight countries combined (95,500). According to the China Ministry of Education (2017), from 1978 to 2016, there have been some 4.6 million Chinese students studying abroad, with about 32% (1.5 million) of them in the UK. The UK has always been the second most favourable country for Chinese students, after the USA. Chinese students are contributing over £2 billion to the UK economy every year (Chinese Embassy London, 2016).
Figure 1.1 – Proportion of non-UK domiciled students at UK HEIs in 2016 (UKCISA, 2017)

Figure 1.2 – Top 10 international students sending countries / regions to the UK (UKCISA, 2017)
With the ongoing changes made to the UK immigration policies since 2010, there has been a sharp decline in student recruitment from a number of countries. Both India and Pakistan have seen a 45% fall from 2011 to 2016 (UKCISA, 2017). This is largely due to the tightened visa policy and the scrapping of the flexible post study working visa for international students (HESA, 2016). In addition, the uncertainty from the UK’s prospective exit from the EU (‘Brexit’) since 2016 has also had a negative impact to international student recruitment for many UK HEIs. A number of Welsh universities have to make substantial job cuts, as a result of the falling number of international student recruitments caused by Brexit (BBC News, 2017).

Despite the impacts of immigration policy change and Brexit, the number of Chinese students coming to the UK to study has however increased sharply year by year from 2010 to 2016 (Chinese Embassy London, 2016). In 2015, there were more Chinese students enrolling at UK HEIs for undergraduate courses than the total number of students from the whole EU (excluding UK). Nearly 25% of all UK postgraduate students enrolled in that year were from China, comparing with 26% from the UK (Daily Mail, 2015).

2016 has seen a record number of 108,000 Chinese students (including from Hong Kong) coming to the UK to study. The trend is expected to grow in the short to medium term, as UK and China are now entering a historical “special bilateral relationship” in trade, education, culture and investment (Chinese Embassy London, 2016). Overall, Chinese students make up 36% of all non-EU students population and about 7% of the entire university enrolments in the UK, making China by far the most important overseas market for UK universities (HESA, 2017).
There have been a number of large scale studies, involving 600 to 1,100 Chinese students studying in the UK, to understand their behaviours, needs and experiences (Chinese Embassy London, 2016; British Council, 2016; and UKCISA, 2016). However, this research could not find specific studies for Chinese students in Wales. There are currently 2,100 Chinese students studying in Wales at degree and above level courses (Chinese Embassy London, 2016). This research will study many of these Chinese students in Wales, through questionnaires, to establish a better understand, as well as benchmark and compare their experiences with wider demographics.

1.4.3 The need for improving international students’ experience in the UK

According to the British Council (2016), UK HEIs have placed significant attention and effort in recruiting international students and bringing them to the UK. However, after they have arrived and enrolled on their courses, the quality and variety of student services offered to them vary significantly between institutions. Feedback from international students suggest that there are considerable differences in the level of support and service availability between urban and rural (or remote) universities, as well as between large and small sized institutions (Marcus, 2013). Institutions also have a varied approach, focus and strategy in managing and looking after them, resulting in different overall experiences amongst international students (Ngow, 2013). Critics (Dennis et al., 2017) argue that UK universities have focused too much on recruiting international students, but have put not enough investment into improving international student services.

Marcus (2013) and Ngow (2013) state that there are clear differences in culture, language ability, learning style, social and academic backgrounds that distinguish students from different parts of the world. This is particularly relevant for “eastern” and “western” cultures.
Many HE providers and academics in the UK often wrongly assume that one teaching style and method could fit all. They make their assumptions from their own experiences of the UK education system and social and political knowledge, which are very different from other countries. With the limited amount of time each tutor, lecturer, academic and supporting staff could spend with each international student individually, either in or outside the classroom, it is almost impossible for UK HEIs to have an accurate understanding on how different groups of students learn and progress (Hexun, 2015 and UKCISA, 2017).

Although the UK is ranked as one of the safest and most welcoming countries in the world for international students, the language and culture challenge, unfamiliarity of the new environment and the UK legal system can still lead to loneliness and vulnerability for many international students (British Council, 2015). Many of them also find it is difficult to socialise with UK students and the wider community (Shepherd, 2014). Rather than understanding and meeting international students’ needs, many UK HEIs have wrongly assumed the academic results, as the only measurement to reflect their study progression and satisfaction. Becker and Kolster (2012) suggest that there is generally a lack of understanding from many UK HEIs around different behaviours among different groups of international students, their expectations, specific needs, learning habits and their satisfaction.

The Office of the Independent Adjudicator for UK Higher Education (OIA, 2015) reports that there have been a record number of complaints from international students in relation to the services they received from their UK HEIs. A quarter of all HE complaints raised by students received by the OIA in 2014/15 were from international students, which represents a raise of nearly 43% from 2011/12. There is an increasing level of dissatisfaction among international students with respect to their studies, overall experience and the services they receive at UK
universities. Fazackerley (2016) and Wainwright (2016) argue that many UK HEIs do not have clear understanding of international students. There is generally a lack of collaborative approach between institutions in trying to improve international student care services and enhancing their learning and studying experiences.

In addition, Edwards and Ran (2013) suggest that international students in the UK often find themselves lonely, isolated and vulnerable, especially when confronted with different cultural conventions and language barriers. As such, although sometimes they can understand a conversation or lecture literally, they can easily lose the real meaning behind some English phrases. These barriers also make it difficult for international students to socialise with UK home students and the wider community. Some urgent and collaborative actions are needed from the HE providers, government, local community groups, student unions and governing bodies to better understand international students’ needs and address these specific issues facing them (Annandale, 2015).
1.5 Research rationale

The huge and unresistant financial benefits from recruiting international students are driving many UK universities to invest heavily in expanding their international dimension and collaboration, and, improving the support and services for their international students (British Council, 2016). To develop and implement an effective international student support system, which meets the demand and expectation from the consumers, has become a top priority for many UK HEIs (Universities UK, 2016). Furthermore, Choudaha and Chang (2013) state that in this intensively competitive and dynamic global HE market, improvements in international student experience in the UK are becoming vital for long-term international student recruitment and retention. Both institutional level and sector wide collaboration is required to allow UK universities to share resources, expertise and best practice that could maximise efficiency, standardise approaches and make wider benefits to international students across the UK (Kehm, 2015 and Morris, 2013).

This research aims to develop a sustainable collaborative framework between Welsh (and UK) universities to enhance international student experiences and widen service choices for them. One of the most successful collaborative models is the co-opetition framework, a hybrid between cooperation and competition (Mongkhonvanit, 2014). Co-opetition, as explained by its architects, Brandenburger and Nalebuff (2002), is one of the most common corporate strategies, where individual organisations work in rivalry as a result of conflicting commercial interests, as well as, simultaneously, cooperating for mutual benefits. A balance of cooperation and competition, in the form of co-opetition, is critical in determining the success and sustainability of a business. A comparison analysis between different
collaboration strategies, including the reasons why co-opetition can be the most suitable HE collaboration model, is carried out in section 2.4.

Co-opetition business models and strategies have been well established and proven successful in the commercial sector, bringing substantial benefits to consumers with improved experience and satisfaction (Kraus et al., 2017). There are already a significant number of academic studies and successful business cases, with improved consumer satisfaction being achieved through co-opetition (Mongkhonvanit, 2014 and Henn, 2014). Nevertheless, such approaches have not been appropriately studied or tested in the HE sector, due to its “non-commercial” nature (Cooper, 2013 and Comrie, 2011).

This research, by applying the business co-opetition theory and practice into the HE sector, will frame and reposition the relevance, development and importance of this business strategy for the UK HE industry. Through the analysis of existing successful business case studies, this research will establish determinants for such framework to succeed specifically in the HE settings, and, verify the associated benefits of co-opetition, which are broadly proven in commercial sectors (Bengtsson and Kock, 2014), are also applicable and significant to the non-commercial HE sector.

This research bridges the gap between the co-opetition theory and its application to HE practice. It establishes a co-opetition framework between Welsh (and UK) universities, to achieve better experience and satisfaction for international students throughout the whole product life cycle of the “UK HE”, from early stage marketing and advertisement, recruitment, arrival in the UK, enrolment, settling in the new environment, the actual learning process, graduation to departure from the UK.
1.6 Aim and objectives

The aim of this research is to develop a HE co-opetition framework, based on cooperation and competition (i.e. co-opetition) theories and practices, that supports the international development of UK universities and enhances the experiences of their international students. The aim will be achieved through the following objectives:

Objective 1: Examine critically the competitiveness of the UK HE industry, by studying its immediate internal and external marketing environments.

Objective 2: Undertake an in-depth review of relevant literature, with respect to co-opetition business strategies, and how these strategies have been utilised in improving customer experience.

Objective 3: Apply the commercial co-opetition theory into the Welsh HE sector, and testify its relevance and significance in universities’ development.

Objective 4: Establish a thorough understating of consumers’ (i.e. international students) behaviors in relation to Welsh HE, including their reasons to study in Wales, specific needs, challenges, expectations and actual experiences.

Objective 5: Identify the best approach of co-opetition for Welsh universities and develop a HE co-opetition framework that can promote sustainable collaboration between Welsh (and UK) universities sand their stakeholder, as well as enhance the experiences of their international students.
1.7 Structure of the thesis

The next chapter, the literature review, begins with a critical examination of the competitiveness of the UK (especially the Welsh) HE industry. It analyses the marketing mix 4P model, e.g. product, price, promotion and place, developed by Welsh universities. It also covers the internal and external marketing environments for this industry. It then studies in details the relevant marketing theories, from cooperation, competition and the hybrid co-opetition, as well as their advantages and benefits. This chapter also evaluates the common formats and best business examples of co-opetition, and its application in the UK HE sector.

Chapter 3, Research Methodologies, studies the research paradigms, sets out research questions, and discusses the appropriate data collection and analysis methods for this research. It compares and identifies data sources, analysing formats, tools and techniques that are being used for this research, as well as discussing the justifications and limitations for these chosen techniques. It also draws plans for the data collection and analysis structure for this research. Chapters 4, 5 and 6 are data analysis chapters for the three stages of primary and secondary data collections, including the case studies, the questionnaires, and the semi-structured interviews respectively. Finally, Chapters 7 and 8, the discussion and conclusion, discusses key research findings, contributions from the study, key challenges faced during the research, and recommendations for future work.
2. LITERATURE REVIEW

2.1 Introduction

This chapter first identifies and categorises the current marketing tools and approaches, which have been developed and utilised by UK HEIs, for marketing and international student recruitments. It then conducts an in-depth assessment for the competitiveness of the UK HE sector in relation to international student recruitment, from both external (international) and internal (national) marketing perspectives. This is to allow UK HEIs to position themselves better in an increasingly competitive global market. It is also to establish whether or not UK institutions and their decision makers should consider developing a collaborative approach, in improving student experience and satisfaction, in order to achieve sustainable levels of international student recruitment and retention. This assessment will be conducted in alignment with the marketing environment diagram, as shown in Figure 2.1, by analysing the forces and factors that directly and indirectly influence the competitiveness of an organisation, at both macro (external) and micro (internal) levels.

The chapter then critically reviews the relevant literature, existing researches, theories and practices regarding a balanced collaborative competition corporate strategy, i.e. the co-opetition. It studies its origin, key benefits to the business and significance in improving customer experiences. It then evaluates the most common formats of co-opetition, followed by explaining examples of best business examples and their success. It compares the pros and cons between these difference co-opetition approaches. After that, this chapter studies the existing development of co-opetition in the Welsh HE ecosystem and lists some examples and benefits from such development to the Welsh institutions and their students.
2.2 Utilisation of marketing tools in the UK HE sector

Numerous studies have analysed and applied marketing instruments into the UK HE sector, particularly by adopting the 4P marketing mix strategy, i.e. product, price, promotion and place (Nedbalová et al., 2014). Akintoye and Main (2015) state that this set of marketing instruments is commonly used by organisations to identify the marketing elements for successfully positioning their products and marketing offers in a targeted location. It is used by business leaders to plan new ventures to evaluate existing offers and optimise their impact in a given market (Boswell, 2012). This section identifies each of the four P elements in this mix for the UK HE sector and explains how this tool has been developed and utilised by UK and Welsh universities in enhancing their competitiveness in the international HE market.
Product

According to Nybom (2014), product, the first P of the 4P model, in the HE setting can be viewed as the HE training and degree courses offered by HEIs. Additionally, institutions also engage with various research activities, patents development, on their own or on behalf of the governments, industries or other organisations. Affiliated student or public services, such as catering, accommodation, transportation and sports facilities are also offered by institutions, which form part of the local and regional economy (Annandale, 2015). Angulo et al. (2014) suggest that over the past few decades, there have been many innovative developments towards the way HE is delivered in the UK, for example: residential schools, work based learning, distance and online studies and virtual courses etc. which in marketing terms, can be understood as product diversification in HE.

According to the UCL Institute of Education (2017) and UKCISA (2016), students and learners in the UK are now able to access courses, based on their preference and availability, in a wide range of delivery formats. These can include full-time, part-time, evening and weekend studies. Many full-time university courses include a one-year working experience option, such as the sandwich course. Candidates can also earn credits from completing associated projects or the higher degree apprenticeship schemes at their workplace, which can then lead to a HE qualification. The flexibility and variety of HE courses provided in the UK has enhanced the competitiveness of this sector as a whole, attracting a wider audience in both the UK and from overseas (Shepherd, 2014).
Price

Boswell (2012) argues that similar to the commercial sector, price in HE is the only element of the marketing mix that generates a turnover, whereas the other three P variables involve costs to the organisation. Therefore, price is the most critical factor that can determine the stability and financial fitness for the business. Price in HE courses is the tuition fee that students pay to HEIs to study their selected courses. The tuition fee, i.e. the price element, is one of the most important factors that many international students take into consideration before deciding the place of study (Universities UK, 2016).

Figure 2.2 – The University of South Wales’ pricing strategy for international students (University of South Wales, 2016)

Dennis et al., (2017) argue that the UK is ranked as one of the most expensive countries for HE studies for international students. A number of methods, such as scholarships, bursaries and discounts, have been widely adopted by institutions as a means of price reduction to attract students. Figure 2.2 shows an example of a pricing strategy developed by the University of South Wales (USW). The university provides a fast route for international students to complete a package course, with a top-up bachelor degree (one year) and a master’s degree (another year) in business subjects, with the total tuition fee of £18,800 (University of South Wales, 2016).
This combined course package, claimed by the institution as the first of this kind in Wales, was designed to target the international students who have a HND or equivalent qualification. According to education agent UK Education Centre (UKEC, 2016), this package offers a fast track to earn both a UK bachelor’s degree and a master’s degree in just two years. Its low costs, which could save students 40% from the tuition fees, if they were to study these courses separately at other Welsh universities, have attracted a significant higher number of international students to the university. From a marketing point of view, it has been a very successful strategy with a unique selling point.

➢ Promotion

There are several popular promotion methods that almost all the universities use in the UK, which include conventional advertising, for instance on television, newspaper, radio, and the increasing application of e-marketing and the appearance on social media network in recent years (Davis and Farrell, 2016). Figure 2.3 lists the 11 social media sites that Swansea University has developed to help promote its branding. Many UK HEIs spend a great deal of time and effort of maintaining these social media sites, by posting news, photos, videos, events and regular updates. As well as the English language, other languages and social media sites in other countries have been chosen by UK institutions, as cost effective ways, to reach wider geographical areas and potential students from other countries (Angulo et al., 2014).

Relationship marketing, typically the face-to-face and interactive education fairs, open days, school or college visits, alumni events and building up partnerships with businesses, governments and industries, have also been widely employed by HEIs and proven effective (British Council, 2016). Additionally, branding and reputation also play an important role in
promoting HE (Nedbalová et al., 2014). Universities nowadays pay a lot of attention to carefully design their logos, coat of arms and maintain their public images. In some cases, they even rename their university titles to reflect their specialty, expertise, historical development and geographical importance (Neumark, 2012). Various studies suggest that institutions with a well-respected and easily identified brand can bring enormous advantages with respect to student attraction, especially in foreign countries (Nybom, 2014).

![Swansea University's 11 social media marketing channels](Swansea University, 2017)

Figure 2.3 – Swansea University’s 11 social media marketing channels (Swansea University, 2017)
Place

Place for HE can usually be referred to as accessibility, delivery methods, campus locations, class schedules, and availability of other supporting facilities (Chandler, 2015). Although the vast majority of HE students in the UK are full-time based, a significant number of participants (nearly 0.8 million) have chosen to pursue a HE qualification on a part time or vocational basis (HEFCE, 2015). Many universities also offer evening and residential weekend courses, which suit well for people with full-time employment and family commitment (Universities UK, 2016). The increasing popularity of online and distance learning, normally offered with a much lower price, has changed the concept of the traditional classroom based HE (Kalita, 2016).

Figure 2.4 – Campuses of Welsh, Scottish and Northern Irish Universities in England
(Left to Right: University of Wales Trinity Saint David, Glasgow Caledonian University and University of Ulster)

Regarding campus locations, more and more UK HEIs are opening campuses far away from their city of origin to attract more students (British Council, 2016). Figure 2.4 shows three universities from Wales, Scotland and Northern Ireland, which have opened campuses in London and/or Birmingham, England. Education providers argue that by extending their presence to London or other international big cities, it can take advantage of the lucrative market of overseas students and offer them unique experiences of combined high standard teaching and ultra-modern living (Salyers et al., 2015). Since the establishment, each of these
universities’ London premises has recruited and taught several hundreds of international students and generated millions of pounds extra turnover year by year (UWTSD London, 2016; GCU London, 2016 and University of Ulster, 2016).

2.3 Assessment for the competitiveness of UK HE

2.3.1 The globalisation of HE and international student mobility

HE providers around the world are continuously investing new methods to engage internationally and making substantial efforts in international recruitment and collaboration, in order to enhance their competitiveness (British Council, 2016). There have been sharp increases in students’ global mobility globally, intensified competitions from major English speaking countries and other European nations. The HE landscape and development in Asia are also fast changing, bringing both opportunities and challenges to the UK HE sector (UKCISA, 2016).

Becker and Kolster (2016) argue that, since mid of 1990s, an international HE market has been emerged, and it is now developing faster than ever before. This is predominantly contributed by the sharp increase in students’ global mobility, as a result of worldwide economic and welfare growth, international transportation improvement and globalisation. In 2016/17, there were nearly 6.3 million students, an increase of 120% from 2010/11, enrolled for HE courses outside their countries of origin (UK HE, 2017). To earn international experience as well as overseas qualification, through studying abroad, has become a more common and frequent event, particularly for young people, all over the world (Kehm, 2015).
Every host countries recognise the huge importance of international students and see them as great opportunities for wealth creation, economy boosting and diversity enhancing in the HE and society in the hosting countries (Becker and Kolster, 2016). Notably, the three largest international student contributors are all Asian countries, including China, India and South Korea. The total number of international students sent from these countries accounts for as much as 41% of all students studying abroad in 2016/17 (UK HE, 2017).

Figure 2.5 – Trend of Chinese students studying abroad 2006/07 to 2016/17 (MOE China, 2017)

Figure 2.5 shows the trend of sharp increase in the numbers of Chinese students studying outside China from 2006/07 to 2016/17. According to the Ministry of Education in China (MOE China, 2017), China has been playing the leading role, in terms of HE exportation and internationalisation, and has become the world's top source for overseas students. During the 10-year period from 2006/07 to 2016/17, China has sent over 3.6 million students abroad to
study. 2016/17 has seen the highest record when over 551,000 Chinese went abroad to study (Toh, 2016 and MOE China, 2017).

Table 2.1 – No. of international students in top 10 hosting countries (ICEF Monitor, 2017)

<table>
<thead>
<tr>
<th>Country</th>
<th>2015/16</th>
<th>2016/17</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>974,926</td>
<td>1,043,839</td>
<td>+7.1%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>493,570</td>
<td>496,690</td>
<td>+0.6%</td>
</tr>
<tr>
<td>China</td>
<td>377,054</td>
<td>397,635</td>
<td>+5.5%</td>
</tr>
<tr>
<td>France</td>
<td>298,902</td>
<td>309,642</td>
<td>+3.6%</td>
</tr>
<tr>
<td>Australia</td>
<td>269,752</td>
<td>292,352</td>
<td>+8.4%</td>
</tr>
<tr>
<td>Russia</td>
<td>250,251</td>
<td>282,921</td>
<td>+13.1%</td>
</tr>
<tr>
<td>Canada</td>
<td>239,665</td>
<td>263,855</td>
<td>+10.1%</td>
</tr>
<tr>
<td>Germany</td>
<td>218,848</td>
<td>235,858</td>
<td>+7.8%</td>
</tr>
<tr>
<td>Japan</td>
<td>139,185</td>
<td>152,062</td>
<td>+9.3%</td>
</tr>
<tr>
<td>Spain</td>
<td>71,533</td>
<td>76,057</td>
<td>+6.3%</td>
</tr>
</tbody>
</table>

On the other hand, Table 2.1 lists the numbers of international students in the top ten hosting countries from 2015/16 to 2016/17. According to the ICEF Monitor (2017), the US has been by far the largest international student hosting country, which welcomed over one million overseas students in 2016/17, an increase of 7.1% from the previous year. Although the UK has been seen as one of the global leaders, second only to the US, in the provision of international HE, its growth in attracting international students is significantly lower than all other major players. The popularity of English language is the main reason for many international students to choose an English speaking country for their HE (Rahul and Li, 2015). English has been embedded into school and university curriculums in many countries.
Over 40% of the international students are studying in English speaking countries (Universities UK, 2017).

While the world benefits increasingly from greater student mobility, the competition to attract bright students has intensified between developing and developed nations (Salyers et al., 2015). China, India and some other Asian countries, which are considered as major international student markets, have improved their own education standards dramatically and are competing against the UK and the rest of the world. Asian Development Bank (2016) suggests that HE sector across Asian countries continues to receive a high level of government funding and support. The teaching quality, international ranking, research ability and student services have improved significantly in many Asian countries in recent years. Increasing number of young students in Asian choose to study in their own or neighbouring countries to save money.

According to Annandale (2016), cheaper costs, geographical closeness, cultural and language similarities and greater convenience, have boosted the emergence of a new but fast growing intra-Asian education market. As economy in Asia continues to grow at a much higher rate than many Western countries (Asian Development Bank, 2016), some researchers argue that there will be a major shift in trade and student mobility. Asia is expected to soon become a major hub and host for international studies and research, which would threaten the dominant status of the US, UK and other Western countries in the international student market (Toh, 2016 and ICEF Monitor, 2017).
2.3.2 External environment facing UK and Welsh HE

The external marketing environment, which is often referred to as the macro environment, can include political, environmental, social, technology, legal and economic (i.e. PESTLE) forces (Angulo et al., 2014). Ferrell and Dibb (2016) suggest that business has to act and react to its external environment effectively, in order to remain competitive in the market. However, business itself often has limited control or restricted influence to the outside world. The external marketing environment for the UK HEIs is fast changing. Having a clear understanding of these external factors can help HE decision makers to react swiftly to challenges and implement changes to stay competitive (Yucel and Dagdelen, 2010).

(a) Political factors

Devolution has enabled Scotland, Wales and Northern Ireland to establish their own legislative and executive bodies, for example, the National Assembly for Wales and the Welsh Government, to set policies in all the devolved areas, autonomously from the UK Government (UK Government, 2016). In recent years, the devolved education, and indeed, HE sector has become more and more distinctive and sometimes even divergent from nation to nation in the UK (QAA, 2017 and Scottish Government, 2016). Reporters and academics argue that some of these differences are caused by political differences, as different national governments across the UK are run by different political parties. For example, the Welsh Government is led by the Labour Party (politically left of centre), whereas the UK Government is currently led by the Conservative Party (politically right of the centre) (Fazackerley, 2016).

One of the biggest differences in HE between the different nations of the UK is the variety of university tuition fees arrangement. Table 2.2 summarises this arrangement in the 2017/18
academic year in all four nations of the UK. As can be seen from the table, in England, home students are charged up to £9,250 p.a. for an undergraduate course. However, it remains free for Scottish domiciled students who study at Scottish universities. There are also different arrangements in Wales and Northern Ireland. All four HE funding bodies across the UK introduced a cap on the total number of home students each institution can recruit each year (Universities UK, 2016). Nonetheless, there is no limit for international student recruitments, and UK HEIs set tuition fees for international students by themselves (The Complete University Guide, 2017).

Table 2.2 – Undergraduate tuition fees in different nations in the UK in 2017/18 (The Complete University Guide, 2017)

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>Scotland</th>
<th>Wales</th>
<th>N. Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition fee p.a.</td>
<td><em>Up to £9,250</em></td>
<td>£ Nil</td>
<td>£ 4,046</td>
<td>£4,030</td>
</tr>
<tr>
<td>(UK &amp; EU students)</td>
<td>(for Scottish &amp; EU students)</td>
<td>(for Welsh &amp; EU students)</td>
<td>(for NI &amp; EU students)</td>
<td></td>
</tr>
<tr>
<td>Tuition fee p.a.</td>
<td>No limit</td>
<td>No limit</td>
<td>No limit</td>
<td>No limit</td>
</tr>
<tr>
<td>(International students)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard course length</td>
<td>3 Years</td>
<td>4 Years</td>
<td>3 Years</td>
<td>3 Years</td>
</tr>
</tbody>
</table>

With respect to the length of the course, it is worth highlighting that some international students are concerned when choosing an undergraduate course to study in Scotland. This is because it normally takes an extra year to complete, comparing with the rest of the UK (CEC Wales, 2015). The additional costs and time involved to study a Scottish HE degree have made it less attractive to international students (UKCISA, 2016). Researchers (Greenaway and Haynes, 2013) suggest that the Welsh Government can and should introduce “Wales-specific” measures and policies to promote the Welsh HE to international audiences.
(b) Economic factors

Since 2008, the global economy has suffered its worst recession in many decades, affecting billions of people all over the world (Ostroukh, 2014). This has particularly shaken and weakened the majority of the world’s strongest economies, such as the USA, Japan, Germany, UK and several other major developed countries. Their inflation, cost of living and unemployment rates, which are important indicators of economic performances, have all hit record high levels (Marginson, 2016). However, China remains one of the very few countries to have continued a strong growth in economy and social development during the recession (MOE China, 2013).

Consequently, the currency exchange rates between a number of foreign currencies, including the British Pound (GBP £), and the Chinese Yuan (CNY ¥) have dropped significantly (Bank of China, 2016). The Bank of China (2016) anticipates that the depreciation of the GBP and the rise in value of the CNY have brought an average saving of 30% for Chinese students, who have come to the UK to study after 2009. According to the British Council (2014), the average annual spending per Chinese student in the UK is approximately £20,000, with the tuition fee, accommodation and living expenses combined. This figure equates to ¥300,000 Yuan in 2008, in contrast of ¥176,000 Yuan in 2016, saving as much as 42% p.a., due to the weakened GBP. The GBP has also seen a sharp drop in value after the Brexit vote in 2016. This has stimulated many more students and tourists from China to come to the UK for the purpose of studying and visiting (Wallace, 2017).

In recent years, similar to many other countries, the Chinese Government also introduced austerity measures to boost the economy, including significantly reducing the base interest rate. Therefore, savings and bank deposits have become no longer the favorable investment
option for many wealthy Chinese families. Instead, they withdraw a large amount of their savings from the banks, to invest them on their children’s future, by sending them to foreign countries for higher education (Bank of China, 2016). This means Chinese and other international students are able to acquire cheaper and more affordable student loans from UK financial institutions to cover their expensive studying and living costs (Marginson, 2016).

(c) Social factors

Research studies undertaken by the Complete University Guide (2016) concluded that the unique cultural and social mix of the UK is an important selling point when attracting investors and students from overseas. The fact that UK is an open democratic society, multicultural with freedom of beliefs, a free legal and justice system, relatively low crime rate, as well as good social and health care, earned its international reputation of being a safe, secure, welcoming and prospective country. These positive social factors, which have been embedded into universities’ marketing strategy when they promote their courses to the international audience, have provided significant access to certain key markets (Avis and Orr, 2015).

In contrast, there has been a rising number of high profile criminal cases involving violence, particularly with guns in the USA in recent years (News Week 2016). Racism and hate crimes have also increased sharply in a number of Western countries in recent years, such as Denmark, France, Greece, Germany and Sweden, following the refuges crisis (BBC News, 2016). These reasons have made the UK the preferable choice for many international students.

In addition, English has been widely taught across the globe. Especially in many Asian countries, where the largest international student markets are based, English language study has been integrated as part of the education curriculum from a young age. Bigger proportions
of students from these countries have chosen the UK as their studying destination (Xu and Wang, 2016).

(d) Technological factors

Technologies have changed the face of HE in the UK and worldwide, not only in learning and teaching aspects, but also in the areas of marketing nationally and internationally (Angulo et al., 2014). According to the British Council (2016), almost all the UK education providers, in both private and public settings, have applied a variety of digital technologies, for instance website, social media and mobile apps, in promoting their institutions and courses. Universities UK (2016) states that such methods, which have been proven highly efficient and cost effective in reaching foreign and wider geographic areas, have become increasingly important and popular in the marketing of UK HE. Many UK HEIs have also utilised these technologies in multiple languages and cultural contexts, to increase visibility and popularity in key target markets. Figure 2.6 shows examples of two Welsh Universities’ websites in Chinese, specifically designed for the China market.

Huang et al., (2016) suggest that another area that has an impact on universities is international transport connectivity. It now only takes hours by plane or even by high speed rail, to travel from continent to continent. With many airlines offering frequent flights linking major cities in Asia and the UK, international students find it is much easier, more comfortable and less expensive, to reach their studying destination from home (Raimo, 2013). Cardiff Airport has received major investment in recent years with a number of expanded international routes. Qatar Airways is committed to introducing frequent long-haul direct service from Cardiff to the Middle East from 2018. This will greatly improve the
international connectivity for Wales, which in return will attract more investors, tourists and international students to the region (Cardiff Airport, 2017).

Figure 2.6 – Two Welsh universities’ official Chinese websites (Bangor University China, 2017 and Swansea University China, 2017)

(e) Legal factors

Legal factors for international student recruitment to UK education institutions are predominately influenced by immigration policies (British Council, 2016). A series of complex requirements and changes has been incorporated into the student visa system since 2010, and is constantly being reviewed and amended by the UK Visas and Immigration (UKVI) department. Any education establishments that wish to recruit students from outside
the EU have to meet and maintain the government set standards and hold a regularly reviewed licence, so that they have the legality to recruit and admit international students (UKVI, 2017).

From 2011 to 2016, over 210 private HE and FE providers in the UK were identified as not being fit providers and had their licence to recruit international students revoked by the UKVI, affecting some 80,000 international students (Fazackerley, 2016). Moreover, the previously popular post-study work (PSW) visa, which allowed international students to work in the UK for up to two years after graduation, was scrapped in 2012. Implemented in 2015, visitors to the UK also need to pay the UK healthcare surcharge, at a rate of £150 per year for a student or £200 per year for all other visa applications, as part of their visa application (UKVI, 2017).

Universities UK (2016) argues that the new government visa rules are making the UK a difficult and unattractive study destination for international students. It further suggests that international students have been unfairly targeted by the government as an indicator for showing the number of migrants coming into the country. Universities and business groups have raised serious concerns that the tightened policies on immigration will harm the UK HE industry and economy. There are signs that the number of international students coming to the UK is shrinking, with student recruitment from both India and Pakistan, two of the major international student markets, dropping by nearly 37% from 2014/15 to 2015/16 (UKCISA, 2016).
(f) Environmental factors

Waśkowski (2017) suggests that environmental factors can be referred to as the availability, sustainability, approachability and fitness of the estate, in which institutions operate. The majority of universities in the UK face problems with aging buildings, high maintenance cost and the increasing shortage of room in which to expand. Particularly for city centre-based universities, the scarcity of appropriate buildings and facilities, the challenges of transportation and accommodation, as well as the issues of traffic congestion during peak hours for staff and students, is restraining universities’ development and expansion (Havergal, 2014).

In the past few years, a number of Welsh HEIs, including Cardiff, Cardiff Met, Swansea, UWTSD and USW, have each spent millions of pounds in building new or refurbishing old university buildings, creating greener and more energy efficient teaching and studying environments (HEFCW, 2017). Swansea University’s new £450 million science park campus (also known as the Swansea Bay Campus) was officially opened in autumn 2015 and has directly and indirectly created 10,000 jobs and supports the university’s plan to double in size. The university estimates that the new campus will contribute £3 billion to the regional and Welsh economy over the next decade (Swansea University, 2016). Additionally, it has become common between different institutions in Wales to share their physical resources, and offer evening and outside term-time teaching, aiming to maximum the efficient use of existing estate (National Assembly for Wales, 2016).
2.3.3 Internal environment facing Welsh HE

This section analyses the internal environment for Welsh HEIs, by applying the micro (internal) environment diagram as given in Figure 2.1. It covers the main internal factors facing the Welsh HE sector, including Welsh HEIs (the organisation), their suppliers, customers, competitors, the public and their intermediaries.

a) The organisations

HEFCW (2017) states that HE courses in Wales are offered by Wales's ten HEIs, including eight traditional Welsh universities, the Open University Wales and the Royal Welsh College of Music and Drama (RWCMD), part of the University of South Wales group. Table 2.3 summarises the names of these institutions, their locations, enrolments and market shares in Wales. In addition, many FE colleges across Wales also provide a range of HE courses, at both undergraduate and postgraduate levels (Welsh Government, 2016). According to HEFCW (2016), Welsh HEIs contribute more than 3% of the total Welsh GDP per year, and, has directly created nearly 40,000 full time employments in Wales and a further 6,000 in the rest of the UK. The Welsh HE sector generated £4.6 billion of output to the Welsh economy in 2015/16.

Wales is currently undertaking a major reform for the HE sector, following a number of critical reviews and government assessments, including the most recent Diamond and Hazelkom Reviews. These reports concluded in 2017. If implemented, they will bring some significant changes in Welsh HE funding and student tuition fee arrangements from 2018, as well as organisational and governance changes (Welsh Government, 2017). In recent years, a number of Welsh institutions have been merged and integrated. For example, the creation of the University of South Wales in 2013, through the merger between the former University of
Wales, Newport and the University of Glamorgan, as well as the UWTSD arrangement, involving the former University of Wales, Lampeter, Trinity College Carmarthen, Swansea Metropolitan University and the University of Wales (HEFCW, 2017).

Table 2.3 – Welsh HEIs and student enrolments in 2016/17 (HEFCW, 2017)

<table>
<thead>
<tr>
<th>Welsh HEIs (alphabetical order)</th>
<th>Location(s)</th>
<th>Enrolments 2016/17</th>
<th>% of market share in Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberystwyth University</td>
<td>Aberystwyth</td>
<td>8,755</td>
<td>6.8%</td>
</tr>
<tr>
<td>Bangor University</td>
<td>Bangor</td>
<td>10,630</td>
<td>8.2%</td>
</tr>
<tr>
<td>Cardiff Metropolitan University</td>
<td>Cardiff</td>
<td>12,580</td>
<td>9.7%</td>
</tr>
<tr>
<td>Cardiff University</td>
<td>Cardiff</td>
<td>30,675</td>
<td>23.7%</td>
</tr>
<tr>
<td>Glyndŵr University</td>
<td>Wrexham</td>
<td>6,660</td>
<td>5.2%</td>
</tr>
<tr>
<td>University of South Wales (USW)</td>
<td>Pontypridd,</td>
<td>25,265</td>
<td>19.5%</td>
</tr>
<tr>
<td></td>
<td>Cardiff and Newport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Wales Trinity Saint David (UWTSD)</td>
<td>Lampeter, Carmarthen and Swansea</td>
<td>9,930</td>
<td>7.7%</td>
</tr>
<tr>
<td>The Open University Wales</td>
<td>Cardiff</td>
<td>6,730</td>
<td>5.2%</td>
</tr>
<tr>
<td>Swansea University</td>
<td>Swansea</td>
<td>17,445</td>
<td>13.5%</td>
</tr>
<tr>
<td>Royal Welsh College of Music and Drama (RWCMD)</td>
<td>Cardiff</td>
<td>645</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

| Total enrolments               | 129,315     | 100 %              |

The significant issues and subsequently the downsizing of the University of Wales, which was once the only university in Wales and the second largest in the UK, have caused huge confusion to many international students and lasting damage to the Welsh HE brand (Mackie and Hamilton, 2015). There has also been some great controversy caused by the series of reforms pushed by the Welsh Government (BBC News, 2014). One Welsh university in
South Wales threatened to take the Welsh Government to judicial review to prevent a forced merger. The Welsh Government also had to drop its plan to merge Aberystwyth, Bangor and Glyndŵr Universities (Havergal, 2014).

Reports from Wales Online (2016) and BBC News (2016) argue that this ongoing and extremely time consuming HE reconfiguration project, which has already been seen as controversial and hugely costly, caused great confusion and uncertainty for the Welsh HE sector as a whole. The effects on student recruitment, marketing, private investment, staff and resources management, institutions’ national and international branding are difficult to be fully evaluated.

b) The consumers

The total number of HE participants enrolled at Welsh institutions has increased dramatically over the past decade. There were now nearly 130,000 students enrolled at Welsh HEIs in 2016/17 (HEFCW, 2017). 17% (22,100) of them are international students from over 145 countries worldwide. This figure represents a 73% increase from 2005/06 (Universities UK, 2016). Nevertheless, it is worth pointing out that as high as 88% of all international students in Wales are registered for taught courses, which means only 12% of them are studying research degrees (UKCISA, 2017). This ratio, which is significantly lower than the UK average of 22%, suggests some weaknesses and limitations in research areas offered by Welsh institutions and potentially some issues of their marketing strategy for attracting research students (Universities Wales, 2016).

Currently, Cardiff University is the only Welsh university that is a member of the prestigious Russell Group, formed by 24 leading UK research universities (Cardiff University, 2017).
The Russell Group (2017) claims that its member universities won 78% of all the research funding from the UK Research Councils (almost £1.5 billion) in 2016, produces the majority of all university research papers in the UK, and attract some of the world’s best research staff and students. Despite the increasing investments and efforts to boost HE research across Welsh institutions, their research quality, outcomes, and contributions are comparatively lower than their counterparts in England and Scotland (BBC News, 2015). THE (2015) argues that the relatively small size (less than 15,000 enrolments) of many Welsh HEIs is one of the biggest barriers to research success. This also has a negative impact in attracting talented research students from the world to study at Welsh universities.

c) The suppliers

Over 67% of current Welsh universities’ recruitment are directly from FE colleges (HEFCW, 2016). The most commonly accepted entry qualifications by Welsh and UK HEIs include A-Levels, the Welsh Baccalaureate or similar Level 3 qualifications awarded by authorised UK examination bodies, such as the Welsh Joint Education Committee (WEJC), City & Guilds and Business and Technology Education Council (BTEC) (Welsh Government, 2015). Although almost all UK students have to apply for undergraduate courses via UCAS, international students can apply directly to individual HEIs (British Council, 2016). UK universities often have different processes in recruiting and accepting international students. As a result, the entry requirements and admission for international students vary from university to university in the UK (Universities UK, 2016).

In general, students from outside the UK need to meet compulsory English language requirements, as well as obtain equivalent qualifications that meet the required standard, to
enter any UK institutions (British Council, 2016). However, with HE budgets suffering large
cuts, many institutions in the UK become more and more financially dependent on the
income from international students. Many UK HEIs are under financial pressure of recruiting
many more international students by lowering the entering requirement (UKCISA, 2016). A
large media undercover investigation in 2012 disclosed several top UK universities, including
Cardiff University from Wales, were accepting international students with far lower A-level
grades, than students in the UK (Wallace, 2017).

Additionally, the standard and quality of qualifications from other countries, as well as the
veracity of students’ claimed qualifications, can sometimes be extremely difficult to check,
especially from countries with significant difference from the UK education system
(Association of Colleges, 2016). According to UK NARIC (2016), not all universities in the
UK have the capacity or resources to verify all different types of foreign qualifications. It was
estimated that around 9% of international applicants used forged or fraudulent materials when
applying for courses at UK universities in 2015. It remains a challenge for many Welsh and
UK institutions to verify qualifications from overseas suppliers (CEC Wales, 2015).

d) The competitors

HEFCW (2017) states that Welsh universities face increasing competition from each other, as
well as from institutions from England, Scotland and Northern Ireland, which compete in the
same UK domestic market. The rivalry is particularly intense in the areas of attracting the
best students, private funding, industrial sponsorships and research grants. Whilst the number
of Welsh domiciled students choosing to study in other parts of the UK continues to grow,
Wales is still an HE “net importer”, meaning there are more UK students coming to Welsh
universities than those leaving Wales for HE studies. In 2015/16, 33,565 non-Welsh UK
students enrolled at Welsh HEIs, comparing with 25,110 Welsh students starting their university courses elsewhere in the UK (Welsh Government, 2017).

What is worth mentioning is that there has been a huge boost for alternative HE providers in Wales (Welsh Universities, 2013). Encouraged by the Welsh Government’s HE in FE initiative, all of the 14 public Welsh FE colleges are offering undergraduate or postgraduate courses ranging from Level 4 to Level 7, validated by their partner Welsh or UK universities (Careers Wales, 2016). All Welsh universities also established partnerships with their local or regional FE colleges. These colleges deliver HE courses at various campuses, which offer greater flexibility and competitive fees (HEFCW, 2015). This strategy, supported and partially funded by the Welsh Government, aims to widen HE access across Wales, particularly in rural and remote areas (Welsh Government, 2015).

In addition, the Open University in Wales is currently well positioned, as the established player, in field of managing and delivering online and distance HE courses. Its qualifications are at high standards and are recognised regionally, nationally and globally (HEFCW, 2016). A unique feature of this university is that it has utilised various advanced e-business techniques, such as e-marketing, e-advertising, virtual communication tools and online learning platform, to sustain its strong position as the largest part-time HE provider in Wales, despite the effect on the part-time market from the rise in tuition fees. Since the vast majority of courses from this university are taught and studied online at a time that suits each student’s availability, it massively reduces the operational costs (hence much cheaper tuition fees) and gives wider accessibility and flexibility to participants (Kalita, 2016).
e) The public

The public and surrounding communities in general are supportive and proud of the presence of their local or regional Welsh universities. Not only do they have significance to the Welsh history and education, but they also bring substantial income to the area annually and create hundreds of thousands job opportunities (HEFCW, 2017). Welsh universities are also the largest local employers in many towns and cities across Wales. The Welsh HE industry is particularly vital to the sustainability of the country’s economy, stability and future. The “Science for Wales” strategy launched by the Welsh Government in 2012 set out a specific ten-year plan to transform scientific and innovative research at Welsh HEIs, with the aim to better engage with local and national industries and the wider public (National Assembly for Wales, 2016).

Nonetheless, Welsh universities have received complaints occasionally from local residents for the misbehaviour of their students, the traffic congestion caused to public roads around campuses, the extra pressure to the local housing and health care, and to the transport systems (Wales Online, 2017). In order to build up mutually beneficial and healthy relationships with their communities, many Welsh institutions offer their sports centers, art, drama and IT facilities, libraries and conference venues to the public. They have also made great efforts to maintain close links with local resident associations, community groups, health care providers, the police and local authorities (Higher Education Academy, 2015). The joint collaboration between key stakeholders of Welsh HE, together with the regulatory well-being of Future Generations (Wales) Act 2015, allow all new campus developments to consider and meet local and national needs educationally, environmentally and economically, as well as institutions’ longer-term sustainability (HEFCW, 2016).
f) The intermediaries

According to the British Council (2016) and THE (2015), overseas education agencies play a major role in promoting UK HE abroad and attracting students from all different parts of the world to British universities. Over half of all international students in the UK contacted an agent in their country before choosing their studying destination. This proportion reached about 70% for students from Asia, proving the significance of these organisations for the international exportation of UK HE (QAA, 2016). These agencies, which often need to first sign agreements with specific universities to become their representatives in designated countries, then become responsible for marketing, recruiting, preparing and sending students to them (Luca, 2015). Huang et al., (2016) suggest that almost all universities and HEIs in the UK have such arrangements in place involving multiple overseas education agents from different countries.

Undoubtedly, education agencies have become incredibly important to the UK HE industry and to prospective international students, with more than 40% of international students in the UK being recruited through this route (Read, 2013). A study from THE (2015) shows that UK universities are paying a premium rate of commission, an average of £1,767 per non-EU recruit which is about 15% to 20% of the average annual international student’ tuition, to their agencies on successful recruitment. Although many other UK universities chose not to reveal the exact figure of payments to their overseas education agents, it is understood this “expenditure” is significant for institutions with high intakes of international students (Luca, 2015).

A Chinese Ministry of Education report (MOE China, 2016) shows that there are some 4,800 registered education agencies or similar organisations that are licenced to provide services to
students who wish to study abroad. It is a common practice that agencies take money from both the students and course providers, after successfully arranging their studies. There are now 1.3 million Chinese students attending foreign universities. In 2016 alone, more than 551,000 Chinese went abroad for further or higher education. 65% (which equates to 358,000 students) have used an education agency (Hexun, 2015). Most of agencies also charge students when providing these services. It can be argued that the huge profit involved within this industry has driven some agencies to put their financial interests before the interests of students (Chandler, 2015). Huang et al., (2016) discovered that misleading information and false promises are sometimes given by agencies, so that they can “manipulate” the eager students to attend a university of their favour.

Whilst the vast majority of agencies provide good, legitimate and reliable services, scandals associated with these organisations are not uncommon in the UK, especially in recent years (British Council, 2017). Cases of bogus agencies, which make fraudulent applications to UK universities, have seen a considerable rise in recent years (Raimo, 2013). According to Tibbetts (2011), a number of leading UK institutions had expelled a large number of overseas students from 2008 to 2011, after investigations with the police revealed their applications were fraudulent. What is concerning is that many of their application documents were prepared or directly provided by the universities’ contracted agents.

The victims of such scandals were those students who had either paid a large amount of money to the agents or tens of thousands of pounds in tuition fees to the university (Neumark, 2012). The students involved had faced withdrawal from their universities; whilst in some incidents, they were deported from the UK and charged with a criminal offence of fraud (Marcus, 2013). Suggestions were made to the governing bodies, by the public and student
groups, to introduce proper regulations into this industry to prevent further damage to the reputation of the UK HE brand. UK universities continue to face growing pressure to become more transparent and to be more open in their relationships with overseas education agencies. It is also important for them to develop a more sustainable international marketing and recruiting strategy, rather than relying heavily on commercial partnerships with overseas education agents (Becker and Kolster, 2012).

2.4 The co-opetition business strategy

As discussed in section 2.3, it is evident that the Welsh HE industry is encountering challenging and constantly evolving marketing environments, both internally and externally. The domestic and international competition has also become intense. In such dynamic and increasingly competitive market, it is necessary to explore and adopt an innovative approach for institutional collaboration.

This section first introduces the traditional competition and cooperation theories in marketing, followed by studies of the hybrid co-opetition strategy. It then analyses the key benefits, the common formats, as well as lists some best business practices of co-opetition in modern world. After establishing the theory, the framework and common applications of co-opetition, its adaptability and effectiveness specifically for the Welsh HE sector can then be verified and evaluated through this research.
2.4.1 Competition and cooperation

Although it is familiar today that different organisations work together to achieve mutual growth, the modern business world is still predominated by “cruel competitions” (Griffith and Aghion, 2010). Porter (2008) strongly argues that small and local businesses are often targeted by large multinational corporations (MNCs), which have the power and resources to influence the market in one way or another, and hence to make its environment more difficult for small players to participate. Because of the direct and indirect threats from big enterprises in the same market, a large number of small or micro-sized businesses across the globe face the risks of insolvency and bankruptcy on a regular basis (Furrer, 2010). Some barely managed to survive but were restricted to further expansion due to limited resource and influence in the market, whilst some were forced to merge or were taken over by larger organisations (Dagnino and Rocco, 2009).

According to Griffith and Aghion (2010), this very common business phenomenon is a reflection of the “win or lose” game theory, or in other words the “survival of the fittest”, zero-sum pure competition approach. This theory describes that any wins from a given market would not be achieved unless gaining the equivalent losses from other players. In addition, the success of one business could only be built upon the failure of another. Based on this approach, Dagnino and Rocco (2009) suggest that the foundation of any commercial organisations should be established on its competitiveness. Their business plan, long term strategy and organisational structure need therefore to be adjusted accordingly, in order to maximise its ability to compete against others. Competition has also been proven to be able to drive businesses to become more efficient and customer orientated. Subsequently, consumers could benefit from fairer trade and cheaper prices that are promoted by competition (Shill et al., 2009).
One of the most widely utilised competition marketing analysis tools is the Porter’s Five Forces model (Foss and Knudsen, 2013). As can be seen in Figure 2.7, this model associates the five factors close to a company, including the rivalry from competitors, powers from new entrants, powers from suppliers, threats from substitutes and threats from buyers. According to Porter (2008), these factors are the organisation’s “five completion forces” that determine its attractiveness in a market, hence influence its overall ability to serve its customers and make a profit. Cadle et al. (2010) recommend that Porter’s model is best suited to evaluate a corporation’s immediate and current marketing environments and define its business strategy. It provides stakeholders and managers with a checklist, which should be considered prior to any major changes in the organisation can be made. It can also help the business to prepare for and quickly respond to challenges and threats from competitors.

Figure 2.7 – Porter’s Five Forces competition model (Porter, 2008)
In contrast, new business cases are emerging to suggest that careful cooperation even between rivals could lead to market growth. This is particularly important for small and less well-known companies (Balestrin et al., 2014). Studies (Dagnino and Rocco, 2009) revealed that by collectively sharing assets and resources within a group of players, it could generate greater total revenue than the sum of revenues that would have been achieved by these players individually. Equally, a joint network with greater competiveness could also be established by means of closer collaboration. This would then help strengthen the market position for these parties involved and increase the bargaining powers to their suppliers and buyers, as well as, raise barrier for other competitors in the same field (Becker and Kolster, 2012).

Nevertheless, Balestrin et al., (2014) argue that there are many challenges and controversies associated with conventional cooperation strategy. The most concerned areas are the integrity, autonomy, intellectual property and the distribution of profits earned as a group to each parties. What is more, building up a mutually trusted relationship with competitors is regarded as one of the biggest difficulties when forming a collaboration partnership. According to Stengel and Turocy (2015), especially when things went wrong or a major loss was encountered, cooperation would easily be turned into a blame game. In such circumstances, each player would naturally withdraw their resources and investment as quickly as possible, instead of collectively resolving the problem itself, in order to minimise the impact on its organisation and protect its own financial interests.

Griffith and Aghion (2010) explain that the cruelty of competition and potentially high risks of cooperation in the market with rivals have forced many smaller businesses into a dilemma. It then becomes easier for large MNCs to gradually grab more and more market share and
establish monopoly status. There has been increasing demand from various parties, including business organisations, trade associations, consumer groups and market regulators, to explore and create an innovative strategy for marketing (Yucel and Dagdelen, 2010).

2.4.2 The hybrid “co-opetition” strategy

According to Brandenburger and Nalebuff (2002), the founders of the co-opetition theory, co-opetition is an innovative and revolutionary approach for corporate and marketing strategies. Under this methodology, it urges individual entities to work in rivalry to protect their own commercial interests and market shares, whilst at the same time, collaborate to achieve mutual benefits. Theoretically, co-opetition can be understood as one of the derivations from the games theory that describes competition and collaboration between different players who are interdependent from each other in the same market (Stengel and Turocy, 2015). Another term that is often used to describe this phenomenon is “frenemy”, a portmanteau of friend and enemy. Both co-opetition and frenemy relations can exist at personal, geopolitical, organisational and industrial levels among individuals, groups, institutions, businesses and even countries (Broek et al., 2017).

Co-opetition, as defined by some researchers (He, 2012 and Bengtsson and Kock, 2014), is a relationship combined with “cooperative competition” and “competitive cooperation” between business partners. The formation of co-opetition is illustrated in Figure 2.8. It occurs when independent organisations work collectively with partial congruence, where they believe they can gain additional competitive advantages and agree to share some common costs. In contrast with the conventional competition philosophy, where a business either wins or loses, co-opetition claims that a higher value creation could be achieved for all partners involved (Broek et al., 2017). This is because the assets and resources from each player can
generate extra commercial advantages into the game. The “plus-sum” outcome could therefore be achieved (Dagnino and Rocco, 2009).

Typically, a co-opetition partnership is enforced with a proper agreement signed by all parties, in which the guidance, responsibility and contribution requirements from each player are clearly defined based on their sizes and different degrees of willingness in participating in the game. The revenue generated as a co-opetition group would then be distributed back to the participants proportionally to their contributions (Bengtsson and Kock, 2003). Having such agreement in place encourages organisations of all sizes to take part and prevents unnecessary arguments at later stages during the partnership (Padula and Dagnino, 2007). Some co-opetitions also set up an independent body alongside to monitor and regulate each player, to ensure their individual roles are fulfilled appropriately (Leitao et al., 2014). A study of the common formats and some best business examples of co-opetition will be carried out in this section.
The foundation of the co-opetition strategy is the value net model invented by Brandenburger and Nalebuff (2002), as shown in Figure 2.9. This model presents an interactive structure that links five categories of players or forces within a single game, including the organisation itself, its suppliers, substitutors (competitors), customers and complementors (intermediaries). Whilst the competition and tension are clearly visible in this model, the bidirectional arrows also mean that each player can influence, and, is simultaneously influenced by other players (Kraus et al., 2017). The Value Net framework establishes an overall business environment, in which all parties collaborate and compete at the same time to exchange goods and services, add values to business network and sustain the business life cycle (Mongkhonvanit, 2014).

One distinct feature of this approach, from any other games theories, is that it acknowledges each player during the game can occupy one or more different roles at the same time, as well as, being able to change its role(s) depending on the situation of the market at that time.
(Ritala et al., 2016). For example, an FE College in Wales sends qualified students to its neighbouring university for HE. This college is therefore classified as the “supplier” for that university. However, if that FE College then starts offering HE courses, in addition to its “supplier” role, it would also become a “competitor” of that university. This co-opetitive value net framework will be utilised at later chapter to analyse specifically the interactive and dynamic relationships between different players within the Welsh HE sector, with respect to its international marketing and student recruitment.

2.4.3 Key benefits of co-opetition

Co-opetition shares the advantages of both competition and cooperation. The relationship from participant to participant is interdependent and interactive. However each player remains independent and keeps its autonomy (Stengel and Turocy, 2015). It has been proven that co-opetition can promote collaboration in a fairer manner, limit open conflicts and enhance the overall competitiveness for each player (Kotler and Armstrong, 2015). Ritala et al. (2016) further suggests that in this very dynamic modern business environment, co-opetition partnership could also help businesses respond more quickly and effectively to challenges and opportunities, as well as, build up a safety net among partners with shared experiences and resources to protect themselves against the threats from other groups in the market.

Table 2.4 summaries some of the key advantages and disadvantages of co-opetition. It is worth mentioning that a successful co-opetition requires joint and continuous efforts from involving parties and needs to be structured with an open and appropriate agreement to ensure a fair and equal environment (Leitao et al., 2014). Co-opetition allows partners to share some of their resources and at the same time gain access to resources from others.
These resources can include, but are not limited to, physical and financial assets, facilities, buildings, production and manufacturing tools, sales and distribution channels, workforce and intellectual properties etc (Ritala et al., 2016 and Broek et al., 2017). Through joint forces, co-opetition creates a bigger player that brings greater influences and competitive advantages in the market. By sharing resources, risks and costs with partners, it also largely maximises the probability of success (Leitao et al., 2014).

Table 2.4 – Key advantages and disadvantages of co-opetition
(Kotler and Armstrong, 2015 and Leitao et al., 2014)

<table>
<thead>
<tr>
<th>Key advantages</th>
<th>Key disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Providing a new model to set strategies that incorporate both competitive and cooperative tactics</td>
<td>➢ Strengthening competitors at your expenses</td>
</tr>
<tr>
<td>➢ Improved customer experiences and satisfaction through widened access and services</td>
<td>➢ Potential legal disputes if agreement / partnership breaks</td>
</tr>
<tr>
<td>➢ Access to greater resources, opportunities, expertise, marketing places and sale channels etc</td>
<td>➢ Monopolising the market by joint efforts from involving parties</td>
</tr>
<tr>
<td>➢ Increased level of creativity and innovation</td>
<td>➢ Potential unfairness of competition to other players and customers</td>
</tr>
<tr>
<td>➢ More financial support for investigating new products / services</td>
<td>➢ Potential loss of intellectual properties and other resources</td>
</tr>
<tr>
<td>➢ Lower risks for investors and potential increase share prices</td>
<td>➢ Potential job loss due to work sharing</td>
</tr>
<tr>
<td></td>
<td>➢ Potential loss of loyal customers and suppliers to competitors</td>
</tr>
</tbody>
</table>

Numerous research studies (Ritala et al., 2016; Mongkhonvanit, 2014 and Yamil et al., 2010) suggest that co-opetition could allow participants to meet agreed objectives, enhance market presence and achieve an “all-win” outcome. Such studies can also provide a new approach to define business strategies that incorporate competitive advantages and cooperative tactics. It
may improve the level of creativity and innovation, offer stronger financial support for new product and service developments, as well as lower the risks for investors with greater potential of share price increase.

2.4.4 Common formats and best practices of co-opetition

Various formats of co-opetition have been developed in recent years, with some of them already being adopted successfully by large organizations and MNCs (Dixit and Nalebuff, 2010). Researchers (Kotler and Armstrong, 2015 and Stengel and Turocy, 2015) argue that some of the most common arrangements of co-opetition in marketing can include strategic alliance, joint venture, franchising, licensing and co-branding. The following section analyses these representations of co-opetition, by explaining their definitions and advantages as well as linking them with some best business practices respectively.

a) Strategic alliance

*Definition:* arguably, this is the most popular and widely utilised format of co-opetition in modern businesses (Ritala et al., 2016). According to Kraus et al. (2017), strategic alliance is a formation of collaboration between competitors in the same market. These individual businesses normally have similar market share, business turnover and capacity. It is regulated by a common agreement with an independent body being set up to ensure a fair relation is maintained. Since these partners have very similar or equal status with each other, it minimises the risks of dispute. Mutual growth can be achieved through the widened access of products and services to current and prospective customers and improved sales and marketing channels (Stengel and Turocy, 2015).
Business example:

Sky Team (multiple international airlines alliance)

Sky Team is one of the world’s largest alliances in the airline industry. It was established in 2000 and owned by 20 world’s leading airlines across the globe. The “Sky Team” is the brand and an independent body that is responsible for monitoring and regulating each member to ensure fair collaboration. As an alliance, it serves nearly 730 million passengers annually, operates in 177 countries, with 16,609 daily departures from 1,074 airports at every corner of the world. Member airlines share flight routes, aircrafts, cabin crews, maintenance and services. Therefore, it achieves a huge reduction in operational costs. The alliance claims that this group offers customers many more choices and better services all over the world than many other airline operators (Sky Team, 2016).

b) Joint venture

Definition: through joint investment from at least two or more parties, this model creates a brand-new entity or trading body into the market. Under this co-opetition structure, it involves parties investing equally in the project with respect to money, time, resource and effort, and share the risks and possible losses (Bengtsson and Kock, 2014). This approach is understood as a well-practised marketing penetration strategy and is particularly welcomed by businesses that want to expand their operations in a foreign country. Due to the complexity and difference of governing laws in different countries, a joint venture normally requires a legal binding agreement that is not only accepted by the participating organisations, but also by the countries in which they operate. Details of profit sharing and obligations for
each party also need to be considered thoroughly and agreed by all parties in order to pursue a successful joint venture (Bengtsson and Kock, 2014).

Business example:

![Chery Jaguar Land Rover Automotive Company Ltd](China) & ![JAGUAR](UK)

**Chery Jaguar Land Rover Automotive Company Ltd**

Chery Jaguar Land Rover Automotive Company Ltd is a 50-50 joint venture, between the Chinese State owned Chery Automotive Group and the UK’s Jaguar Land Rover (JLR). Its market value is estimated to be $2.78bn, and it is seen as the first ever project of the UK based luxury vehicle brands to transfer into an overseas market. Under this joint venture agreement, a new manufacturing plant, employing more than 2,000 workers, was opened in a Chinese coast city near Shanghai (BBC News, 2012).

The two companies also established a new research and development centre for enhancing automotive design and safety, specifically to meet the different legal and market requirements for China. JLR’s sales in China have seen some rapid increase since 2010. In 2012 alone, its sales in China increased by more than 80%. JLR will provide advanced and high standards of manufacturing techniques; whilst Chery Group in China is able to offer insight knowledge and expertise in the world’s largest car market. Both companies firmly believe this collaboration will add leverage their respective strengths (Monaghan, 2012).
c) Franchising

**Definition:** according to Kraus et al. (2017), franchising is also an important method of co-opetition, where the franchisor allows the approved franchisees to use its brand, services, goods, distribution channels, support and many other associated aspects. A franchisee usually pays a setup fee to the franchisor to establish the individual business, followed by a regular payment to continue the partnership. Bengtsson and Kock (2014) explain that the relationship between each franchisee can be seen as a competitor to competitor relation, as they all operate in the same market and serve similar ranges of customers. However, there is a great level of standardisation and unity. The franchisees are also required to make continuous efforts to avoid open conflicts with each other. It is believed to have lower risks and require less specific knowledge of the particular market, as professional training will be provided by the franchisor. There have been many successful franchising cases worldwide, involving some very famous giant business groups, for example the famous fast food restaurant chains, KFC, McDonald's, Subway and the Burger King (Dixit and Nalebuff, 2010).

**Business example:**

![KFC logo](https://via.placeholder.com/150)

KFC

KFC is the world’s second largest chain of fast food restaurants, with nearly 19,000 restaurants owned by franchisees in more than 120 countries and territories. Its turnover in 2012 exceeded $23bn, making it one of the world’s largest employers and richest food companies. Individual franchisees in the same area compete with each other to drive towards higher service standards, but also cooperate under standardised regulation from the franchisor.
This massive chain of franchisors raises a huge barrier for any new entries and other competitors to enter the market, and has great power and resources to influence to its suppliers, customers and governing bodies (KFC, 2016).

d) Licensing

*Definition:* licensing is a commercial arrangement between businesses, where one company grants other companies the permission to use its brand, design and/or intellectual property to manufacture and sale its products and services (Angulo et al., 2014). Licensing strategy is often used by new or smaller players, who want to take advantage of the existing and mature production and distribution systems that other companies may have spent a long time to establish. The licensees, in return, pay the licensor a specified payment (Broek et al., 2017).

To some extent, licensing is similar to the franchising partnership (Kotler and Armstrong, 2015). However, it carries less legal responsibility and greater flexibility for the licensees, as they can operate in their own right independently from the licensor (Angulo et al., 2014). Nonetheless, the licensor and each of the licensees can become competitors as they are trading in the same market. A set of rules is normally in place to promote a healthy relationship with the parties involved (Boswell, 2012).

**Business example:**

Apple & the app developers licensing
From as little as $99 p.a., software developers can purchase the Apple App License from Apple, which will allow them to market and sell their products to a network of over 800 million active iPhone, iPad and iPod users. As a licensor, Apple provides a full range of services to its licensees (software developers), from software design training, advanced developing tools, testing facilities, advertising platforms and distribution networks worldwide. Apple then charges the licensees a small percentage of their sales revenue (App Store, 2016). Many licensees are competitors. But, the licensing framework under Apple allows them to work together for mutual growth. Since the launch of App Store in July 2008, there have been over 2.8 millions apps being developed and more than 1.7 billion songs being played on iTunes. It has transformed mobile phone uses and modern business models with hundreds of thousands successful business stories (Apple Developer, 2016).

e) Co-branding

**Definition:** Co-branding is a business partnership, where two or more companies form an alliance to create a joint and new brand identity (Balestrin et al., 2014). The aim is to combine the strengths from different parties, in order to offer consumers a wider range of products and improved experiences. It is widely seen in the fashion, food, electronics and automotive industries, and is proven to be an effective tool in enhancing brand recognition and loyalty (Kraus et al., 2017). According to Leitao et al. (2014), co-branding brings new sources in finance, marketing and distribution methods for partners, which is also able to attract more interests from existing and new customers. Businesses from different backgrounds could also use this strategy to add variety to their products by working with partners from some other industry (Boswell, 2012).
Business example:

Emporio Armani + Reebok Co-branding

In the fashion industry, Armani and Reebok co-branding is appreciated as a creative collaboration between the luxury and top Italian fashion designer and the mass-market retailer. Sports, fashion, glamour and high quality have been combined perfectly in this joint effort. The co-branding apparel collections bring the sport and fashion together and created a confident and stylish look. The luxury elements from Armani fashion are further improved by Reebok’s advanced technologies to maximise comfort, fit and performance. Armani’s world famous fashion label with Reebok’s hugely diverse ranges of customers and sales channels achieved a significant increase in market share and profits for both companies (Marketing Magazine, 2010).

In summary, Figure 2.10 briefly summarises the most common formats of co-opetition, including their definitions, business examples, and specifically the proven success and significance to customer experiences. What is worth mentioning is that there is a requirement for joint and fair efforts from all participating bodies, in order to establish successful co-opetition arrangements. An open and trusted environment also needs to be in place for healthy discussions between businesses (Leitao et al., 2014). Under the co-opetition settings, participating parties share resources, in return they gain wider access to some services and resources from others. In many cases, financial support, production services, advert and distribution channels, as well as human resources and intellectual properties can also be shared within the co-opetition framework (Stengel and Turocy, 2015). According to Yamil et
al (2010), the ultimate goal for this partnership is to create a united entity, with much wider access in the market and bigger influence in the industry. Business partners help each other for mutual growth, instead of fighting each other in the same market. These will be the principles to be judged upon when assessing the relevance and application of co-opetition into the UK HE sector.

Figure 2.10 – Summary of Co-opetition formats and significance to consumers (Kotler and Armstrong, 2015; Leitao et al., 2014 and Yamil et al., 2010)
2.5 Linking co-opetition practice to the HE sector

With respect to co-opetition development in the Welsh HE sector, Table 2.5 briefly validates whether or not the most common applications of co-opetition, i.e. the five co-opetition models, are evident within the Welsh HE settings. The Table also identifies examples of some typical co-opetition cases for each Welsh HEI. As can be seen from Table 2.5, both the concept and the application of co-opetition as well as its five models are widely utilised at all Welsh HEIs.

It is clear from Table 2.5 that the utilisation of strategic alliance and joint venture (the most popular formats of co-opetition) are evident at all Welsh Universities. They have been utilised by all Welsh HEIs, where partners form a wide range of collaborations in different projects. With combined efforts, expertise and shared risks, such partnership can help each participating institution significantly, in terms of further expansion, operational efficiency improvement, branding, wider market access (Padula and Dagnino, 2007).

Findings also suggest that franchising and licensing are also well developed by Welsh Universities, with the exception of Cardiff University. Many Welsh Universities have chosen their regional and national FE colleges, private HE providers and even overseas partners to form a collaboration framework, in which these organisations are authorised and regulated by their paired Welsh HEIs, to deliver their franchised or licensed HE courses. One of the biggest advantages is the widened HE access and much greater flexibility. As a result, many students from different places and countries can pursue HE courses, without the necessity of travelling to Wales.
Table 2.5 – Analysis of Co-opetition development in Welsh HEIs
(Unless stated otherwise, material sources are from Welsh HEIs’ websites and prospectuses)

<table>
<thead>
<tr>
<th>Welsh HEIs</th>
<th>Co-opetition model</th>
<th>Evident (Y / N)</th>
<th>Examples of Co-opetition cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberystwyth University</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>St David’s Day Group Alliance, including Aberystwyth, Bangor, Cardiff, Swansea and South Wales Universities (<a href="http://www.stdavidsdaygroup.ac.uk/">http://www.stdavidsdaygroup.ac.uk/</a>)</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td>Y</td>
<td>Welsh Institute for Sustainable Environments (WISE): a joint venture with Bangor and Swansea Universities (<a href="http://www.wisenetwork.org/">http://www.wisenetwork.org/</a>)</td>
</tr>
<tr>
<td></td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised / validated degree courses are offered by three FE Colleges across North Wales (<a href="https://www.gllm.ac.uk/">https://www.gllm.ac.uk/</a>)</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Aberystwyth’s Mauritius (Africa) Campus, licensed to and operated by Mauritius based Boston Campus Ltd (<a href="http://www.aber.ac.mu/">http://www.aber.ac.mu/</a>)</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>No evidence found</td>
<td>N/A</td>
</tr>
<tr>
<td>Bangor University</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>St David’s Day Group Alliance</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td>Y</td>
<td>Welsh Institute for Sustainable Environments with Aberystwyth &amp; Swansea</td>
</tr>
<tr>
<td></td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised / validated degree courses are offered by three FE Colleges across North Wales (<a href="https://www.gllm.ac.uk/">https://www.gllm.ac.uk/</a>)</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Licensing to Hong Kong College of Technology, which provides undergraduate pathway courses for Bangor (<a href="http://www.hkct.edu.hk/">http://www.hkct.edu.hk/</a>)</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>No evidence found</td>
<td>N/A</td>
</tr>
<tr>
<td>Cardiff Metropolitan</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>European Erasmus+ Programme, which supports the European HE modernisation and internationalisation (<a href="https://erasmusplus.org.uk/">https://erasmusplus.org.uk/</a>)</td>
</tr>
<tr>
<td>University</td>
<td>Joint venture</td>
<td>Y</td>
<td>A £1m joint venture project with Sport Wales, Cardiff City FC and Cardiff City Council in delivering and improving vital services in the Welsh capital.</td>
</tr>
<tr>
<td></td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised degree courses offered at regional Bridgend College, Cardiff and Vale College and Coleg y Cymoed.</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Licensing to Westminster International College (Malaysia) &amp; London School of Commerce which deliver the University’s courses in the UK and worldwide.</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>No evidence found</td>
<td>N/A</td>
</tr>
<tr>
<td>St David’s Day Group</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>St David’s Day Group Alliance</td>
</tr>
<tr>
<td>Alliance</td>
<td>Joint venture</td>
<td>Y</td>
<td>A leading center for compound semiconductor research: a joint venture with</td>
</tr>
<tr>
<td>University</td>
<td>Strategic alliance</td>
<td>Joint venture</td>
<td>Franchising</td>
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<td>-------------</td>
</tr>
<tr>
<td>Cardiff University</td>
<td>No evidence found</td>
<td>N/A</td>
<td>No evidence found</td>
</tr>
<tr>
<td>Glyndŵr University</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>The former University of Wales Alliance</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td>Y</td>
<td>Industrial biopolymers knowledge transfer centre, a joint venture with Bangor University</td>
</tr>
<tr>
<td></td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised degree courses offered at regional Coleg Cambria in Wrexham and Deeside College.</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Licensing to Putra International College and Kirkby International College, both in Malaysia, for delivering the University’s degree courses.</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>No evidence found</td>
<td>N/A</td>
</tr>
<tr>
<td>Royal Welsh College of Music &amp; Drama (RWCMD)</td>
<td>Strategic alliance</td>
<td>See University of South Wales (USW), as RWCMD is part of the UWS Group.</td>
<td></td>
</tr>
<tr>
<td>Swansea University</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>St David’s Day Group Alliance</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td>Y</td>
<td>Welsh Institute for Sustainable Environments with Aberystwyth &amp; Bangor</td>
</tr>
<tr>
<td></td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised / validated degree courses are offered at the local Gower College Swansea (<a href="http://www.gcs.ac.uk/higher-education#!pnl_all">http://www.gcs.ac.uk/higher-education#!pnl_all</a>)</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Licensing to private International College Wales Swansea (ICWS), which delivers preparing courses for Swansea (<a href="https://www.icws.navitas.com/">https://www.icws.navitas.com/</a>)</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>No evidence found</td>
<td>N/A</td>
</tr>
</tbody>
</table>

St David’s Day Group Alliance

Joint venture with the British Airways to become the only University in the UK to offer European Aviation Safety Agency (EASA)’s qualification with an Honours degree, and the establishment of a new £3.3m Aerospace Centre
<table>
<thead>
<tr>
<th>Institution</th>
<th>Type</th>
<th>Y/N</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of South Wales (USW)</td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised / validated degree courses are offered at regional and other UK colleges (<a href="http://www.southwales.ac.uk/about/group/">http://www.southwales.ac.uk/about/group/</a>)</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Licensing to the University of Nicosia (UNIC) online for delivering its courses through online platform (<a href="https://unicaf.southwales.ac.uk/">https://unicaf.southwales.ac.uk/</a>)</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>Y</td>
<td>USW Group (Brand) includes the USW itself, Merthyr Tydfil College and the RWCMD</td>
</tr>
<tr>
<td>University of Wales Trinity Saint David (UWTSD)</td>
<td>Strategic alliance</td>
<td>Y</td>
<td>A two-year fast track BA (Hons) International Hotel Management with Marriott Hotel, combined academic campus based learning and practical training at the Hotel</td>
</tr>
<tr>
<td></td>
<td>Joint venture</td>
<td>Y</td>
<td>A joint investment with the Welsh Government in developing the University’s new £100m waterfront campus in Swansea</td>
</tr>
<tr>
<td></td>
<td>Franchising</td>
<td>Y</td>
<td>University’s franchised / validated degree courses are offered at various regional colleges, inc. Pembrokeshire College and Gower College Swansea</td>
</tr>
<tr>
<td></td>
<td>Licensing</td>
<td>Y</td>
<td>Licensing to London School of Commerce &amp; British School of Commerce (Sri Lanka), which deliver the University’s degree courses worldwide</td>
</tr>
<tr>
<td></td>
<td>Co-branding</td>
<td>Y</td>
<td>UWTSD Group (Brand) includes the UWTSD itself, Coleg Sir Gâr and Coleg Ceredigion</td>
</tr>
</tbody>
</table>
Finally, the fifth format of the co-opetition model is known as co-branding. Although this is a slightly less common co-opetition strategy (Ritala et al., 2016), it has been applied by two Welsh institutions, including the University of South Wales (USW) and the University of Wales Trinity Saint David (UWTSD). As listed in Table 2.5, the USW Group and the UWTSD Group respectively have a number of separate HE and FE institutions under their Group branding. Each institution is independent from each other, nonetheless shares the same brand name. This type of "married" HE and FE partnership is very effective in delivering university courses to a wider audience, and is already proven successful in reaching out to students in remote areas, who would not normally consider a HE course (Avis and Orr, 2015).

Co-opetition in HE is an innovative approach that creates an environment, in which HEIs can compete fairly with each other, whilst at the same time work together in agreed areas, share resources and expertise to achieve mutual benefits (Asaro, 2012). Stengel and Turocy (2015) suggest that the benefits from establishing such co-opetition models between universities can bring mutual growth, through the widened access of products and services, improved sales and marketing channels, as well as shared expertise and experiences.

More details on the development of co-opetition within the Welsh HE, its importance, and more importantly how such partnership can improve international students’ experience, will be studied and analysed in Chapter 4.
2.6 Summary of the Literature Review

By employing the respective marketing environment models, both the external and internal marketing environments for the UK and Welsh HE have been presented and evaluated, at global, national, industrial (macro) and organisational (micro) levels. Through this evaluation, it is evident that the Welsh HE sector is facing increasing challenges internally and externally. Nevertheless, there are still great opportunities and potential for international marketing expansion and of achieving higher international student intakes for Welsh institutions.

This chapter has categorised and compared the main marketing strategies that are widely used in promoting an organisation's influence in the market, raising organisation profiles and bringing in extra revenues. These strategies included competition, cooperation and the hybrid co-opetition approaches. By comparing the differences of these strategies and studying successful business examples, it was discovered that co-opetition is an innovative approach for international marketing with significant business advantages, and enhanced choices for consumers.

It appears there are some great benefits for Welsh and UK HEIs in adopting the co-opetition strategy. This helps them drive collaboration with other national and international institutions and achieve better outcome in recruiting international students and offer better services. Further to the theory study of co-opetition, the following chapters will therefore verify the applicability and models of co-opetition specifically to the Welsh / UK HE industry. Thereafter, it is aimed to develop and validate a fresh co-opetitive framework that could be applied by UK HEIs for developing sustainable collaboration and achieving better customer satisfaction.
3. RESEARCH METHODOLOGY

3.1 Introduction

This chapter evaluates the two most common types of research paradigms, which are the qualitative and quantitative approaches respectively, and discusses which method(s) would be suitable for this research. The underpinning theoretical framework and application of both research methodologies, as well as their suitability in relation to this research project are studied and compared. After that, the research questions are identified, which are also linked to the main research objectives. The techniques for collecting and analysing the primary as well as the secondary data are discussed. The justifications for choosing such techniques, the selection of data resources, the data collection design process and their technical limitations are addressed. Finally, the wider ethical considerations for this research project are addressed at the end of this chapter.

3.2 Research paradigms and methodologies

According to Davis et al. (2014), the variance in standards, individual preference, the difference in research aims and objectives, allocated timescale and limitation in budget, can greatly influence how the methodology is chosen. Thomas (2013) suggests that in science, engineering and medical fields, research is usually conducted through experiments and trials on a laboratory, industrial or clinical basis, so that the effectiveness, safety and application of any revolutionary inventions can be tested. In contrast, research for humanities and social sciences may involve archival work, survey studies and semi-structured interviews, to verify
innovative hypothesis and predict the changes of human and social behaviours (Emmel, 2013).

Nevertheless, according to Saunders et al (2015), despite the various forms of researches, their methodologies can be distinguished by the two predominant research philosophies, namely the positivistic and phenomenological paradigms (or commonly known as the quantitative research and the qualitative research respectively). Davis et al (2014) state that in general, qualitative research studies the definitions, descriptions, characteristics and meanings of certain objects, whereas the quantitative research produces quantifiable measurements and precise mathematical conclusions. A brief comparison between these two types of research approach is shown in Figure 3.1.

Figure 3.1 – Brief comparison between qualitative and quantitative research (Davis et al., 2014)
More specifically, a positivistic (or quantitative) approach is seen as a quantifiable and measurable investigation, through the application of mathematical techniques. Its aim is to translate empirical observations into numerical formats, for instance in percentages, numbers and statistics (Thomas, 2013). Collis and Hussey (2013) argue that quantitative research emphasises the facts and root causes behind human and social behaviors, rather than on the subjective state of the objects. By using a mixture of numerical and statistical methods, this type of research is to produce precise data, information, numbers, facts and quantifiable conclusions, commonly achieved through some large-scale sample studies, scientific experiments, simulations and computerised trials (Bryman and Bell, 2014).

In contrast, Dane (2010) and Bryman and Bell (2014) describe the phenomenological (or qualitative) research as subjective, humanistic and interpretive. It studies individuals’ understanding and personal explanation of human behaviors, and explores the rationales which have driven such behaviors. Thomas (2013) suggests that successful qualitative research could be carried out by collecting and analysing appropriately chosen participants’ frame of reference, which can be commonly obtained through in-depth interviews. Additionally, a number of other data collection methods, such as focus groups, panel discussions, observations from various texts, pictures, visual and audio materials, are also broadly utilised in qualitative research (Dane, 2010).

It is important to understand that each research paradigm has its limitations respectively (Emmel, 2013). Ritchie et al (2013) and Saunders et al (2015) criticise the quantitative research can sometimes be too simplistic and numerical to reflect the dynamic and changing environment. However, the qualitative research, which is largely drawn based on individuals’ understandings and experiences, is open for biases. As a result, to achieve a complementary
view, this research study chooses a mixture of both quantitative and qualitative methodologies. For the primary data collection, this research first collects quantitative data by using questionnaires, and then obtains qualitative insight knowledge into the research subject through in-depth semi-structured interviews with carefully chosen participants.

3.3 Research questions

Saunders et al. (2015) argue that all types of academic research should be led by the research questions, objectives and based on existing knowledge. As shown in Table 3.1, the research questions for this project have been linked to the key research objectives. This will enable the researcher to focus and carry out specific tasks to achieve these objectives through the different stages of this project.

Table 3.1 – Linking research questions with project objectives

<table>
<thead>
<tr>
<th>Main objectives</th>
<th>Research questions</th>
</tr>
</thead>
</table>
| ➢ Critically examine the competitiveness of the UK HE industry, by studying its immediate internal and external marketing environments. | ➢ What is the current marketing environment, both internally and externally, for the UK & Welsh HEIs?  
➤ What are the main factors impacting the competitiveness of the UK HE? |
| ➢ Undertake an in-depth review of relevant literature, with respect to co-opetition business strategies, and how these strategies have been utilised in improving customer experience. | ➢ What is co-opetition and why is it important for an organisation?  
➤ How has this been developed in the commercial sector and what are their main advantages?  
➤ What are the best business examples and how are they relevant to UK HE? |
| ➢ Apply the commercial co-opetition theory into the non-commercial UK HE sector, and testify its relevance and significance in universities’ development. | ➢ What are the existing practices of co-opetition in the UK HE sector, what are their benefits?  
➢ Are these examples of co-opetition relevant in HE settings and can they achieve better customer experiences? |
| ➢ Establish thorough understating of consumers’ (i.e. international students) behaviors in relation to UK HE, including their reasons to study in the UK, specific needs, challenges, expectations and actual experiences. | ➢ Why do they come to study here?  
➢ What are the barriers and challenges?  
➢ Is the current student care system working? If not, why?  
➢ What services and supports do they actually want from their HEIs? |
| ➢ Identify the best approach of co-opetition for UK HEIs and develop a UK HE co-opetition framework that can promote sustainable collaboration between UK HEIs and their stakeholder, as well as enhance the experiences of their international students. | ➢ What factors and areas are essential for UK / Welsh HEIs in order to develop co-opetition framework?  
➢ What extra or improved student services can be offered from this collaborative approach?  
➢ What are the views from the key stakeholders of UK / Welsh HEIs?  
➢ Will the consumers be satisfied with the new framework? How can this be proved? |

### 3.4 Selecting suitable data collection techniques

Secondary data is referred to as the information and literature that already exist; whereas primary data is generated and obtained through fresh and novel investigations and collections, such as by conducting interviews or questionnaires (Emmel, 2013). Bell and Waters (2014) suggest that there are many methods for collecting and analysing various forms of data. However, many successful researchers often combine primary and secondary approaches to achieve a more robust and rigorous outcome and to enrich the dimensions of new findings.
Saunders et al. (2015) also argue that both secondary and primary data play their individual but essential part to help establish a comprehensive understanding of the chosen research field, achieve the research aims and objectives, and to reach conclusions.

As such, this research will adopt a mixed approach for data collection and analysis, which includes a series of small case studies for secondary data collection, together with questionnaire and semi-structured interviews for primary data collections. Figure 3.2 outlines the data collection process map designed for this research. As can be seen the Figure, the case
studies focus on the status quo of Welsh HEIs, in terms of their collaboration development in Wales and internationally. The research then carries on to include two phases of primary data collections. The first part is the questionnaire exercise, which involves studying the expectations and experiences of consumers to Welsh HE, e.g. students and their parents. The second part is then the semi-structured interviews with participants from Welsh HE policy makers. The following sections will provide specific details about data collection techniques to this research, their advantages and technical limitations, as well as explaining how they are being utilised to achieve the research aim and objectives.

3.5 Stage 1: Secondary data collection (case studies)

3.5.1 The purpose

Secondary data, often referred to as the supplementary data, is abstracted from existing information and literature (Ritchie et al., 2013). The critical analysis of key secondary data is essential for this research, as it provides the foundation for any new discovery (Emmel, 2013). With respect to this study, the secondary data collection provides comprehensive knowledge and understanding of the application of co-opetition in relation to Welsh HEIs. This not only establishes the links between the co-opetition theories and the practical examples in the Welsh HEIs, but also directly addresses objective 3 of this project, to identify best practices of co-opetition in the Welsh HE sector.

The series of small case studies first attempt to establish whether or not the phenomenon of co-opetition strategy exists in Welsh HEIs. It brings examples of best practice in terms of
Welsh HE co-operation development. Each case study also describes the background, format and detail of such development and how the institutions have benefited from them.

3.5.2 Data sources considered

The secondary data for this research will be collected primarily from the most recent prospectuses from each of the nine Welsh HEIs published in 2016/17, together with the information and contents observed from their official websites as listed in Table 3.2. These combined data sources would provide information about individual Welsh institution, their latest collaboration developments in Wales, across the UK and overseas. Additional resources, such as government and other relevant organisations’ publications, journals, “grey” literature, newspapers and media reports would also be used as supplementary information.

Table 3.2 – List of Welsh HEIs websites to be analysed for this research

<table>
<thead>
<tr>
<th>Welsh HEIs</th>
<th>Official websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberystwyth University</td>
<td><a href="http://www.aberystwyth.ac.uk">www.aberystwyth.ac.uk</a></td>
</tr>
<tr>
<td>Bangor University</td>
<td><a href="http://www.bangor.ac.uk">www.bangor.ac.uk</a></td>
</tr>
<tr>
<td>Cardiff Metropolitan University</td>
<td><a href="http://www.cardiffmet.ac.uk">www.cardiffmet.ac.uk</a></td>
</tr>
<tr>
<td>Cardiff University</td>
<td><a href="http://www.cardiff.ac.uk">www.cardiff.ac.uk</a></td>
</tr>
<tr>
<td>Glyndŵr University</td>
<td><a href="http://www.glyndwr.ac.uk">www.glyndwr.ac.uk</a></td>
</tr>
<tr>
<td>Royal Welsh College of Music &amp; Drama</td>
<td><a href="http://www.rwcmd.ac.uk">www.rwcmd.ac.uk</a></td>
</tr>
<tr>
<td>Swansea University</td>
<td><a href="http://www.swansea.ac.uk">www.swansea.ac.uk</a></td>
</tr>
<tr>
<td>University of South Wales</td>
<td><a href="http://www.southwales.ac.uk">www.southwales.ac.uk</a></td>
</tr>
<tr>
<td>University of Wales, Trinity Saint David</td>
<td><a href="http://www.uwtsd.ac.uk">www.uwtsd.ac.uk</a></td>
</tr>
</tbody>
</table>
3.5.3 Justifications and technical limitations

A case study research methodology is defined as a comprehensive description and examination of a chosen theme, which could cover a wide range of subjects, such as an individual, a group, an organisation, any professional or government body, or any other establishment. According to Ritchie et al. (2013), a case study research method is particularly valuable for testing theories by applying them in practical situations. It is a quick and easily understandable approach to determine whether or not theoretical models and assumptions exist and work in the real world. A case study can be relatively straightforward to conduct, through the analysis from existing data, observations, reports and literatures. It often does not require any fresh data collection or actual contact with the studying subject (Krippendorff, 2012).

Callegaro et al. (2014) suggest that a case study research tends to focus on a single but highly relevant case, rather than spending various resources and time to try to cover some wider population. Case studies are often associated with selective collection and filtering from a large amount of data, usually specific rather than generic. This then provides labour effectiveness. It is also known for its flexibility among many other research tools, as it is applicable and can be used to analyse many different types of materials, literatures, data and other sources of information (Bryman and Bell, 2014). It can be used in both qualitative and quantitative researches and easily adaptable with other research methodologies, to achieve better data finding and analysis (Schreier, 2012).

Through the viewing of the nine Welsh HEIs’ prospectuses and websites, this process aims to quickly identity and select examples and cases of co-opetition. By using a series of brief case studies focusing on the Welsh institutions themselves, this technique offers a straightforward
link between the theoretical phenomena and assumptions of co-opetition and practical Welsh HE cases. Another important advantage of using case studies is that it simplifies complex theories and concepts (Emmel, 2013). It provides a valuable alternative and complementary approach to traditionally statistically focused research studies (Bell and Waters, 2014).

Nevertheless, the case study research approach has been criticised by certain academics (Bryman and Bell, 2014) as too narrative and too limited in certain fields. It is restricted since it normally only focuses on a single study subject. The data collected cannot necessarily be applicable to a wider setting. Through a case study, it is sometimes difficult to bring clear cause-effect conclusions and to generalise convincing outcomes from a single case. It carries the risk of being biased in the way the data is collected and interpreted. In addition, the analysis conclusion may also be incomplete or misleading, limited by the availability, quality and credibility of the chosen material. (Ritchie et al., 2013). Bell and Waters (2014) suggest that case study therefore becomes more reliable and powerful when it is used in conjunction with other research methods, for examples survey studies and interviews.
3.6  Stage 2: Primary data collection (Questionnaires)

3.6.1  The purpose

According to Callegaro et al. (2014), a questionnaire is a frequently utilised research tool for gathering and documenting information, which typically analyses the marketing popularity, the trend and pattern on a particular matter. It is most commonly composed by a series of questions, with additional space and instruction added for these participants who wish to put their own comments. Thomas and Heck (2011) suggest that it is important for the questionnaire to have a definite purpose to reflect the objective(s) of the research. All the questions involved should also be straightforward and easily understandable, in order to avoid misunderstanding or misinterpretation from participants to participants. The recommended format is single or multi choice(s) type of questions.

With respect to this project, as listed in Figure 3.4 (section 3.2), the questionnaire exercise is the first phase of the primary data collection. It is set to be consumer oriented, i.e. Chinese students and alumni from Welsh universities and HEIs. The aim is to discover and understand consumers’ needs, their expectations, personal experiences and suggestions for both the Welsh HEIs in which they are/were studying at and for the Welsh HE in general.

3.6.2  Questionnaire design

In order to establish the best understanding of Chinese students' (i.e. the consumers) behaviours, their needs, expectations and personal experiences from the Welsh HE (i.e. the product), the questions are designed to link closely to their day to day studies, their living, university and social service needs and satisfaction from their personal experiences in Wales.
By doing so, it can ensure the answers from respondents can be relevant to this research and useful for the data analysis. In addition to these questions that can lead to factual answers, such as gender, age, levels and subjects of studying etc, the questionnaire also covers opinion-based questions to gather information to reflect views on an individual basis.

As a result, this questionnaire is designed to consist of the following three sections, to cover single choice questions (for collecting factual and basic personal information), multiple choice questions (focusing on studying experience in Wales), and thirdly, opinion based questions (for gathering information on their expectation and suggestion for Welsh HE). Each section is made up of 10 to 15 questions and has a different objective in relation to this data collection exercise. The full list of the questionnaire and the objectives for each section are given in Appendix 1.

**Section 1: single choice questions (factual and basic information)**

The aim of this section is to gather respondents’ basic information, including gender, age group, academic and professional background, the length of their stay in Wales and the length of their course at their chosen Welsh institution. This section consists of several single choice questions, aiding completion of the overall questionnaire.

**Section 2: multiple choice questions (studying experience in Wales)**

Through this section, the aim is to gather information, in order to determine the most important factors that led to their decision to choose to study in Wales and to study at their current university. It is also to discover the channels they have used and the advice they have taken, during their decision-making process. It also asks respondents to list the biggest challenges for them whilst studying in Wales, as well as the specific help or support they
need in order to complete their courses. This section is presented in 10 multiple-choice questions, which may require some thinking before the answer(s) could be selected by the participants. Section 2 also covers recruitment and enrollment experiences for these students.

Section 3: opinion based questions (expectation and suggestion for Welsh HE)

The third section is to collect personal expectations and suggestions from respondents to reflect their studying experiences in Wales in general and towards their universities. Respondents are asked about their opinions through 10 close-ended questions and need simply mark each question by choosing from a five-point Likert scale, i.e. “strongly agree”, “agree”, “neither agree or disagree”, “disagree” and “strongly disagree”. Again, the primary focus is on their personal recruitment process and experience, the strengths and weaknesses from what their universities have offered for international students, and what would their universities do more to improve their satisfaction.

Appendix 1 outlines the details of the questionnaire designed for this research, together with the format and the full list of questions. The questionnaire is translated and provided in both English and Chinese languages. This can encourage to maximise the response rate, as well as to avoid any misinterpretation of the questions by some participants. In addition to the conventional paper based (hard-copy) questionnaires, this research also adopts electronic and online based techniques to maximum the efficiency, reduce the cost and outreach wider audience both in Wales and China. These include converting the questionnaires into web link and mobile version formats so that they can be sent to wide audience by emails and text messages. The distribution channel also utilises social media, such as Facebook, Twitter, as well as their Chinese language equivalent, Renren and Weibo, which in total have over 700 million users in China (Sina News, 2015).
The researcher has also converted the questionnaire into web based and mobile app based formats, in both English and Chinese languages. A snapshot of the website and mobile app versions of the questionnaire is displayed in Figure 3.3. As part of the data collection effort,
an email request to participate the survey study was sent to the International Offices at all the eight Welsh Universities and the Royal Welsh College of Music and Drama (RWCMD). The email asks the relevant International Office to forward the survey invitation, with a participating web link, to their Chinese students at their institution. A copy of the email is attached in Appendix 2.

In addition, Cardiff Met also provides its staff and students with free access to the Qualtrics software package, which is an effective tool to create, distribute and analyse online surveys. With this software, the entire questionnaire with all the questions, including the Chinese language translations, is transferred to the digital online format in Qualtrics. This software generates a web link, which is distributed to the target audience via emails, mobile phones and social media. Once the survey achieves the targeted response rate, the researcher can choose to generate a detailed report with statistics, figures or graphs for each question from the survey. This report can then be used for the data analysis.

### 3.6.3 Sampling and selection strategy

Since this research is primarily focused on Welsh HE marketing in relation to the Chinese market and student recruitment from China, the consumers for the Welsh HEIs can therefore be understood as current Chinese students who are studying at Welsh HEIs, as well as these ones who have completed their studies and graduated from their Welsh institutions. To gather a reflective view of the Chinese students studying and living experiences in Wales, this research plans to attract as many as possible Chinese students across Wales to take part in the questionnaire exercise. They can include both undergraduate and postgraduate students, as well as graduates who have already completed their studies.
After the questionnaire was designed and approved by the supervision team, an invitation to participate, which contains the link for the online questionnaire, was sent in July 2016, to all eight Welsh universities and the RWCMD’ international offices and their relevant student service departments. The questionnaire invitation is given in Appendix 2. The questionnaire was also posted in some of the most popular Chinese students’ social media sites, such as WeChat, Weibo and Renren, with an open invite for Chinese students in Wales to participate. The data collection lasted for six months from July 2016 to January 2017.

There were in total 136 recorded responses over a period of six months, with 130 of them (95.6%) being completed online or via a mobile device, and the remaining six responses (4.4%) from printed paper format. After verification, 124 out of the total 136 responses are validated to be genuine and sufficient, giving a confidence level of 91%. As such, the answers from these 124 responses were selected for the data analysis. According to the Chinese Embassy London (2016), excluding FE students, there are currently 2,100 Chinese students enrolled at degree and above level HE courses in Wales. The response rate of 124 represents 6% of the total Chinese student population in Wales.

Bryman and Bell (2014) argue that the larger the sample size, the more reflective the research outcome would be. It would be ideal if more Chinese students had responded to the survey. However, due to the limited timescale given for this research, it was impossible to reach out each one of the Chinese students in Wales. However, there have been larger scale studies, conducted by the British Council (2016), the UKCISA (2016) and the Chinese Embassy (2016), involving 600 to 1,500 Chinese students studying in other parts of the UK. The findings from this questionnaire exercise will be benchmarked with the wider UK level
studies. During the data analysis stage, it will also discuss the similarities and/or discrepancies between this questionnaire study and other studies.

3.6.4 Justifications and technical limitations

The questionnaire is one of the most popular research tools, which has been used extensively in marketing, commercial, academic and many other types of research (Ritchie et al., 2013). Some researchers (Thomas and Heck, 2011) believe questionnaires are extremely effective and efficient tools for collecting a large range of information and data, although some argue that the quality of data collected varies greatly depending on the personal experience and knowledge of the individual respondents (Davis et al., 2014). It is highly recommended that a questionnaire should be used in conjunction with other data collection techniques in order to achieve a comprehensive evaluation of the research subject (Bryman and Bell, 2014).

Its key advantages include cost effectiveness and the ability to reach simultaneously a large number of people covering a wide geographic area. It is also a standardised approach, in which each participant gets exactly the same series of questions. It can produce very straightforward data analysis, as the responses can be standardised, as well as can be capable of covering a large number of issues in an efficient way. Anonymity is also a key part of a questionnaire, which could promote the rate of response and encourages the participant to freely express their genuinely held opinions (Thomas and Heck, 2011 and Davis et al., 2014).
3.7 Stage 3: Primary data collection (semi-structured interviews)

3.7.1 The purpose

According to Ritchie et al. (2013), a semi-structured interview is a qualitative research technique that has been broadly used to collect data involving participants sharing their opinions and views on a chosen subject. The interviewer (researcher) normally sets up a theme by preparing a set of open-ended questions, which will allow the respondents to give specific answers. Based on these answers, the researcher could then discuss them further or even raise new questions that he/she may not have considered prior to the interview. Therefore, it is not necessary to design all the questions in advance. Conversely, many questions can be created throughout the interview, giving both parties the flexibility to explore and discuss details of certain issues. It is two-way communication (Emmel, 2013).

The first and second stages of data collection and analysis, i.e. the brief Welsh HE case studies and the questionnaire, are aimed to evaluate the current status of co-opetition development in the Welsh HE sector and understand consumers’ needs respectively. After such analysis, the semi-structured interview then focuses on policy and decision makers, as well as key senior stakeholders of Welsh HE, to discover the best solution to meet consumers’ expectations and determine a sustainable strategy for marketing and student recruitment in China. During the semi-structured interviews with the relevant experts in UK (Wales) and China HE, the researcher plans to identify examples of best practice in both countries in terms of international marketing and student recruitments.
3.7.2 Interview design

The list of questions is prepared in advance, based on the co-opetition framework identified and discussed in Chapter 2.4. A brief introduction of the theory which is used for this research, i.e. international marketing and co-opetition, is to be given to the interviewees at the beginning of each interview, so that they can have a basic understanding of the theme and the technical term. Following the questionnaire exercise, where international student recruitment process at Welsh universities has been analysed, the semi-structured interview is then to address the issues and suggestions which are identified by the students, with key decision makers and senior stakeholders of the Welsh HE sector.

This is therefore the most important part for primary data collection. There are 11 questions designed in this section. The interviewer plans to guide the interviewees to first acknowledge the existence and importance of co-opetition in their organisations. It then explores if there is any specific co-opetition partnership between their institution and their counterparts in Wales and in China. These questions are also linked with the feedback and suggestion gathered from the previous questionnaire exercise. Expertise and opinions are also to be asked to the interviewees, on how their institution might benefit from strong collaborations with Chinese universities, hence to achieve better satisfaction for their Chinese students.

These 11 questions were designed as open-ended questions, which give the respondents the flexibility to freely express their own opinions and add more information. After the secondary data analysis (which analyses the forms and applications of co-opetition within the Welsh HE sector), the assumption is that a number of Welsh HEIs would already have established some sort of partnerships with Chinese universities. For this semi-structure interview, fundamentally, it is to test whether or not the strengthened “co-opetition framework” between
Welsh and Chinese HEIs could be accepted and established by Welsh institutions, in relation to Chinese student recruitment.

The full list of questions for the interview, together with the interview procedure, is given in Appendix 3. To maximise efficiency and reduce unnecessary cost, interviews will be conducted based on face-to-face, telephone, Skype, webcam or smart phone techniques, depending on the preference and availability of the interviewees.

### 3.7.3 Sampling and selection strategy

Participants for the interviews are selected based on their relevant experience in the Welsh and Chinese HE sectors, as well as the knowledge and insight they could bring into this research. It will involve relevant experts and officials, from governing bodies, HE authorities, independent organisations and HEIs, in both Wales and China. For the purpose of collecting high quality first-hand data, this project plans to invite a sufficient number of participants, ranging from people who have direct knowledge of international and particularly Chinese students (either through teaching, student service or recruitment process), to these ones who have political, diplomatic and governing experiences with promoting Welsh (or UK) HE to the Chinese market.

It is also worth reiterating that the core of a co-opetition partnership is its value net framework, which defines each market (game) is composed by five interdependent players, including customers, competitors, suppliers, complementors and organisations themselves (Brandenburger and Nalebuff, 2002). By applying the theory, the interviewees can also be grouped to represent these five players in the value net framework. The interviewees are experts, officials and academics mainly from HE governing bodies, authorities, HEIs and
independent HE organisations etc from Wales (and UK). Table 3.3 lists the ten different types of interviewees chosen for this research study and their corresponding roles in the co-opetition value net framework.

Table 3.3 – List of targeted interviewees and their organisations

<table>
<thead>
<tr>
<th>#</th>
<th>Interviewee position</th>
<th>Organisation</th>
<th>Role in Co-opetition framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International Recruitment / Marketing Officer</td>
<td>Various Welsh universities</td>
<td>Organisations / Competitors</td>
</tr>
<tr>
<td>2</td>
<td>International Students Alumni Officer</td>
<td>Various Welsh universities</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lecturer with close contact with Chinese students</td>
<td>Various Welsh universities</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Academic with international HE collaboration experience</td>
<td>Welsh or UK universities</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>International Development Official</td>
<td>Welsh / UK Government</td>
<td>Complementors</td>
</tr>
<tr>
<td>6</td>
<td>Higher Education Official</td>
<td>Welsh / UK Government</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>International Development Officer</td>
<td>Chinese HEI which is in partnership with UK HEIs</td>
<td>Suppliers</td>
</tr>
<tr>
<td>8</td>
<td>Education Agent Official</td>
<td>Chinese education agent recruiting for UK HEIs</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Chinese Student Union / Society Representatives</td>
<td>Various Welsh universities</td>
<td>Customers</td>
</tr>
<tr>
<td>10</td>
<td>Chinese Alumni Group</td>
<td>Various Welsh universities</td>
<td></td>
</tr>
</tbody>
</table>

Regarding the role of HEFCW, this research study has adopted and analysed a series of annual reports, namely “Higher Education for the Nation (Wales)”, commissioned by the HEFCW from 2015 to 2017. These reports cover the most significant and recent collaboration developments between universities in Wales, the contributions the Welsh HE sector makes for the whole nation, the reforms agenda the funding council sets for Welsh universities, as well as the insight into the challenges facing this sector, and the plans of
delivering a sustainable future for Welsh HE (HEFCW, 2015; HEFCW, 2016 and HEFCW, 2017). In addition to these annual reports, a number of other publications from HEFCW, in relation to university structures and funding arrangements, are also utilised as important sources of references for this research.

More specifically, the HEFCW is a Welsh Government sponsored body established in 1992, whose primary role is to administer and distribute funds given by the Welsh Government to universities in Wales. It also funds a small number of HE course at FE colleges (Welsh Government, 2017). It regulates institutions’ fee levels and access plan for domestic (UK origin) students, scrutinises their teaching and research performance, and monitors their financial affairs (HEFCW, 2017). Although HEFCW plays a significant role in Welsh universities’ domestic development and home student recruitment through its funding and finance arrangements, HEFCW has limited influence or involvement in universities’ international student recruitment and overseas development (HEFCW, 2016). In general, universities in Wales (and in the UK) manage their international development and student recruitment, including setting the fees for international students, independently from any governing bodies (Universities UK, 2016).

The input from HEFCW, through their reports and publications, has always been included in each stage of the secondary and primary data collection and analysis processes. The main focus for this DBA research is however related to student recruitment and collaboration from overseas, which are different from the roles and function of the HEFCW. The chosen interviewees, as shown in Table 3.3, have more specific knowledge and expertise in this field, hence are more relevant and more suitable for this research study.
3.7.4 Justifications and technical limitations

Semi-structured interviews are an interactive process, in which the interpersonal and communication skills of the researcher can impact the outcome and success of the interview considerably (Ritchie et al., 2013). Fundamentally, it requires thorough preparation by the interviewer, who will take the leading role during the interviews. The objective is to gain respondents’ knowledge on the chosen subject in great detail and depth, rather than judge or comment on what is given from the interviewees. Instead of influencing the participants, the researcher should establish a friendly and relaxed environment, so that the respondent could talk freely about their opinions on the subject (Callegaro et al., 2014).

In addition, a large amount of data can be generated and collected in one interview. The interview itself can also be very flexible in terms of interview style, formats of questions and the interview channel, such as through face-to-face conversations, telephone and webcam. Moreover, it has the capability for both parties to raise and discuss fresh ideas and issues, which may not be considered previously, during the “live” interview (Emmel, 2013). Callegaro et al., (2014) also suggest that complex questions can be easily discussed and clarified during the interviews, which are easily recordable and give the researcher the opportunity to re-access, review and analyse the answers at any time.

Nevertheless, some critics (Bryman and Bell, 2014) argue that the honesty of participants and their answers may not be guaranteed, which would directly affect the quality of the data collected. The outcome of the interview is largely dependent on interviewer’s interpersonal and communication skills. The interviewer may unconsciously give cues or signals, which could then mislead the interviewees to give wrong answers. According to Thomas and Heck (2011), open-ended style of questions may be difficult to analyse and may lead to answers
that are not directly relevant to the research. It is also difficult to compare answers between
different participants or establish any trend, due to the differences between the individual
respondents and their style of answers. More importantly, it can be time consuming and
expensive, especially when travelling is involved (Ritchie et al., 2013).

3.8 Primary data analysis techniques

The primary data for this research is collected through both the qualitative and quantitative
research methodologies. The assessment and analysis of the data collected needs to be
conducted by appropriate techniques. In general, quantitative data is often presented in
statistical, numerical, scientific and precise formats, for example as a percentage, number and
ratio (Callegaro et al., 2014). Software, including Microsoft Excel, DataMelt, R and IBM
SPSS Statistics, is widely utilised in quantitative and scientific researches (Collis and Hussey,
2013). In contrast, the data from qualitative research can be more difficult and challenging to
analyse, largely due to its descriptive and interpretive natures (Davis et al., 2014).
Nonetheless, a popular qualitative data analysis software package, named NVivo, is available
and commonly used by social and qualitative researchers. It is a specifically designed tool for
analysing rich text-based data and multimedia information (Emmel, 2013). This section
discusses the techniques that are used for the analysis of primary data, collected from the
questionnaires and the semi-structured interviews respectively.
3.8.1 Quantitative data analysis

Quantitative data for this research is collected from the questionnaire exercise, which targets Chinese students from different Welsh universities. A number of popular statistical analysis tools are considered for evaluating the quantitative data collected. The data collected will be presented by descriptive statistics. The online Qualtrics questionnaire and analysis tool (described in section 3.6.3) and Microsoft Excel are used to analyse such data. Figure 3.4 briefly explains the steps and procedures for the quantitative data collection and analysis.

Figure 3.4 – Flow map of quantitative data analysis
As can be seen in Appendix 1 (the full list of questions for the Questionnaire), all the questions are designed to lead the respondent to give a specific answer, either through single or multiple choices (Section 1 and 2 of the questionnaire), or through Likert scale tables (Section 3). The quantitative data collection does not involve any open-ended questions. Therefore, most of the answers collected would be classified as descriptive, meaning the data would not contain any emotions or feelings from the respondents. In theory, descriptive quantitative statistics is often used to determine the main characteristics and trend of a collection of data and to present the level of measurements collected or observed into numerical order (Dane, 2010).

As well as using Qualtrics and Microsoft Excel for data standardisation and graphic analysis, the descriptive statistics analysis tool from the IBM SPSS package is also utilised. This tool allows the producing of statistical cross tabulation, illustration, frequency chart and easily understandable ratio and numerical comparison (Callegaro et al., 2014). Some distinct characteristic associated with descriptive statistics is the measures of central tendency, such as the mean, median and mode of the sample (Thomas and Heck, 2011). These features from the questionnaire responses will also be analysed with IBM SPSS. The aim is to interpret the large amount of collected quantitative data into simple measures and summaries.
3.8.2 Qualitative data analysis

Qualitative data analysis can be subjective and interpretive, focusing on understanding individuals’ personal expertise and experiences on the study objective (Emmel, 2013). The qualitative data for this research is collected from the semi-structured interviews with 11 identified participants within or relevant to the Welsh HE sector (details see Table 3.3 in Section 3.7.2). The interviewer will ask each interviewee for their permission to record the whole interview for data analysis.

There are a wide range of qualitative data analysis software available to segment, code and categorise the data collected. The NVivo software package, has been chosen for this research analysis, because of its widespread use for research across a variety of academic disciplines (Davis et al., 2014). According to Tabash (2012), NVivo is easy to use for handling rich text records gathered from interviews. Additionally, it is known for its effectiveness to facilitate interactive enquires and sampling. The integrated data collected from qualitative research can then be linked, arranged, shaped and modeled into meaningful outputs. The process of the qualitative data analysis for this research is shown in Figure 3.5.
Figure 3.5 – Flow map of qualitative data analysis

1. Conducting semi-structured interviews (with 11 participants)
2. Recording responses / answers, inc. taking notes
3. Documenting transcripts from interviews
4. Organising and coding the transcripts into NVivo software
5. Software analysis of transcription, inc. highlighting main issues & trending
6. Producing descriptive data analysis results
7. Discussing and verifying answers and conclusion
3.9 Moral and ethical considerations

Wiles (2012) argues that any research or experimental activities that involve participants, such as humans, animals or some other subjects, have the potential risks of causing ethical, social, environmental and even sometimes legal concerns and complexity. Research ethics therefore become a crucial part of any research. Ritchie et al., (2013) argue that it is the moral responsibility of the researcher and their research institution to put in place relevant assessment to ensure the appropriateness of their research activities. Any negative effects and risks to the participants and studying objects should also be carefully considered and avoided where possible (Bell and Waters, 2014).

This research strictly follows the Guideline of Research Ethics instructed by Cardiff Metropolitan University. In addition, each stage of the research is also under the direct supervision of the research director and supervisors from Cardiff School of Management. The School’s reference and file number for the ethics approval for this research is 201409123. The approval documentation is presented in Appendix 4. Research activities that involve third party individuals or organisations, including the questionnaire exercise and semi-structured interviews (for the primary data collection and analysis), are subject to prior ethics approval from the relevant organisations and from the University’s Research Committee.

Two common ethical concerns, associated with social science research involving participants, are anonymity and confidentiality (Thomas, 2013). For this research, these two concerns are likely to occur at the primary data collection stage, i.e. the questionnaire and the interview. This research study is anonymous as the names of all participants will not be exposed or given to any third party. To protect privacy and confidentiality, the questionnaire form will
not ask for any identification information or personal details. The respondents for the semi-structured interviews will be referred to by their job titles rather than their names. A “Participants Information Sheet”, as listed in Appendix 5, which outlines the purpose of this study and how the data is going to be used, is also prepared for the participants. Each participant makes a voluntary decision on whether or not to take part in this research.

The format of questions and the contents, for both the questionnaire and the interview, will also be discussed and agreed with the research supervisors beforehand. Additionally, if the participant feels uncomfortable of answering any question, she/he could simply tell the interviewer, and the interviewer shall move on to the next question. Participants can end the questionnaire / interview and withdraw from the study at any stage of the process should they wish to do so.

It is worth reiterating the considerable cultural difference between the UK and China. The language barrier, different religious beliefs and political sensitivity on certain topics may also bring some challenges and obstacles especially when contacting government organisations and officials for the semi-structured interviews (full list given in Table 3.3 in section 3.7.2). The researcher is a fluent Chinese and English speaker, who also has great personal insight and knowledge of both countries and their government and political structures. This project can therefore be conducted efficiently in both English and Chinese, with minimal misinterpretation of data.
3.10 Reliability and validity

Collis and Hussey (2013) state that reliability is an important element that could determine whether a research is successful. Generally speaking, reliability means the repeatability and consistency of the research. In other words, the research outcome and results generated should not be changed if it is done at a different time, in some different circumstances or by different researchers. Reliability is often easier to achieve in quantitative research, as it normally applies scientific, quantifiable and positivist research approaches (Bryman and Bell, 2014). In qualitative research, reliability could sometimes be compromised due to the large difference between individuals and their different experiences (Dane, 2010). Several other factors, such as human and systematic error, misunderstanding, language misinterpretation and observer's misjudgment, could also impact the quality and reliability of data collection (Ritchie et al., 2013).

Due to the limited time scale of this research, it would be extremely difficult to conduct the primary data collection exercise more than once. The questionnaire sample study attempts to attract as many as possible Chinese students who have direct experiences of the Chinese and Welsh HE systems. The scale of the sample will generate quality and reliable data for the research analysis. Regarding the semi-structured interview, the carefully selected participants are from the most relevant organisations and with suitable knowledge. All the questions will also be thoroughly designed and discussed with the research supervisors, to ensure the data is as comprehensive as possible.

According to Collis and Hussey (2013), the term validity in social science research is referred to as the trustworthiness and accuracy from the research findings that reflect the phenomena
of this study. This could also be understood as the dependability and credibility of the research work. Human errors, inaccurate measurements, inappropriate calculations and inefficient samples could affect research validity. Nevertheless, Davis et al., (2014) argue a proper preparation, clear focus, interactive engagement with participants and conformability are effective methods of achieving better validity through the data collection practice.

It is also common that the researcher may interpret the findings and make judgment solely from her/his personal point of view. That individual’s experience, knowledge in this field and personal skills may cause bias to the analysis; and hence influence the overall validity (Bryman and Bell, 2014). A popular solution to this problem is to discuss the data with peers and supervisors to gain multiple perspectives and verify the true meanings from responses (Emmel, 2013).

Another feature of this research is that both the quantitative and qualitative methodologies are adopted, through the application of three distinctive research techniques, namely the case studies, questionnaires and semi-structured interviews. This combination of research techniques is suggested by some researchers (Ritchie et al., 2013; Thomas, 2013) as “triangulation” approach, which means different types of data can be collected and cross-reference checked. This can also bring the advantages from both research methods and improves the reliability and validity for the data collected.
4. SECONDARY DATA ANALYSIS (CASE STUDIES)

4.1 Introduction

This chapter analyses the information and data collected from the websites, university prospectuses and marketing publications from all nine Welsh HEIs, as listed in section 3.5.2. It attempts to capture the existence and elements of co-opetition in the Welsh HE sector, as well as between Welsh HEIs and with their partner FE colleges. The application of the five most common models of co-opetition discussed in Section 2.5.5, including strategic alliance, joint venture, franchising, licensing and co-branding, is to be verified from the Welsh HE perspective. The aim for this secondary data analysis is to link the theory and these five models of co-opetition with practical Welsh HE examples, as well as highlight the importance of developing such strategy in the Welsh HE sector.

The significance and necessity for adopting such an approach in this sector, with respect to Welsh institutions’ international development, overseas marketing and student recruitment are also discussed in this chapter. The secondary data collection and analysis are a crucial part of this research, as it provides essential understanding for the current co-opetition development within Welsh institutions.
4.2 Welsh universities’ strategic alliances

a) Case study (1 of 2) – The St David’s Day Group

As identified in section 2.5, the strategic alliance approach of HE collaboration is employed by all Welsh Universities. Different institutions interpret this type of co-opetition in different forms and standards, varying from forming partnerships with private enterprises and other HEIs, to alliances between two or multiple institutions. Arguably, the biggest and most influential University Alliance in Wales is the St David’s Day Group of Universities, which is comprised of the big five institutions in Wales, which are Aberystwyth, Bangor, Cardiff, South Wales and Swansea Universities (St David's Day Group, 2016).

![Image of the St David's Day Group of Welsh universities]

Figure 4.1 – The St David’s Day group of Welsh universities

This Group was established on St David’s Day on 01 March 2009. Geographically, its member institutions cover almost all regions of Wales (see Figure 4.1 for their locations across Wales). The five universities claim to be research orientated, and jointly they represent over 95% of the HE research activities in Wales. Nearly 110,000 students, making up 73% of all Welsh HE students, are studying at these universities (HEFCW, 2016). The combined
annual turnover from this Group is as high as £1 billion. The wider economic contributions in the local and regional communities, direct and indirect jobs created as a result of the existence of these universities, and the great accessibility of HE courses to the nation, are remarkable (HEFCW, 2016).

What is worth mentioning is that with the shared expertise, resources, funding, teaching and research facilities, this universities group has been able to establish five national research centres in Wales since 2010. They include Wales Institute of Cognitive Neuroscience (WICN), Research Institute of Visual Computing (RIVIC), Low Carbon Research Institute (LCRI), Wales Institute of Mathematical and Computational Sciences (WIMCS) and the Wales Institute of Social and Economic Research, Data and Methods (WISERD). In addition four notable social and industrial projects, namely the High Performance Computing Wales (HPC Wales), Advanced Sustainable Manufacturing Technologies (ASTUTE), Climate Change Consortium (C3W) and Wales IP (Wales Intellectual Property Collaboration Project) have been launched as a result of the collaboration from this Group (St David's Day Group, 2016).

Operating as a strong and united HE voice, this strategic alliance has quickly gained recognition from businesses and investors. Member universities are able to attract millions of pounds of investments, as well as highly skilled research professionals and students (THE, 2016). According to Wales IP (2016), the St David's Day Group is seen as a one-stop destination for academics, students, investors, government bodies and private companies, who can build up reliable academic and commercial partnerships, as well as gain access to Wales’ leading research facilities and technologies, through this group.
b) Case study (2 of 2) – The former University of Wales model

Once representing all HEIs and university students and graduates in Wales, the University of Wales (UW) was established under its Royal Charter in 1893. It was the first, the oldest, the largest and once the only university in Wales, and one of the very first Welsh national institutions. The establishment of the UW has been seen as one of the greatest milestones in the Welsh political and national movement, which over the past two centuries has played a key role towards Welsh devolution and national identity recognition (Mackie and Hamilton, 2015). As can been seen from Figure 4.2, under its previous federal and then confederal structures, all HEIs in Wales, with the exception of the former University of Glamorgan, were once constituent, accredited or validated members of the university (University of Wales, 2016). A number of these institutions have ceased existence in recent years following mergers, and some have changed their names (Mackie and Hamilton, 2015).

![Figure 4.2 – The former University of Wales structure before 2004](image-url)

(University of Wales, 2016)
Although students were enrolled independently and were studying at different institutions across Wales, their degrees were centrally awarded by the UW. Once with over 120,000 students at HEIs in Wales, in the UK and at its 130 accredited HE centres across the globe, the university was the most powerful institution in Wales and the second largest university in the UK until 2011, when the university decided to cease validating courses in the UK and abroad, and to merge with two other Welsh universities (BBC News, 2015). Despite the issues surrounding the UW in recent years, the former federal UW model, which was the first of this kind in the Welsh HE history, played a significant role in shaping and developing the HE system in Wales throughout its existence over two centuries since 1893 (THE, 2016).

Under the university framework, the four founding colleges, including Aberystwyth, Bangor, Cardiff and Swansea, were able to cooperate with each other in teaching, research, training and many other areas, which allowed them to develop and create a strong and proud HE brand for Wales (University of Wales, 2016). The joint and centralised UW’s approach of HE development also reinforced and enriched the presence of HE in each key region within Wales. From the 1990s, the university reorganised itself with a new two-tier confederal structure, which allowed additional independent colleagues and HEIs from Wales to join the UW umbrella (BBC News, 2011). The new confederal approach not only gave member institutions great autonomy, but also enabled them to expand in their own right, whilst distinctive features in HE delivery and research were developed by different HEIs to suit their regional needs (Mackie and Hamilton, 2015).

Table 4.1 lists the main benefits of co-operation and whether or not these benefits are evident in the Welsh HE case studies, i.e. the St David’s Day Group and the former University of Wales Alliance. It is clear that all these claimed benefits are relevant to these two case studies.
Through co-opetition, both alliance groups had invested extensively in research and innovative initiatives in multiple sectors, supporting businesses across Wales (HEFCW, 2016). Collaboratively, the St David’s Group of universities have become the leading force in research associated with advanced engineering and manufacturing, digital economy, health and biosciences (Welsh Crucible, 2016). In addition, they have been working in cooperation driving a number of environmental, health and social service projects, such as natural environment sustainability development for Wales, primary healthcare service and planning, and social care and wellbeing researches (Wales IP, 2016).

Table 4.1 – Benefits of co-opetition in Welsh HE case studies (strategic alliance)

<table>
<thead>
<tr>
<th>Claimed benefits of co-opetition (Kotler and Armstrong, 2015 and Leitao et al., 2014)</th>
<th>Welsh HE co-opetition model: Strategic Alliance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The St David’s Day Group</strong></td>
<td><strong>University of Wales Alliance</strong></td>
<td></td>
</tr>
<tr>
<td>Promote collaboration and bring bigger impact in the market</td>
<td>Evident</td>
<td>Evident</td>
</tr>
<tr>
<td>Help businesses respond more quickly and effectively to challenges and opportunities</td>
<td>Evident</td>
<td>Evident</td>
</tr>
<tr>
<td>Allow partners to share resources and gain wider access to resources from others</td>
<td>Evident</td>
<td>Evident</td>
</tr>
<tr>
<td>Create a bigger player that brings greater influences and competitive advantages in the market</td>
<td>Evident</td>
<td>Evident</td>
</tr>
<tr>
<td>Improve level of creativity and innovation, offer stronger financial support for new product and service developments</td>
<td>Evident</td>
<td>Evident</td>
</tr>
</tbody>
</table>

On the other hand, the UW brand and degree was for a long time the most valuable asset in the Welsh HE. The university itself played a dominant role of transforming the entire HE system of Wales into its current modernised shapes (BBC News, 2014). It is also worth pointing out, through history, UW’s member institutions have had a tradition of working together to achieve better teaching standards, quality in HE, institutional regulation and legislation setup, brand creation, social and student services. Many former members have
maintained close ties with each. Through collaboratively working together between all member institutions, UW helped build up a huge level of confidence for the Welsh HE sector as a whole and created a sense of Welsh national higher education, when facing completions with universities in other parts of the UK and globally (University of Wales, 2016 and BBC News, 2015).

4.3 Joint ventures between Welsh HEIs

As explained in section 2.5, the joint venture approach of HE co-opetition is as popular as the strategic alliance among Welsh universities. From Table 4.2, it is clear that all Welsh institutions have developed one form or another of joint venture partnership with other FE colleges, universities, businesses or government bodies in Wales, in the UK or abroad. This section looks at two examples of HE joint venture in Wales, namely the Welsh Institute for Sustainable Environments (WISE), between Aberystwyth, Bangor and Swansea Universities, and UWTSD’s joint investment with the Welsh Government in developing the university’s new £100m waterfront campus in Swansea.

a) Case study (1 of 2) – Welsh Institute for Sustainable Environments (WISE)

According to Aberystwyth University (2016) and Swansea University (2016), the initiative for the creation of the Welsh Institute for Sustainable Environments (WISE) was proposed in 2009, in response to an increasing demand for an easily accessible and credible service for Welsh businesses. It is to support local businesses’ long-term sustainability and environmental development. The primary aspiration for this WISE network is to offer businesses the access to the knowledge and expertise on environmental, economical and
social sustainability. In this way, businesses could better prepare and position themselves for challenges and opportunities in these areas in their longer-term development.

As can be seen from Figure 4.3, led by three of the top Welsh universities, including Aberystwyth, Bangor and Swansea, the WISE has already developed extensive and authoritative knowledge on as many as 11 environment related fields, supporting the transformation of businesses and local communities. The WISE Network (2016) states that through this strong industrial and academic partnership in Wales, this project aimed to achieve sustainability and resource efficiency at the heart of modern Welsh business. Many businesses operating in the environment or related sectors can be equipped and well informed with new opportunity and growth in the green industry. Another key element of this
partnership is to create a culture of confidence and to bring academic research, expertise, modern technology and skill into businesses’ future development, in driving product innovation, new products and services development (Swansea University, 2016).

Official figures from the WISE (2016) suggest that since its launch, this project has already benefited nearly 500 different businesses across Wales. Among these businesses, nearly a quarter (119 out of 500) of them have entered new R&D collaborations with one or more of these universities. In addition, 116 knowledge transfer cases in environment and green business modeling were achieved, through training, workshops, seminars and conferences at university facilities. Since this project started, almost 80 highly skilled new jobs have been created. Their business revenue has also seen an increase of £4.7m. More jobs have been created through the WISE Network. The WISE project continues to welcome new companies to join the network, with 20 new members joined in 2017 (Aberystwyth University, 2016).

WISE is recognised as a leading collaboration example in Welsh HE sector, where three major Welsh universities work together to secure their financial funding, and maximise their social and business impact. Different phases of this project are led by different universities but supported by the others. This approach offers each university equal opportunity to lead, develop and strength their expertise. This special partnership built upon trust and cooperation enables Welsh companies to develop sustainable products, processes and services, as well as achieve social, environmental and economical sustainability (The WISE, 2016 and Swansea University, 2016).
b) Case study (2 of 2) –

UWTSD & Welsh Government’s joint £100m waterfront campus development

Known as one of the biggest HE infrastructure projects in the city of Swansea, the UWTSD’s new 18 acres waterfront campus development, namely the Swansea Waterfront Innovation Quarter (as shown in Figure 4.4) in the city's SA1 area, involves a considerable amount of joint investment of up to £100m between the university and the Welsh Government (Wales Online, 2015). After securing the support and cooperative development effort of both the Welsh Government and Swansea City Council, upon completion, this new campus could contribute in achieving the city’s ambition of becoming a creative centre of education, work and living, as well as enriching Swansea’s reputation as a city of innovation and energy (QAA Report, 2015 and UWTSD, 2016).

Figure 4.4 – UWTSD’s £100m waterfront campus development plan (UWTSD, 2016)
The QAA (2015) states that this development will play a significant role in HE transformation in South West Wales and will allow UWTSD to consolidate and strengthen its HE provision in the region and beyond. In partnership with the Welsh Government and other neighbouring FE colleges, UWTSD is already serving over 25,000 learners across South West Wales, and generating around £100m revenue annually. This new project could drive the economic infrastructure even further, by bringing new business and academic opportunities. Currently, existing UWTSD’s Swansea campuses are spread across the city. A number of schools and facilities are planned to migrate to this new waterfront campus in as early as 2017/18. Once the services, facilities and teaching are centralised, it would greatly benefit students, university stuff, researchers, investors and visitors, without the need of travelling between different locations (UWTSD, 2016).

By working closely with the Welsh Government and the local authority, the University has been able to evaluate thoroughly the impact from such project to the surrounding area, as well as to public transport, local health services, car parking facilities and access / movement from and to the public. As part of this development, purpose built facilities would be at the heart of delivering 21st century modern learning, teaching and applied research, and offering social and leisure uses for the key stakeholders of the University and to the public (Evening Post, 2015). According to Swansea City Council (2017), UWTSD’s waterfront project can greatly drive the economic and social prosperity for the city and bring direct benefits to the area with new and attractive facilities and improved infrastructure.
Table 4.2 – Benefits of co-opetition in Welsh HE case studies (joint venture)

<table>
<thead>
<tr>
<th>Claimed benefits of co-opetition (Kotler and Armstrong, 2015 and Leitao et al., 2014)</th>
<th>Welsh HE co-opetition model: Joint Venture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The WISE Project</td>
</tr>
<tr>
<td>Promote collaboration and bring bigger impact in the market</td>
<td>Evident</td>
</tr>
<tr>
<td>Help businesses respond more quickly and effectively to challenges and opportunities</td>
<td>Evident</td>
</tr>
<tr>
<td>Allow partners to share resources and gain wider access to resources from others</td>
<td>Evident</td>
</tr>
<tr>
<td>Create a bigger player that brings greater influences and competitive advantages in the market</td>
<td>Evident</td>
</tr>
<tr>
<td>Improve level of creativity and innovation, offer stronger financial support for new product and service developments</td>
<td>Evident</td>
</tr>
</tbody>
</table>

After the case studies, there is evidence that both the WISE project and UWTSD’s waterfront project, through joint ventures, also share the same co-opetition benefits as claimed by the theories (see Table 4.2). Thanks to the combined influence, resources and efforts from these universities, the WISE project was able to secure a £6.6 million funding from the European Regional Development Fund and from the Welsh Government from 2014 to 2016. The three universities have also jointly invested a further £5.4 million, bringing the total funding available for this project to £12 million (UK Grants, 2016). Contemporary national news reports (Wales Online, 2015 and Evening Post, 2015) argue that without this joint venture approach with local and national governments, UWTSD alone would not be able to secure and deliver this major HE transformation project.

These two joint venture projects can both enhance student satisfaction, improve universities’ research capacity, contribute to the sustainability of HE in the region, but also encourage further investment and financial benefits to their surrounding communities. It is expected that
the opportunities for engaging with wider private sectors and private investments would also be maximised throughout these projects. Both projects are committed to using locally-sourced workers and materials wherever possible, meaning hundreds of new jobs could be created directly or indirectly (UWTSD, 2016 and Swansea City Council, 2017).

4.4 Franchising with FE colleagues

As previously explained, franchising between Welsh HE and FE institutions is a very common model in Wales. In fact, research suggests that there is only one Welsh university, namely Cardiff University, which does not have any forms of franchising partnership with other Welsh FE colleges (see Table 4.2). This kind of FE-HE franchising strategy has always been welcomed and promoted by HEFCW and the Welsh Government. The “HE in FE” initiative has been a key part of the Welsh Government’s HE policy since the late 1990s (HEFCW, 2014). Welsh Government (2015) claims that cross HE and FE sector collaboration on a regional or national level has significant benefits, for example greater access to HE for students, expansion and flexibility of the wide range of courses offered, widened progression opportunities and a more co-ordinated relation with local industry and business.

Many FE colleges in Wales are relatively small in size and geographically located in small cities, towns and villages in different parts of Wales. They traditionally have a good level of collaboration and integration with local businesses, and have great understanding of local communities and their needs (HEFCW, 2014). The National Assembly for Wales (2016) suggests that Welsh HE and FE provisions are complementary to each other. The close
cooperation between the two sectors widens education delivery and skill set transformation for the whole nation (Wales) and enhances its future competitiveness.

Table 4.3 – Franchised Welsh Colleges of USW and Cardiff Met (USW, 2016 and Cardiff Met, 2016)

<table>
<thead>
<tr>
<th>Welsh HEI</th>
<th>Franchised Welsh FE Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bridgend College</td>
</tr>
<tr>
<td></td>
<td>Cardiff and Vale College</td>
</tr>
<tr>
<td></td>
<td>Coleg Gwent</td>
</tr>
<tr>
<td></td>
<td>Grŵp Llandrillo Menai</td>
</tr>
<tr>
<td></td>
<td>Coleg Morgannwg / Coleg y Cymoedd</td>
</tr>
<tr>
<td></td>
<td>Coleg Powys</td>
</tr>
<tr>
<td></td>
<td>Gower College Swansea</td>
</tr>
<tr>
<td></td>
<td>Neath Port Talbot College</td>
</tr>
<tr>
<td></td>
<td>YMCA Wales Community College</td>
</tr>
<tr>
<td></td>
<td>Ystrad Mynach College</td>
</tr>
<tr>
<td></td>
<td><em>Merthyr Tydfil College</em></td>
</tr>
<tr>
<td></td>
<td>(*Merthyr Tydfil College has become part of the USW Group in 2006)</td>
</tr>
<tr>
<td></td>
<td>Acorn Learning Solutions (Ltd)</td>
</tr>
<tr>
<td></td>
<td>Bridgend College</td>
</tr>
<tr>
<td></td>
<td>Cardiff and Vale College</td>
</tr>
<tr>
<td></td>
<td>Coleg Morgannwg / Coleg y Cymoedd</td>
</tr>
<tr>
<td></td>
<td>YMCA Wales Community College</td>
</tr>
<tr>
<td></td>
<td>Ystrad Mynach College</td>
</tr>
</tbody>
</table>

Total number of franchised Welsh Colleges: 10

Total number of franchised Welsh Colleges: 6

Table 4.3 lists the names of franchised Welsh FE colleges of two of the Welsh HEIs in South East Wales, including the University of South Wales (USW) and Cardiff Metropolitan University (Cardiff Met). Remarkably, the USW has the highest number of franchised Welsh FEIs in Wales. Over the past decade, the USW has established “HE in FE” partnership with 10 out of the 15 public FE colleges in Wales, providing thousands of extra HE opportunities to various students and student groups (USW, 2016). Table 4.3 also shows Cardiff Met has
very similar partnerships with five regional Welsh colleges and one private FE and HE provider (Acorn Learning Solutions Ltd). Both universities, together with Cardiff University and the Open University in Wales, are initiating institutions for the “Regional HE Growth Strategy for South East Wales” signed in 2011/12, with the aim to stimulate the generation of significant further opportunities for HE learners and employers in the region (Cardiff Met, 2016). Furthermore, through the Cardiff City Deal, three main HEIs in South East Wales are also working closely with their regional ten local authorities (BBC News, 2016).

According to USW (2016) and Cardiff Met (2016), one of the key ambitions for this regional HE strategy is to bring more people of all ages from some of the most economically and socially deprived areas in the UK to take part in HE. Examples in South East Wales can include the Heads of the Valleys and Merthyr Tydfil regions. These areas are usually associated with high unemployment, poorer living and health standards and considerably lower levels of education attainment. This Strategy identifies and promotes innovative HE progression routes, greater collaborated widening access projects, and new partnerships with regional governments, employers and investors. As a result, hundreds of HE and vocational courses have been made available and deliverable not only at HE and FE institutions’ campuses, but also in community centres, workplaces and other public venues. A large number of this kind of HE and FE franchise is driven by the needs of local communities, rather than what the universities want (Welsh Government, 2015).

Figure 4.5 shows the number of HE students enrolled at FEIs through franchised HE courses in Wales in 2015/16. This data is the latest information in this area according to the Welsh Government (2016). It proves that all of the 15 publicly funded FE colleges in Wales have HE franchising arrangements in place with HEIs in Wales and/or in other parts of the UK. In
total, 4,865 students were studying HE courses at FEIs in Wales in 2015/16, which counted for around 7% of the total number of HE enrolments in Wales that year. Out of these 4,865 students, about 26% of them were studying on a full-time basis, and 74% were part-time students. At the UK level, as of April 2016, the total number of 379 FE colleges in the UK delivers as much as 83% of all the country’s HNC and HND degrees, and 58% of foundation degrees. Nearly 70% of these colleges also offer full-time undergraduate and postgraduate level courses with franchised HEIs (Association of Colleges, 2016).

Figure 4.5 – No. of students on franchised HE courses taught at FEIs in Wales 2015/16
(Welsh Government, 2016)

HEFCW (2016) states that the vast majority of HE in FE courses in Wales are funded through franchise arrangements between universities and colleges. In return, this has helped foster productive and successful relationships between HE and FE cross-sector cooperation. Close collaboration with universities has also allowed smaller FE colleges to utilise the skills,
facilities, experiences and resources from the bigger HEIs. Training, professional workshops, research conferences and best practice sharing sessions have been delivered. The learners, teachers, staff and local community have all benefited from such franchise relationships.

Furthermore, the Association of Colleges (2016) state that FE colleges are in greater numbers and wider presence across the country, including in some remote and rural areas. By offering HE on many people’s doorstep, many more people would consider studying HE courses through local access, with reduced travelling cost, greater time flexibility and minimal interference to work and life. Many courses delivered at local colleges are cheaper and designed to suit surrounding skill needs. HE in FE simplifies the progression for further studies at university should the students choose to do so. Some education experts also claim that local colleges can also attract people into HE, who may not otherwise take up university level education.
4.5 Licensing to private HE providers

In co-opetition theory, as previously described in section 2.5, there are notable similarities between the franchising and the licensing collaboration strategies. Fundamentally, both strategies involve the parent (core) business delivering services and products through third party organisations, under either franchised agreement or special license. The licensing co-opetition strategy is equally well developed and used as the HE-FE franchise in Welsh HE, with eight out of the nine Welsh universities engaging in this kind of arrangement with mostly private education providers in the UK as well as in other countries. Cardiff is the only Welsh university that is not participating in this kind of partnership (see section 2.5).

The two case studies for this subsection are aimed to conduct a thorough evaluation at the licensing partnership of the private International College Wales Swansea (ICWS) with Swansea University (partnership since 2007), and the private college London School of Commerce (LSC) with UWTSD (partnership since 2010) respectively. The main reason for choosing these two cases is because these partnerships are practical examples of some of the earliest and most successful university to private education sector collaborations in Wales. Since the partnership began, each private institution, namely the ICWS and the LSC, has enrolled hundreds of additional international students for courses or preparing courses for their partnered Welsh universities, with widened HE access for many international students who may not first choose to study a Welsh HE degree (Swansea University, 2016 and UWTSD, 2016).
Case study (1 of 2) –

International College Wales Swansea (ICWS) & Swansea University

The ICWS, part of the international private education provider Navitas UK Holdings Ltd (Navitas), was established as an affiliate college of Swansea University located inside the University’s Singleton campus in 2007. Its main objective is to provide extended HE opportunities, through its degree pathway and preparation courses, specifically designed for international students who would otherwise not meet the academic and/or language requirements for direct entry to university undergraduate and postgraduate courses (QAA Report, 2015). The ICWS’s partnership model takes a collaborative approach with Swansea University, with its courses designed to align the University’s vision, goals and objectives (ICWS, 2016).

![Pathways at Swansea University](image)

Figure 4.6 – The ICWS, an affiliate college of Swansea University (ICWS, 2016)
As shown in Figure 4.6, there are over 20 different subjects and courses available, in addition to various levels of English language courses for international students. These academic courses are divided into three categories, including university foundation degree, first year undergraduate degree and the pre-masters course across many academic disciplines. Since its establishment, there has been a steady year-to-year increase of student enrolments at the college. For 2012/13 to 2013/14 academic year alone, there was an increase of nearly 20% in student numbers, rising from 440 to 522, making the ICWS an important part of Swansea University’s international strategy (ICWS, 2016). Navitas, the college’s parent company, operates in multiple countries and has representatives and agents across the world. This has enabled the ICWS to recruit students from approximately 100 countries to Swansea (Swansea University, 2016).

The arrangement and licensing agreement between the two institutions is reviewed on a regular basis. The quality of teaching and student satisfaction levels are monitored by the University’s internal procedure (ICWS, 2016). The QAA also visits routinely and audits ICWS’ teaching standards and quality process. According to a QAA Report (2015), there is clear evidence that the two parties are working closely and have a strong relationship in ensuring student satisfaction and enhancing their overall experience. Student performance is tracked by using their internal assessment process. Regular sharing and mutual learning activities are evident at the management, staff and student levels between the ICWS and the University. Since 2014, senior staff at the college have become part of the Swansea University's Learning and Teaching Committee. Students from ICWS also have representatives in the University's students' union and various committees.
On the other hand, relevant senior university staff have become key members of the college’s decision-making body, contributing to the ICWS’s existing and new programme reviews (Swansea University, 2016). The largest number of intakes at the college is in its foundation courses. A structural review of its foundation programmes has been conducted, involving students, relevant staff from the college and the University, as well as external HE advisors. This close working relationship has allowed open and transparent recommendations for general improvement being made and implemented, and have directly benefited the students and their overall experiences. The flexible entry scheme at the college offers students the opportunity to start their studies in January, May, June or September of each year. This is something that many UK universities do not offer (ICWS, 2016).

b) Case study (2 of 2) – London School of Commerce (LSC) & UWTSD

The partnership between LSC and UWTSD started in 2010. LSC is now an associate college of UWTSD (UWTSD, 2016). As shown in Figure 4.7, this private school, which is located in central London, offers a variety range of HE courses across multiple disciplines, starting from foundation degrees, to BA (Hons) degrees, masters degrees and to the highest academic PhD and professional doctorate (i.e. the DBA) courses (LSC, 2016). In addition to its special relationship with Cardiff Met, the school itself is also accredited as an independent FE and HE provider, by a number of UK education accreditation bodies. It has also been registered with the relevant UK Government’s education department as a recognised private education provider (LSC, 2016).
In contrast with the ICWS-Swansea University arrangement, the vast majority of courses at the LSC are accredited by UWTSD under special licensing and accreditation procedure and regular review. A small number of courses are also accredited by Cardiff Met and Anglia Ruskin University. Students enrolled for LSC’s courses are directly registered with UWTSD throughout the programme, and are entitled to UWTSD students’ benefits, such as student ID, library and IT services etc. Upon successfully completion of the course, which is designed, delivered and assessed by the LSC, students will have their degrees awarded directly by UWTSD (UWTSD, 2016).

Established in 1999, the School’s main goal is to provide cost-effective HE study leading to widely recognised UK degree qualification. As can be seen from Figure 4.8, international students’ tuition fees at the school are considerably lower than many other UK universities. Whilst studying in London, students can enjoy the vibrant lifestyle, unique cultural

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Course Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DBA</strong></td>
<td>£ 22,950* Duration: 3 Years</td>
</tr>
<tr>
<td><strong>PhD</strong></td>
<td>£ 18,950* Duration: 3 Years</td>
</tr>
<tr>
<td><strong>MBA</strong></td>
<td>£ 6,950* Duration: 1 Year</td>
</tr>
<tr>
<td><strong>MBA for executives</strong></td>
<td>£ 4,950* Duration: 18 months (Part-Time)</td>
</tr>
<tr>
<td><strong>MSc Information Technology</strong></td>
<td>£ 6,950* Duration: 1 Year</td>
</tr>
<tr>
<td><strong>MSc International Hospitality Management</strong></td>
<td>£ 6,950* Duration: 1 Year</td>
</tr>
<tr>
<td><strong>MSc International Tourism Management</strong></td>
<td>£ 6,950* Duration: 1 Year</td>
</tr>
<tr>
<td><strong>BA (Hons) Business Studies</strong></td>
<td>£ 15,950* Duration: 2 Years</td>
</tr>
<tr>
<td><strong>Degree Foundation</strong></td>
<td>£ 6,950* Duration: 8 Months</td>
</tr>
<tr>
<td><strong>Academic English</strong></td>
<td>£ 4,950* / £ 5,950* Duration: 6 / 8 Months</td>
</tr>
</tbody>
</table>

Figure 4.7 – Programmes offered at the London School of Commerce (LSC, 2016)
experience and plenty of business and career opportunities that the capital has to offer (LSC, 2016). As well as in London, the LSC Group also operates worldwide, in countries including Malaysia, Sri Lanka, Bangladesh, Armenia, Malta, Serbia and India. In association with Cardiff Met, the LSC Group has been able to provide students from over 130 countries to study for highly recognisable UK degree courses. As of 2016, there have been over 10,000 students registered for Cardiff Met’s degrees at various locations of the LSC Group of Colleges, with an estimate of 3,000 new annual recruits estimated from 2018 (LSC, 2016). This collaboration partnership with the LSC has significantly promoted UWTSD’s profile internationally, and has generated substantial income for the University (UWTSD, 2016).

According to Mongkhonvanit (2014), licensing is a less common format of co-opetition in the HE sector, due to its legal complexity. It is however a popular choice for many private education providers, which seek associated partnerships with public universities, to improve their credibility. Both the ICWS and the LSC are great examples of commercially successful Welsh HE to private HE sector collaboration (THE, 2015). The involved Welsh universities provide quality assurance, excellence in HE and world class teaching and research facilities. In return, the private college and school groups, with their effective corporate structure, offer a successful and sustainable worldwide marking and recruitment network. Under specific licensing and agreement, partners are able to share their expertise, knowledge, assets and resources in securing significant success in HE and in their business, as well as maximising market share, profits and competitiveness with respect to international HE (ICWS, 2016; LSC, 2016 and Swansea University, 2016).
4.6 Co-branding of HE in Wales

Co-branding, which is also referred to as brand partnership, comes to existence when two or more brands or businesses of services and products work together with a joint brand image. This often can attract additional groups of consumers who may not have found their individual brand attractive, to promote marketing synergy (Padula and Dagnino, 2007). Although co-branding is common in the business world, its application in the education sector is rare, largely due to the complexity of HE regulations, institution’s autonomy and controversy of qualification awarding procedures (Singh et al., 2011). Despite the rarity, there are two examples of HE and FE co-branding in Wales, associated with the University of South Wales Group (USW Group) and the University of Wales Trinity Saint David Group (UWTSD Group), which are both comprised of individually functioning HE and FE institutions (see section 2.5). This section examines these two case studies, their special co-branding success and their significance in HE and FE delivery in Wales.

a) Case study (1 of 2) – the University of South Wales Group

As can be seen from Table 4.4, the USW Group is structured with two Welsh HEIs, including the USW itself and the RWCMD, plus one Welsh FEI, namely the College Merthyr Tydfil. It also owns the Universities Heads of the Valleys Institute (UHOVI) located in Merthyr Tydfil. In total, the Group educates over 34,000 students in Wales who are from over 130 countries, who are on various levels of vocational, FE and HE courses and trainings. This Group came into existence in May 2006, when the former University of Glamorgan and the College Merthyr Tydfil integrated into one education brand. In 2007, the RWCMD, formerly a member of the University of Wales, joined the Group. When the former University of Wales,
Newport merged with University of Glamorgan in 2013, the Group name then changed to its current title: the USW Group (RWCMD, 2016 and USW, 2016).

Table 4.4 – The University of South Wales Group (USW, 2016)

<table>
<thead>
<tr>
<th>The University of South Wales Group</th>
<th>Member Institutions</th>
<th>Locations</th>
<th>Enrolments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Caerleon</td>
<td>25,265 (2015/16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiff</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Newport</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pontypridd</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merthyr Tydfil</td>
<td>3,500 (2015/16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiff</td>
<td>600 (2015/16)</td>
<td></td>
</tr>
</tbody>
</table>

As part of the larger USW Group, the College Merthyr Tydfil has access to the wider academic network, teaching resources and facilities, as well as the skills, expertise, personnel and professional development provided by the USW. This FE and HE integration, seen as the first of this kind in Wales, has stimulated both institutions to work closely to combine some of their courses together, to attract wider audience and also to reach out to significantly larger geographic areas in South East Wales. Many of the re-designed and integrated courses not only meet the needs and demands of learners and employers, but also help promote a better social, economic and cultural stability in the region. As a result of the joint approach, a new lifelong learning campus was established in Merthyr Tydfil, which made the town a new “university town” in South East Wales (College Merthyr Tydfil, 2016).
The other key member of the USW Group is the RWCMD, which is the National Conservatoire for Wales. Currently with its 600 students, the RWCMD provides internationally recognised teaching and training in performing arts, music, opera, drama, acting and their related HE, research and management courses. It is also the only HEI in Wales and one of the very few in the UK that offers Bachelor of Music (BMus) programmes (RWCMD, 2016). With the strong financial and resource backing from the USW Group, the RWCMD has managed to secure and deliver its biggest redevelopment project to date, when the College was relocated to its brand new £22.5 million purpose built facilities (RWCMD, 2016 and USW, 2016).

The USW (2016) claims that with their common values, over 100 years of teaching and ambition in delivering quality and excellence in education, the three institutions of the USW Group have contributed significantly in advancing the social, economic and cultural prospect of Wales and beyond. The combined skillset and talents of the staff across these institutions, together with their shared abundant resources, have allowed them to become a modern and thriving force in providing outstanding learning and teaching opportunities, a centralised hub for community and industrial engagement, as well as a recognised brand for innovative research. The joint workforce is also able to attract bigger investment with wider influence in the Welsh education development (College Merthyr Tydfil, 2016).

b) Case study (2 of 2) – the University of Wales Trinity Saint David Group

Table 4.5 shows the second FE and HE co-branding collaboration in Wales, namely the UWTSD Group, which was created in August 2013 when the UWTSD and Coleg Sir Gar joined force. Another regional FE college, Coleg Ceredigion, later joined the Group in
January 2014. The UWTSD Group is a special example in Wales and in the UK, where four established HEIs merged together, along with two FEIs (UWTSD, 2016). The Group has nearly 30,000 learners, from the age of 13 to mature students, in their 17 campuses located in a number of rural and urban locations in South West and Middle Wales Coleg Sir Gâr (2016). According to the QAA (2015), this dual sector university and college structure has enabled extensive cooperation between key education institutions in the region, which provides learners, employers, communities and industries an integrated approach of leaning. Under this structure, each member institution participates in key academic and development decision making process, whilst maintaining its own operation and identity.

Table 4.5 – The University of Wales Trinity Saint David Group (UWTSD, 2016)

<table>
<thead>
<tr>
<th>Member Institutions</th>
<th>Locations</th>
<th>Enrolments</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wales Trinity Saint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiff</td>
<td>11,425 (2015/16)</td>
</tr>
<tr>
<td></td>
<td>Carmarthen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lampeter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>London</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Swansea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Llanelli</td>
<td>10,000 (2015/16)</td>
</tr>
<tr>
<td></td>
<td>Carmarthen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ammanford</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Llandeilo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aberystwyth</td>
<td>3,815 (2015/16)</td>
</tr>
<tr>
<td></td>
<td>Cardigan</td>
<td></td>
</tr>
</tbody>
</table>
This innovative framework widens FE and HE opportunities, mapping the education route from secondary education to post doctorate research. The Group also works closely with local education authorities and schools, to improve curriculum planning and strengthen education progression routes. This collaborative network of FE and HE institutions has enhanced links and better understanding with local businesses and communities, which also offers more flexible study programmes to accommodate local needs (UWTSD, 2016). A comprehensive range of academic and vocational courses is offered not only at campus based locations, but also at various community centers and through workplace workshops (Coleg Ceredigion, 2016).

With these joint efforts from all member institutions, the UWTSD Group plays a crucial part in promoting and delivering bilingual education in the region. Many of their courses are offered in both English and Welsh. Both Coleg Sir Gâr and Coleg Ceredigion are two of the largest bilingual FE course providers in Wales, where learners can learn and achieve qualifications learning through the medium of Welsh and English (UWTSD, 2016). The Virtual College, which was created in 1998 by Coleg Sir Gâr and later supported by the UWTSD Group, offers almost 1,000 accredited courses via the internet, covering a range of subjects, from IT, teaching training, business, management to language study and accounting (Coleg Sir Gâr, 2016).
5. PRIMARY DATA ANALYSIS (QUESTIONNAIRES)

5.1 Introduction

This chapter analyses the primary data collected through the second stage of the data collection exercise, namely the questionnaires. As outlined in section 3.6, the questionnaire was designed specifically for past and current Chinese students who have had first-hand experiences of Welsh HE and the wider university journey they have received in Wales. The respondents involved a mixture of Chinese students at various levels of HE study. This is to ensure information from different groups or academic levels of Chinese students are covered in this data collection process.

The analysis of the questionnaires is to establish a rigorous and robust understanding of Chinese students’ needs, behaviours, experiences in relation to the Welsh HE products. It then interprets their responses into statistical and logical explanations. First, this chapter reviews the questionnaires statistics, including the number of respondents, their age, academic background and some other basic personal information. Based on the 10 questions and answers from section 2 of the questionnaire, it then evaluates their studying experience in Wales. Finally, it analyses the exceptions and suggestions from the respondents, based on another set of 10 questions from Section 3. This chapter also compares the findings, in relation to Chinese students studying in Wales, with wider UK benchmarks. This can help decision makers and key stakeholders of Welsh institutions better understand their performance and position themselves more effectively in this competitive HE market.
5.2 Respondents' demographic profile

Table 5.1 summarises the profiles and demographic information from the 124 respondents. The questionnaire has achieved an acceptable gender balance with 52% male and 48% female participants. This balance is important, because male and female students may have different approaches and experiences to the questions asked during this survey. Moreover, it ensures that the opinions and views from both gender groups can be equally analysed through the data collection process, as well as can be assessed without any gender bias. For this study, most respondents fall into the “22 – 25” (43%) and “26 – 29” (34%) age groups. 13% of Chinese students in this survey are between the age of 18 and 21, whilst the age group with the fewest students, “30 and above”, equates to 10% of the sample population.

Table 5.1 – Demographic and basic profile of respondents

<table>
<thead>
<tr>
<th>Demographic &amp; basic information</th>
<th>Actual number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>64</td>
<td>52%</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>48%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 21</td>
<td>16</td>
<td>13%</td>
</tr>
<tr>
<td>22 – 25</td>
<td>54</td>
<td>43%</td>
</tr>
<tr>
<td>26 – 29</td>
<td>42</td>
<td>34%</td>
</tr>
<tr>
<td>30 &amp; Above</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>Length of stay in Wales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 6 months</td>
<td>16</td>
<td>13%</td>
</tr>
<tr>
<td>6 months – 1 year</td>
<td>34</td>
<td>28%</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>51</td>
<td>41%</td>
</tr>
<tr>
<td>&gt; 3 years</td>
<td>22</td>
<td>18%</td>
</tr>
</tbody>
</table>
Figure 5.1 – Levels of HE courses studied by Chinese and international students

Figure 5.1 shows nearly half (48%) of these surveyed Chinese students are studying postgraduate or higher level (including research) courses. 41% are enrolled on undergraduate courses, 9% are studying foundation degrees, while 2% have been enrolled on other HE
courses or training at Welsh HEIs. In comparison, at the UK level, 63% of all international students in the UK are studying undergraduate courses, and 34% are for postgraduate courses (UKCISA, 2016). It appears that there is a higher proportion of Chinese students enrolled at postgraduate level courses.

Figure 5.2 – Subjects studied by Chinese and international students
More specifically, Figure 5.2 summarises the academic subjects and disciplines that the surveyed Chinese students are studying at Welsh HEIs. The most popular courses are in business and management related subjects, being studied by 42% of the students. The second most popular choice is engineering related subjects, which has 19% of the share. 15% are enrolled on economic and finance courses, and 13% in social sciences. In contrast, a mere 5% of these students are studying arts and design subjects, whilst only 2% are for law and medical related degrees. Academically, law and medicine courses normally require a much higher and more specific academic entry requirement with very strict English language requirements. These courses could also take considerably longer to complete. Therefore, the vast majority of international students find these courses are difficult to apply and study (British Council, 2016). This corresponds to the finding from this questionnaire survey, which shows that there are only 2% of law and medical students respectively among Chinese students in Wales.

When compared with all other international students studying in the UK, it is clear that business, engineering and social science subjects are the top three most popular subjects for all international students. Due to the relatively limited sample size, some other subjects, such as language and education studies, were not identified through the questionnaires from the Chinese students in Wales. However, there are around 7% and 3% international students studying these two subjects respectively in the UK (UKCISA, 2016). Language barrier is seen as one of the biggest obstacles when deciding the studying subject for international students. This is the main reason why some of the very specialised subjects, such as law (6%) and medical studies (9.4%), attract a very low number of international students (British Council, 2016).
5.3 Consumers' (Chinese students) behaviour in relation to Welsh HE

For any business to succeed, it is important to understand consumers’ behaviours and needs (Angulo et al., 2014). Binsardi and Ekwulugo (2010) argue that this should be the same for HE and its associated marketing. In order for Welsh HEIs to deliver an effective international marketing strategy in China and achieve successful Chinese student recruitment outcome, it is critical to study and analyse their consumers’ behaviours. Through the questionnaire data analysis, this section first looks at four areas. These are student finance, decision making factors, sources of information and recruiting channels that are directly linked to Chinese students choosing to study in Wales. It also compares some key performance indicators (KPIs) in relation to Welsh HE recruitment in China with wider UK performance, to help understand areas of strength and weakness for the Welsh HEIs.

5.3.1 Perception of Wales and the Welsh HE brand

Visit Britain (2016) suggests that when compared with other UK regions, the awareness of Welsh brands and products are less established than English and Scottish ones. The weaker Welsh branding recognition abroad not only impacts on the Welsh tourism industry, but also the manufacturing and agriculture export sectors, as well as the HE sector. As can be seen from Table 5.2, data from Visit Britain (2016) shows that out of the total number of 361,087 Chinese tourists who visited Britain in 2014, only 1.3% of them (4,659) visited Wales. In contrast, Scotland hosted 48,324 (13.4%) Chinese visitors, the London region had the largest market share of 46.3% (167,074 Chinese tourists), and the rest of England accommodated 39.1% of the total number of Chinese tourists (141,030) in 2014.
Table 5.2 – Chinese tourists visiting Britain in 2014 (Visit Britain, 2016)

<table>
<thead>
<tr>
<th>Britain regions</th>
<th>No. of Chinese visitors</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater London region</td>
<td>167,074</td>
<td>46.3%</td>
</tr>
<tr>
<td>England (excluding London)</td>
<td>141,030</td>
<td>39.1%</td>
</tr>
<tr>
<td>Scotland</td>
<td>48,324</td>
<td>13.4%</td>
</tr>
<tr>
<td>Wales</td>
<td>4,659</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>361,087</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

As can be seen from Table 5.3, 77% of respondents agree or strongly agree that Welsh universities are less well-known in China than equivalent English and Scottish ones. 17% of them neither agree nor disagree, whilst only 6% of these students disagree with this statement. The Welsh national identity and branding have been increasing in Europe in recent years, thanks in part to the consistent performance from the Welsh national teams at major European sports tournaments, such as Six Nations Rugby and the European Football Champions (Sky Sports, 2016). However, in China and in some other Asian countries, it is clear that people know very little about Wales, and many people think Wales is a regional city of England (CEC Wales, 2015).

Table 5.3 – Popularity of Welsh universities seen by Chinese students

<table>
<thead>
<tr>
<th>Statement: In general, Welsh Universities are less well-known in China than equivalent English and Scottish ones.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of responses</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>In %</td>
</tr>
</tbody>
</table>
5.3.2 Student finance

As can be seen from Figure 5.3, 78% of respondents are financed by their parents and family. 11% are through self-finance, and a small 6% have secured scholarships from either the university (5%) or the government (1%). A further 4% are financially supported by bank or student loans, whilst only 1% are sponsored by private companies. In other words, excluding external financial sources, such as sponsorship, scholarship and borrowing, the vast majority of Chinese students studying in Wales (89%) are privately financed, either by the individual students themselves or from their families. Because of the high level (78%) of family financial support, the opinions of students’ families should also be considered as part of the consumers’ behaviour analysis. To some extent, as they are the actual financiers for the HE services, whilst the students are the beneficiaries from their financial support, Chinese students’ families play a significant role for choosing and deciding the right HE services and courses for their children and relatives.

Figure 5.3 – Student finance among 124 surveyed Chinese students in Wales
In contrast, most of the UK home students are eligible to apply for government funding, known as student loans, to cover their tuition fees and living cost for their HE courses (UK Government, 2016). As mentioned in section 2.3, different national governments in the UK have different tuition fee policies. Regardless how much a student has borrowed from the student finance, a special repayment arrangement is in place across the UK, meaning that only graduates with earning over £21,000 per year would need to repay a fixed proportion of their income every month back to the loan. The current policy also allows the remaining debt to be written off if unpaid after 30 years. Only graduates who earn high enough salaries would completely repay the total amount of borrowing (UCAS, 2016).

Without the option of taking the UK government-backed student loans, Chinese students and their family face enormous financial pressure and challenge when they choose to study in the UK (Hexun, 2015). UKCISA (2016) suggests that the tuition fees charged by UK HEIs to international students are considerably higher than home students, making the UK one of the most expensive countries for international students. Nevertheless, Chinese students bring a significant financial income stream into the HEIs and their local economies, and in general spend much more proportionally than UK students. According to the British Council (2014), in addition to university tuition fees, the weekly average spending by a UK student is around £250 during their term time. Comparatively, a Chinese student is estimated to spend more than £540 per week, 115% higher than the UK students.
In Wales, this research reveals that the total cost for Chinese students to study at Welsh universities varies depending on both the level and the length of their chosen HE courses. Figure 5.4 shows the cost distribution among the 124 surveyed Chinese students. 2% of these students have their total cost under £10,000, because they have received scholarships from their university or private companies. 43% of these students spend a total amount of £20,000 to £30,000 for the whole duration of their stay in Wales. 32% of them spend between £30,000 and £40,000 in total whilst studying in Wales. A further 14% of these students have decided or plan to pursue another degree at a higher level, resulting in a total cost in excess of £50,000.

It is clear from the data that the majority (75%) of Chinese students' total spending in Wales is in the range of £20,000 to £40,000. The average Chinese student in Wales spends from £16,000 to £18,000 every year including both the tuition fees and the living costs. According
to the Chinese Embassy in London (2016), there are currently over 120,000 Chinese students studying in the UK, contributing £2 billion to this country every year. The average annual spending per Chinese student in the rest of the UK is about £16,700, similar to the findings identified from this research.

5.3.3 Key decision-making factors

Various researchers (Becker & Kolster, 2012; Choudaha & Chang, 2013; the Guardian, 2013) in the past have concluded that there are range of factors for international students to consider when choosing to study in the UK. The key factors include the overall cost, quality of the course, university's reputation, campus location, social life, safety and employability etc. Nevertheless, there has not yet been any specific analysis on this issue with respect to Chinese students studying in Wales. Therefore, this questionnaire asked each Chinese student in the survey to identify, through responses to multiple choice questions, the factors that mattered to them the most before they came to Wales for their studies. Figure 5.5 summarises the factors that influenced their decision making, as well as the importance level for these factors (marked by percentage of students choosing this factor).

As can be seen from Figure 5.5, "tuition fee & cost" and "reputation & ranking" are the two most important factors for Chinese students, with over 50% of them choosing both factors (56% and 53% respectively). Earlier analysis from section 5.4.1 shows that the average annual spending for each Chinese student in Wales is between £16,000 and £18,000. According to Xinhua News (2015), as of 2015, the annual disposable income per capita in urban area of China is approximately ¥34,288 Chinese Yuan (equivalent to £3,500 p.a. as of May 2017). This means the average household income for an ordinary Chinese family (with both parents in employment) is only £7,000 per year. Many Chinese parents finance the full
amount of their children's overseas study, which is two to three times higher than their entire annual household income. The long-term financial burden is significant, which explains why the cost to study in Wales is their first and foremost factor for consideration.

![Decision making factors for Chinese students in Wales](image)

Figure 5.5 – Chinese students' decision-making factors

The finding also shows 12% more Chinese students think the university’s reputation and ranking are more important than the teaching quality, when it comes to choosing their university. The British Council (2016) explains that the opportunities for Chinese students to explore their interested institutions prior to their study are limited. For instance, before enrolment, it would not be possible for many of the prospective students in China to visit the UK or their chosen universities. The most easily accessible and widely used piece of information, upon which they can base their decision, is the university ranking and league table regularly published by independent and authoritative organisations. Within a limited
timeframe, many Chinese students heavily reply upon universities’ ranking for their decision making (The Guardian, 2013).

Campus location and family and friends living nearby also play a big part during Chinese students’ decision-making process. Universities UK (2013) suggests that both UK and international students choose universities at locations with good transport links and services. Over 68% of university students, aged between 18 and 25, prefer studying in urban rather than rural areas. For the Chinese students in this survey, 32% of them feel that having friends or family nearby is important for them. Xu (2012) argues that Chinese students are 50% more likely to choose to study in a certain country if they have relatives or friends living there. This could make them feel more secure and help them integrate into the local life much more easily. They could also use their relatives’ or friends’ experiences to gain a good understanding and judgement of what it is likely to live in a foreign country.

Raimo (2013) and Shepherd (2014) state that social life forms an essential part of university life, which helps students not only develop additional skills outside classroom, but also build up a valuable network of life-long friends and potential future business partners. Social life is also seen as one of the most important factors for many UK and international students when they choose their university. This research discovered that only 14% of Chinese students in Wales think social life is important for them. Ngow (2013) suggests that university expectation and experience are very different between UK domestic and Chinese students. Despite some 120,000 Chinese students currently studying in the UK, Chinese students often isolate themselves from wider student population, local community, and various student social events. Many Chinese students only socialise with people from their similar language or culture background.
China Daily (2016) argues that many Chinese students studying overseas are usually able to achieve good grades and qualifications academically, but self-confidence, communication skills, social and other soft skills among many of them are less well-developed when compared with students from other countries. It suggests as few as 15% of Chinese students who have studied in the UK said they have made local (British) friends during their time in the UK. It is therefore no surprise that 86% of these Chinese students in Wales do not consider social life as an important factor for their university study. In relation to employability prospects after graduation, this survey shows that 11% of Chinese students think this is an important factor for their decision making.

5.3.4 Most accessed sources of information

When asked how Chinese students find out information about studying in Wales and their chosen universities, as displayed in Figure 5.6, 59% of them have used education agents in China as their source of information. This high usage rate puts the education agent as the most popular source of information for Chinese students. The second most widely used resource is the universities' official websites, with 41% of them getting information through this method. However, the majority (59%) of Chinese students did not access or use Welsh universities' websites to gain knowledge about the institution, the course and other information.

Additionally, 37% of Chinese students studying in Wales learnt about their chosen Welsh university from their partner institution in China. The British Council (2016) states that it is common for UK universities to establish HE partnerships in China and around the world. This has proved to be a particularly effective way for international HE collaboration, profile awareness raising, joint project and investment, marketing, student exchange and recruitment.
etc. According to Kelly et al., (2015), Welsh HEIs have all established links with institutions worldwide, including partnerships with a large number in China.

A number of Welsh universities also validate and accept qualifications from their partner institutions in China. Upon successful completion of their courses in China, these students are offered advanced entry to study further at a Welsh institution. As some of these courses are jointly designed and delivered by both parties, some elements are linked to the courses in Wales. Students who have completed these courses generally adopt their Welsh study and study environment more smoothly and quickly, than those who have not done these courses (Wales Online, 2016).
Furthermore, this survey data shows that 27% of Chinese students obtain information from their friends and relatives. As identified in the previous section (see Figure 5.5), 32% of them feel that having friends or family nearby is one of their key decision-making factors. It is no surprise that more than a quarter of Chinese students in Wales use these people as their resource and source of information. Slightly over 10% of these students use services provided by the British Council (13%) and get to know the university from their university fairs (12%) in China. Lastly, 5% and 3% of them have tried to search for information from Wales.com (Welsh Government's official online gateway to Wales which offers information in a number of languages, including Chinese) and from the internet.

From this analysis, it is evident that the mostly widely used sources of information include services from the education agents, Welsh universities' partners in China and word of mouth from family and friends. The finding that 59% of the Chinese students do not use Welsh universities' official website as a useful resource suggests that there is some internet culture difference between the way in which UK and Chinese students use the internet for research. Only 8% of Chinese students have used internet search facilities. It is evident that most of the prospective Chinese students choose to learn about studying in Wales through more conventional and face-to-face marketing channels, rather than through the internet.

Although some Welsh universities (Aberystwyth University, 2016; Cardiff University, 2015; and Swansea University, 2016) organise annual university fairs and seminars in China, it can only target a very small number of cities with limited benefits to both university and students. Developing new innovative marketing and recruitment strategies that meet Chinese students’ needs would be greatly beneficial for the institutions.
5.3.5 Significance and controversy of education agents

Based on the survey responses from 124 Chinese students at Welsh HEIs, as many as 80% of them have used services provided by education agents in China to assist their university and/or visa applications. In section 5.3.4, the analysis shows that not only are such organisations seen as the most popular source of information for Chinese students (see Figure 5.6), but can also have an important role in promoting Welsh universities, providing useful services and recruiting potential students in China.

The British Council (2016) and QAA (2016) conclude that over 50% of all international students and 70% of all Asian students coming to study in the UK have contacted an education agent in their home country before deciding their course and study destination. The insight knowledge of local affairs, understanding of the local language and marketing environment, as well as easy accessibility, prove that these agents are an essential part of international marketing and student recruitment for Welsh and UK universities.

According to the British Council (2016), education agents are normally registered as legal entities (i.e. limited companies) in the host country. They then approach and negotiate an agreement with the Welsh or UK universities that they wish to represent. The agreement specifies the activities that each education agent can conduct on behalf of the university, which can include marketing, advertising, student recruitment, education exhibitions, visa and university application support and many other services.
Table 5.4 – Estimate of commission fees paid by a Welsh HEI to education agent

<table>
<thead>
<tr>
<th>Number of Chinese students recruited</th>
<th>10</th>
<th>20</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees payable to the education agent</td>
<td>£15,000 (10 x £1,500)</td>
<td>£30,000 (20 x £1,500)</td>
<td>£75,000 (50 x £1,500)</td>
</tr>
</tbody>
</table>

Upon the successful recruitment of students from that country, the university then pays the agent a commission fee as per their agreement. Although the rate of commission varies, the average commission rate paid by UK universities is around 15% to 20% of the tuition fee paid by each international student (Garner, 2014 and Luca, 2013). Based on this information, Table 5.4 shows an example of the commission fees paid by a Welsh university to its education agent. The Guardian (2016) suggests that almost all HE providers and a large number of FE colleges in the UK have some kind of arrangements in place with overseas education agents. Education agents bring a substantial number of international students to the UK every year. It is estimated that universities in the UK with high intakes of international students face high expenditure on agent’s commission fees (Luca, 2015 and Chandler, 2015).

Figure 5.7 summarises Chinese students’ views on these agents from their personal and first-hand experiences. According to the data, although many Chinese students in Wales state that there are benefits from their service, there are great concerns and negative experiences associated with them. More specifically, 56%, 50% and 26% of surveyed students think that education agents are first providing useful information, secondly speeding up university and/or visa application processes; and thirdly playing a critical part in decision making. On the other hand, 30% of them feel that the education agents’ service fee is too high, 24% state
that the services provided are not essential, 24% have concerns that they occasionally involved with fraud and scandal, and another 15% of Chinese students feel that these agents are giving false promises.

Figure 5.7 – Mixed views on education agents from Chinese students in Wales

Without any doubt, these organisations in China play a vital role to the UK and Welsh universities in terms of Chinese student recruitment. However, concerns and complaints regarding services provided by education agents are often overlooked. Scandals associating Chinese education agents and UK (and Welsh) HEIs are on the rise in recent years (Hexun, 2015). In 2012, Cardiff University was implicated in a Chinese student recruitment controversy. This happened when its contracted Chinese education agency (which sends more than 2,500 Chinese students to UK universities every year) guaranteed to Chinese students
places at the university, when these students had lower grades than required (Watt and Newell, 2012).

Both ITV News (2014) and BBC News (2015) reported that in addition to Cardiff, other Welsh institutions, such as Glyndŵr, USW and the former University of Wales, have also in recent years been involved with some high-profile controversies with respect to international student recruitment. These have caused considerable damage to the Welsh HE brand and its reputation. Victims of such scandals are vulnerable international students. Some students have lost tens of thousands of pounds, and had to be withdrawn from their study. Others did not achieve the qualification for which they were studying (Chandler, 2015).

5.3.6 Alternative options other than education agents

As discussed in section 5.3.5, there are strong but divided views on education agents. With 80% of all surveyed Chinese students in Wales having used their services and with many negative experiences and controversies, it is important to find out if these students would suggest any alternative options for their recruitment process. Table 5.5 lists three common partnership options for international HE recruitment and collaboration, which include partnership with local education agents, with local HEIs, and with local government. This questionnaire asked these Chinese students to compare their preferences, in terms of trust levels, between these three different formats of partnership.

As presented in Figure 5.8, only 20% of these Chinese students agree or strongly agree that they have more trust in Welsh HEIs which are in partnership with Chinese education agencies, compared with 70% for partnership with Chinese HEIs, and 75% for partnership with Chinese central or local government. The same data also shows that 41% of them feel that
they have less trust in Welsh HEIs that are in partnership with Chinese education agencies, compared with 11% and 6% for partnerships with Chinese HEIs and government respectively.

Table 5.5 – Different partnership options for Welsh HEIs for student recruitment

<table>
<thead>
<tr>
<th>Statement 1: You have more trusts on Welsh/UK HEIs which are in partnership with Chinese education agencies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>No of responses</td>
</tr>
<tr>
<td>In %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement 2: You have more trusts on Welsh/UK HEIs which are in partnership with Chinese HEIs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of responses</td>
</tr>
<tr>
<td>In %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement 3: You have more trusts on Welsh/UK HEIs which are in partnership with Chinese central/local Government.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of responses</td>
</tr>
<tr>
<td>In %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement 4: It improves career prospects if your University in Wales cooperates with HEIs or businesses in China.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of responses</td>
</tr>
<tr>
<td>In %</td>
</tr>
</tbody>
</table>
Developing international partnerships with overseas institutions is an effective and common way of helping universities to recruit international students (Angulo et al., 2014). Some academics (Annandale, 2015; Davis and Farrell, 2016) acknowledge that the establishment of a healthy and lasting relationship with overseas HEIs is important for the future of UK universities in general. There have been various formats of collaborations in international HE for different purposes. However, there is currently a vacuum for such partnerships, which are specifically designed to support international student recruitment (Annandale, 2015). The next stage of data collection and analysis, i.e. the semi-structured interviews, will focus on policy and decision makers and key senior stakeholders of Welsh HE, to discover how the preferred recruitment partnership and marketing strategy could be implemented.

Figure 5.8 – Trust level varies between different HE partnerships for Welsh HEIs
5.4 Chinese students' experiences of Welsh HE

After studying the behaviour of Chinese students in relation to Welsh HE prior to the start of their study, this section then explores and analyses their experiences during their study in Wales. It looks at areas specifically related to their experiences, including key challenges facing Chinese students, their study and general support needs, as well as areas of concern. It also considers their sources of help and assistance, and finally their activities outside university.

5.4.1 Key challenges during their study

Studying far away from home and in a foreign country is already a big challenge for international students in the UK (British Council, 2016). Figure 5.9 lists the biggest challenges when studying in Wales, identified from the 124 Chinese students who responded to the questionnaire. Nearly half of them have experienced language barrier issues (47%) and difficulties of making new friends (46%), making these their top two challenges when studying in Wales. The third and fourth biggest challenges are the cultural difference and loneliness, with 40% and 35% of Chinese students having experienced these difficulties respectively.

Over a quarter (28%) of surveyed Chinese students found that adjusting to the huge difference in climate and food between Wales and China is very challenging to them. According to CEC Wales (2014), there have been numerous reports and complaints from international students, as well as from the locals, with respect to the unpredictable and “eventful” weather in Wales throughout the year. Coincidentally, almost all Welsh HEIs have avoided mentioning the Welsh weather in their marketing and promotion materials. 20% of
them also think the technical difficulties of their academic courses have been an issue for them. Lastly, as mentioned in earlier sections, the vast majority of Chinese students (78%) are financially supported by their family, which could explain why only a small proportion of them (14%) feel that financial pressure is one of their biggest challenges during their study in Wales.

<table>
<thead>
<tr>
<th>Survey question: What are your biggest challenges when studying in Wales?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges</td>
</tr>
<tr>
<td>Language barrier</td>
</tr>
<tr>
<td>Difficult to make new friends</td>
</tr>
<tr>
<td>Culture difference</td>
</tr>
<tr>
<td>Loneliness</td>
</tr>
<tr>
<td>Climate and food</td>
</tr>
<tr>
<td>Studying difficulty</td>
</tr>
<tr>
<td>Financial pressure</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td>Percentage</td>
</tr>
<tr>
<td>47%</td>
</tr>
<tr>
<td>46%</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td>35%</td>
</tr>
<tr>
<td>28%</td>
</tr>
<tr>
<td>20%</td>
</tr>
<tr>
<td>14%</td>
</tr>
<tr>
<td>2%</td>
</tr>
</tbody>
</table>

Figure 5.9 – Biggest challenges facing Chinese students when studying in Wales

5.4.2  Most needed university services

As can be seen from Figure 5.10, nearly 60% of Chinese students put career and interview advice as the most needed service from their university. The high demand for this service is similar to the findings of another questionnaire published by The Telegraph (2016). Their questionnaire identified that 80% of Chinese students think that it is difficult to find a job in
the UK after their study, largely due to the tightened immigration policies. Secondly, 45% of them named language support as their most needed university service. This reflects the finding from section 5.5.1 where nearly half of these Chinese students experiencing language barrier as their biggest challenge whilst studying in the UK. Between 32% and 37% of them feel health and wellbeing, housing advice, and study advice are the most required services.

There are also a number of extra value adding services identified from this survey. As can be seen from Figure 5.11 below, 64% of Chinese students wish that their university could offer them summer internships. Whilst many Welsh and UK universities offer internships and part time jobs to their students, it is unrealistic that they could cover a large number of Chinese students due to limited opportunities (British Council, 2016). The second most desirable service mentioned by these students is the Welsh and British culture classes. Notably, between 35% and 41% of these students also would like their universities to offer them basic local law lessons (41%), emergency support (36%) and local culture and history trips (35%).

![Survey question: What are the most needed University services for you during your study in Wales?](image)

Figure 5.10 – Most needed university services for Chinese students in Wales
5.4.3 Some unfair and unpleasant experiences

The UK is ranked as one of the safest and most welcoming countries in the world for international students. However, the language and culture challenge, unfamiliarity of the new environment and the legal system can still lead to vulnerability for many international students (British Council, 2016). With regard to the Chinese students studying in Wales, a large proportion of them feel that they have experienced racially related incidents, either through personal experience or through someone they know closely. These incidents took place both on and off university campuses, ranging from unfriendly jokes to much more serious incidents.

As summarised in Figure 5.12, 59% of these students feel they have experienced unfair treatment, 51% of them encountered unfriendly jokes, 40% with verbal assaults, and 35%
with clear racial discrimination. Directly and indirectly, many of them have also become victims of some more serious criminal acts, such as robbery and theft (42%), fraud (15%) and sexual harassment (12%). The impact from such experiences and the seriousness should not be underestimated. With the vulnerability many Chinese and other international students feel, such experiences could greatly impact on their wellbeing, mental health, concentration and study outcome, and making them even more isolated (Garner, 2014).

![Survey question: Have you or someone you know ever encountered the following experiences?](image)

**Figure 5.12 – Unpleasant experiences from Chinese students in Wales**

### 5.4.4 Where do Chinese students seek help?

This study found that the vast majority (77%) of Chinese students would seek help from their family or close friends, when they face difficulties during their study or living in Wales. 54% of them have contacted their personal tutor or lecturers for help and advice. As can be seen from Figure 5.13, 29% of them used student services provided by the university. A smaller
number of them have approached student unions (15%), police / emergency services (9%), government / local council (5%) and the Chinese Embassy (3%).

Figure 5.13 – Where do Chinese students seek help from?

5.4.5 Activities outside university

As can be seen from Figure 5.14, outside university, three quarters (75%) of Chinese students have travelled in Wales and across the UK during their study. Taking advantage of close links with mainland Europe, more than half (51%) of them have also visited one or more European countries. 37% of them have taken part time jobs. Others have also been engaged with activities such as accompanying their parents or family whilst visiting (31%), participating in university society events (30%) and taking part in voluntary work (28%). 14% of Chinese students in Wales have managed to take internships before completing their courses.
5.5 Overall satisfaction rating

As can be seen from Table 5.6, nearly half (47%) of the responding Chinese students feel that their university has not given them enough support for their pre-departure preparation, whilst 27% are unsure and 26% think the opposite. Furthermore, less than half (44%) of the Chinese students think they have good understanding of and plans for their study and life in Wales before their departure. Conversely, 35% of them state that they did not have good understanding or plans for their Welsh adventure before coming to Wales. In addition, when asked if their Welsh study has given them obvious advantages compared with graduates from Chinese HEIs, less than a third of them (31%) think this is the case. Nevertheless, more than half of them (54%) are unsure (neither agree nor disagree), 14% of them disagree and 1% strongly disagree their Welsh study would give them any obvious advantages.
Table 5.6 – Students’ first experience with a Welsh university

| Statement 1: The University has not provided enough support for pre-departure preparation, during your study or after the completion of your course. |
|---|---|---|---|---|---|---|
| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Total Valid Responses |
| No of responses | 4 | 23 | 28 | 43 | 6 | 104 |
| In % | 4% | 22% | 27% | 41% | 6% | 100% |

| Statement 2: You already have good understanding and plan for your study and life in Wales. |
|---|---|---|---|---|---|---|
| No of responses | 4 | 32 | 23 | 39 | 6 | 104 |
| In % | 4% | 31% | 22% | 38% | 6% | 100% |

| Statement 3: Comparing with graduates from Chinese HEIs, you have obvious advantages after study in Wales. |
|---|---|---|---|---|---|---|
| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Total Valid Responses |
| No of responses | 1 | 15 | 56 | 27 | 5 | 104 |
| In % | 1% | 14% | 54% | 26% | 5% | 100% |

This survey also found that the vast majority (86%) of Chinese students who have studied in Wales think that their study and overall experience in Wales is value for money. This should be seen as a sign of confidence given by international students to the quality of Welsh HE and living experience in Wales. Arguably, there is great potential for universities in Wales to improve services provided to Chinese students. Some UK universities already work with other organisations, such as the British Council and their partners, to give international students informal lectures and workshop sessions in their country of origin as part of the pre-departure assistance (British Council, 2015). The communication methods could also be changed or improved to make the Chinese students feel more confident. During the semi-structured interviews, involving key stakeholders and decision makers of Welsh HE, the aim will be to develop a model that can address these shortcomings.
6. PRIMARY DATA ANALYSIS (INTERVIEWS)

6.1 Introduction

The semi-structured interviews involved 10 groups of key stakeholders from the Welsh and the UK HE sector, covering senior officials and academics from various UK HEIs, governing bodies, HE service providers, education agents and student groups (see Table 3.3 in section 3.7). This chapter begins with analysis of a number of existing and significant HE collaborations, which the interviewees have shared and had detailed personal involvement. This analysis includes the reasons why Welsh / UK HEIs should collaborate, the importance and benefits from such partnerships in relation to improving student services, the barriers and difficulties for establishing them, and what can be learnt from these experiences.

After that, this chapter identifies a suitable co-opetition model in which UK / Welsh HEIs can collaborate, based on the choice and the reasons given by these key stakeholders (i.e. interviewees). It then applies the theoretical co-opetition framework, namely the value net model (see Figure 2.16 in section 2.3), to create this HE collaboration model. By applying the theory, each interviewee/stakeholder is matched with a specific role(s) in this HE value net model, which comprises the organisation itself, competitors, customers, complementors and suppliers. Based on the interview data, this chapter then discusses the necessary steps and assurances to safeguard this co-opetition model, and verifies the benefits to the international students (i.e. the consumers of the UK/Welsh HE product).
6.2 Learning from existing UK-China HE collaborations

6.2.1 Interviewees and their individual involvement of HE collaboration

Table 6.1 lists the intended 10 interviewees and their organisations originally identified at the early stage of the research, as well as the actual interviewees who took part in the study. As can be seen from the Table, these interviewees are from a wide range of HE and HE related organisations, including Welsh and UK HEIs, their partner Chinese institution, governing bodies, other HE services providers, student and alumni groups. The 10 different interviewees are shown anonymously as #1 to #10 respectively. These unique numbers are used for quotations during the data analysis.

All interviewees who took part in this study could identify formal HE collaboration partnerships between their institutions and overseas organisations, with which they have personal involvement. These examples are listed in the last column of Table 6.1. Some of these developments include the University of Nottingham Ningbo campus in China (the first Sino-foreign university in China), Bangor University's China campus and UWTSD’s Wuhan Ligong College (a Chinese college opened in Swansea in 2017). This section looks at the significance and obstacles from establishing such partnerships, and what lessons can be learnt to assist developing a new collaborative framework based on co-opetition.
Table 6.1 – Intended and actual interviewees who took part in the study

<table>
<thead>
<tr>
<th>#</th>
<th>Intended interviewees</th>
<th>Intended organisations</th>
<th>Actual interviewees</th>
<th>Actual organisations</th>
<th>Involved HE collaboration projects</th>
<th>Roles in co-operation framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>International Recruitment / Marketing Officer</td>
<td>Various Welsh / UK HEIs</td>
<td>Asia Business Centre Executive Manager</td>
<td>University of Nottingham</td>
<td>University of Nottingham Ningbo campus</td>
<td>Acting as Organisations and Competitors</td>
</tr>
<tr>
<td>#2</td>
<td>International Students Alumni Officer</td>
<td></td>
<td>International Development Officer</td>
<td>University of Wales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#3</td>
<td>Lecturer with close contact with Chinese students</td>
<td></td>
<td>Assistant Dean</td>
<td>UWTSD</td>
<td>Wuhan Ligong College in Swansea</td>
<td></td>
</tr>
<tr>
<td>#4</td>
<td>Academic with international HE collaboration experience</td>
<td></td>
<td>China Director</td>
<td>QS World University Ranking, UK</td>
<td>University of Nottingham Ningbo campus</td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td>International Development Official</td>
<td>Welsh / UK Government</td>
<td>Executive Manager</td>
<td>Welsh Government Office in China</td>
<td>Bangor University's China campus</td>
<td>Acting as Complementors</td>
</tr>
<tr>
<td>#6</td>
<td>Higher Education Official</td>
<td>Welsh / UK Government</td>
<td>Former Education Officer</td>
<td>British Council</td>
<td>University of Birmingham’s partnerships with 17 Chinese Universities</td>
<td></td>
</tr>
<tr>
<td>#7</td>
<td>International Development Official</td>
<td>Chinese HEI(s) which is partnered with UK HEI(s)</td>
<td>International Student Support Officer</td>
<td>Wuhan University of Technology, China</td>
<td>UWTSD Wuhan Ligong College in Swansea</td>
<td>Acting as Suppliers</td>
</tr>
<tr>
<td>#8</td>
<td>Education Agent Official</td>
<td>Chinese education agent recruiting for UK HEIs</td>
<td>Manging Director</td>
<td>Cultural &amp; Educational Consortium Wales</td>
<td>University of South Wales top up programme for Chinese HEIs</td>
<td></td>
</tr>
<tr>
<td>#9</td>
<td>Chinese Student Union / Society Representatives</td>
<td>Welsh / UK HEIs</td>
<td>Student Groups</td>
<td>Swansea University, Cardiff Met and UWTSD</td>
<td>Swansea University with Chongqing Technology &amp; Business University</td>
<td>Acting as Customers</td>
</tr>
<tr>
<td>#10</td>
<td>Chinese Alumni Group</td>
<td>Welsh / UK HEIs</td>
<td>Alumni Groups</td>
<td>Cardiff and Swansea Universities</td>
<td>Confucius Institute at Cardiff University</td>
<td></td>
</tr>
</tbody>
</table>
6.2.2 Reasons to collaborate nationally and internationally

All interviewees agreed that UK HE faces intensified competition domestically and from abroad. They all acknowledged that collaboration with other national and international HEIs can strengthen their competitiveness. Broadly speaking, as expressed by the 10 interviewees, the reasons for UK HE to collaborate include sharing best practices and resources, improving teaching standards and student services, cost saving, gaining greater access to other markets, enhancing research capacity and credibility, and promoting the UK university brand to a much wider audience.

From UK HEIs’ perspective, interviewees from three UK universities stated that:

“We cannot afford to have staff or offices in every part of the world where we recruit. Having local partners and sharing a platform with other UK HEIs saves us a huge amount of money every year.”

Interviewee #1 (UK HEI)

“Many smaller UK universities often do not have recognition from the international market. By working together, we can sell the UK as a brand destination and compete against countries like Australia, the US and so on.”

Interviewee #2 (Welsh HEI 1)

“Welsh HEIs can be complementary to each other. Our eight institutions have very different features, in terms of locations, courses, studying and living experiences. We compete, but there are many areas where we can work together.”

Interviewee #3 (Welsh HEI 2)
According to Universities UK (2016), there is a culture of collaboration among HE establishments in the UK. The majority of UK universities also have links and partnerships with international institutions and organisations. With respect to marketing and student recruitment, the benefits from international collaborations help UK HEIs establish a successful HE branding. This strong UK branding continues to attract more and more international students to the UK. Working together also brings more choices and provides better value for students. UK universities are in broad agreement that it is necessary for them to continue working cooperatively to maintain its global competitiveness (UKCISA, 2017).

Especially for Welsh HEIs, most of which are classified as “small” universities with student enrolments less than 15,000 (BBC News, 2016), it is important for these institutions to collaborate with each other and with wider industries, as suggested by interviewee #4. He further added that almost half of all Welsh institutions are not traditionally research orientated. They have to coordinate and work together to share resources and experiences, in order to attract and conduct larger scale research projects. Research funding and income is by far the largest source of revenue for many financially strong and successful universities in the UK. This has not been the case for a number of Welsh HEIs. From a research and innovation perspective, collaboration is vital for Welsh HE’s finance and future.

The earlier questionnaire study from section 5.4 discovered that the vast majority (77%) of surveyed Chinese students in Wales feel that Welsh universities are less well-known in China than their equivalent universities in England and Scotland. Many people in China do not know anything about Wales. Interviewees #5 and #8 suggested that collaboration between Welsh HEIs and overseas partners could be a potential solution in raising the awareness of Welsh HE to an international audience.
They stated that:

“Facing the very severe competition from other regions of the UK, from Europe and globally, I agree that all Welsh institutions can do better if they collaborate. Wales lacks a strong HE brand and identity. Collaboration between all Welsh HEIs can help establish that.”

Interviewee #5 (Governing Body)

“From our experience, many Chinese students are not aware of Wales or any Welsh HEIs. They tend to choose universities in large urban areas, such as London and other big cities. It is therefore important for Welsh institutions to work with local partners in targeted markets. This is a very effective way of promoting Welsh HE and recruiting talented students.”

Interviewee #8 (Education agent)

This is supported by the work of Stengel and Turocy (2015) that formal cooperation between smaller players is very common in the business world. Such partnership between small players could build bigger influence in the market, better security against other competitors, widened access of resources and products, and improved services for customers. In practice, the Sky Team example mentioned in section 2.3 shows a successful example of this kind, where a group of smaller airlines from different countries joined forces to create one of the world’s largest airline alliances. As an alliance, they attract substantially more passengers and generate higher annual revenues than many other airline groups (Sky Team, 2016). All 10 interviewees agreed that this kind of business collaboration can be replicated in the Welsh HE sector with similar benefits.
6.2.3 Significance for international student recruitment

According to the interviewees, including student and alumni groups from Welsh HEIs, there are many benefits from international HE collaboration, especially in widening and improving student services. In recent years, increasing number of UK HEIs have innovatively opened campuses far away from their city and country of origin to expand their operation. This strategy has proved to be successful in terms of attracting more students and generating more revenue (The Guardian, 2016). A number of Welsh HEIs, for example Bangor University, Cardiff Met and UWTSD, also have established a presence and are delivering their courses outside the UK, through their international partnerships (Bangor University, 2016; Cardiff Met, 2016 and UWTSD, 2016).

Arguably, one of the most successful and best-known UK international HE collaboration establishments is the University of Nottingham Ningbo China (UNNC), which was opened in 2004 and is China’s first Sino-foreign cooperative university (Prospects, 2017). Jointly owned and operated by the University of Nottingham (UK) and Zhejiang Wanli University (China), the 144-acre university hosts more than 6,500 students from over 70 countries and produces around 1,500 graduates each year (UNNC, 2017). It is one of the largest overseas campuses from any UK HEI and is regarded as a pioneer in offering high quality but localised international higher education (Zhao and Wang, 2016).

Both interviewees #1 and #4 have worked on the UNNC project and shared their experiences.

“Thanks to our international partners, the University (of Nottingham) was able to open campuses in Malaysia and China and establish a strong brand image there. With our
presence in these countries, we are offering students much more localised and focused services that our competitors in the UK or in these countries do not provide.”

Interviewee #1 (UK HEI)

“The benefits from this partnership (UNNC) to students are phenomenal. First, Chinese students can now pursue a UK degree on their doorstep without leaving their country. Secondly, there is a huge financial saving both for the university and for the students. Thirdly, this UK-China cooperative model is fully embedded with the local education system, offering a real alternative from traditional higher education.”

Interviewee #4 (University ranking body)

According to UNNC (2017), receiving the full approval of the Chinese Ministry of Education and UK’s QAA, the university attracts some of the most talented local students from China every year. New student intake numbers have risen sharply from just 97 in 2004/05 to 960 in 2016/17, with further year on year increase expected. Having secured and maintained the local logistics and supply chain, the university has reduced its operational costs by nearly a third in China, compared with equivalent operations in the UK (Zhao and Wang, 2016). This not only generates a notable saving for the university, but also brings direct financial benefits to the students. As can be seen from Figure 6.1, for many courses leading to the same qualification, the tuition fees at its China campus are less than half the fees charged at its UK campus.
Because of its uniqueness and success in China-foreign HE collaboration, UNNC has enjoyed ongoing good publicity and coverage from the national media in China. It has hosted a number of high profile visits from senior government officials from both China and the UK (Prospects, 2017). Interviewee #1 further added that this has allowed the university to secure substantial funding and investment from the government and other bodies, which are being used to drive research projects, improve teaching and learning facilities, and enhance student experiences. Strong links with local and international industries have also been established, offering students better employment prospects.
6.2.4 Encountered barriers and obstacles

All interviewees were asked to describe the main obstacles and barriers their organisations faced when establishing international HE partnerships. As summarised in Table 6.2, the issue of trust, bureaucracy and politics, and lack of understanding were the most frequently experienced obstacles encountered by the interviewees and their organisations. Moreover, immigration policy, the lack of continuity and government support were also identified as common challenges. The interviewees further added the barrier of entering local market, legal challenge, culture difference and quality management, were also barriers to a successful HE collaboration.

Table 6.2 – Main barriers and obstacles experienced by interviewees

<table>
<thead>
<tr>
<th>Obstacles</th>
<th>Mentioned by which interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust issue</td>
<td>Interviewees #2, #4, #5, #7 and #9</td>
</tr>
<tr>
<td>Lack of understanding</td>
<td>Interviewees #2, #3, #6 and #8</td>
</tr>
<tr>
<td>Bureaucracy and politics</td>
<td>Interviewees #1, #4, #5 and #7</td>
</tr>
<tr>
<td>Immigration policy</td>
<td>Interviewees #4, #8 and #10</td>
</tr>
<tr>
<td>Lack of continuity</td>
<td>Interviewees #3, #5 and #6</td>
</tr>
<tr>
<td>Lack of government support</td>
<td>Interviewees #2, #7 and #8</td>
</tr>
<tr>
<td>Barrier of entering local market</td>
<td>Interviewees #4 and #8</td>
</tr>
<tr>
<td>Legal challenge</td>
<td>Interviewees #1 and #7</td>
</tr>
<tr>
<td>Cultural difference</td>
<td>Interviewees #9 and #10</td>
</tr>
<tr>
<td>Quality management</td>
<td>Interviewee #10</td>
</tr>
</tbody>
</table>
On the issues of trust and the lack of understanding, interviewees #2 and #8 explained that:

“Higher education is a very competitive market. The first response you will get when asking another university to collaborate is ‘what do you want?’ or ‘what is your purpose?’. We naturally do not trust our competitors. Without trust, cooperation simply won’t work.”

Interviewee #2 (Welsh HEI)

“It is fair to say that all parties in a cooperation started with great enthusiasm and best intentions. But we have seen many cases where organisations set unrealistic goals and did not understand each other properly. These relationships did not last long.”

Interviewee #8 (Education agent)

Akintoye and Main (2015) argue that the lack of trust and mutual understanding are the main causes for the failure of any corporate partnerships. In addition to interviewee #2’s opinion, four other interviewees (#4, #5, #7 and #9) also felt that UK universities normally see each other as competitors, rather than partners. All universities want to recruit good students, attract investments and want their organisation to succeed. Therefore, it is natural sometimes that many UK universities do not trust each other. The interviewees further explained that building up trust with their competitors normally takes a long time, but appreciated that this step is the most crucial part for establishing any partnership.

As summarised in Table 6.2, there are also a number of external factors affecting the outcome of collaboration, on which organisations have little influence. Interviewees #1 and #4 expressed their frustration (see below) on the bureaucracy of external organisations and the UK immigration policy.
“The main obstacle we faced was red tape and bureaucracy. To launch eventually this partnership (UNNC), we had to get approval from local, regional and national authorities from both countries. This process was very complicated, time consuming and expensive.”

Interviewee #1 (UK HEI)

“One of the key things that has impacted negatively on UK universities’ ability to collaborate internationally is its immigration policy. Sometimes it is very difficult to persuade top academics and students in China to come to the UK, as the visa system is so complicated. People will simply go to other countries.”

Interviewee #4 (University ranking body)

These experiences were not isolated, as both interviewees #5 and #7 stated that their organisations also faced similar difficulties with their HE partners. Moreover, Table 6.2 shows that the lack of continuity and lack of government support were both mentioned by three interviewees, as the main barriers for their collaboration projects. On this issue, interviewee #6 commented:

“Continuity is a key challenge. Often when there is a senior management change in the organisation or in the governing body, it puts everything on standstill. We had one instance where a university had a new vice-chancellor and a new team, which led to the whole collaboration project with another institution being scrapped.”

Interviewee #6 (HE supporting body)

Overall, interviewees from various HEIs, HE governing and supporting bodies, and student groups listed 10 main obstacles, which they have experienced when their organisations
attempted to establish national or international collaborations. The interview asked each participant to explain how their respective organisations overcome these challenges and eventually secure the partnership. The following subchapter analyses their responses and explains what can be learnt for future cooperative developments for HEIs.

6.2.5 How did organisations overcome obstacles?

With respect to the issue of trust, Interviewee #2 pointed out that all Welsh universities have HE partners at various locations in China. He states that each Welsh HEI is different and offers different courses. It makes sense if they could share their local contacts in China to expand their network and influence. One Chinese university can be in partnership with more than one Welsh university. He argues that Welsh HEIs are complementary to each other and there are many common interests on which they can work together. Interviewee #2, #5 and #7 also gave the following advice on resolving trust issues:

“Be open minded and work on mutual interests and goals.”

– Interviewee #2 (Welsh HEI)

“Government can act as the moderator. It has the credibility and can work with all parties to bring a solution.”

– Interviewee #5 (Governing Body)

“Treating each other with respect and honesty. Set out clear objectives and follow them.”

– Interviewee #7 (Chinese HEI)

To help achieve better understanding between different partners, Interviewee #7 argued that individual parties need to spend plenty of time to establish a proper understanding of each other. Thorough preparation work needs to be carried out before any formal meetings can take place. Interviewee #3 explained that clear objectives need to be set and given by
university management team, with regular reviews to ensure the best outcome is achieved. Mutual visits, joint staff training and student exchange programmes can also be great examples of building trust and links between partnered institutions.

When it comes to collaboration with organisations overseas, it appears to be a sensible option to use local service providers, such as local legal firms and consultants etc. Interviewees believe that they can provide good local knowledge and speed up some complex processes. Interviewee #1 added that their local partner in China has a strong working relationship with the local government, which provided services such as helping find the best campus location, facilitating the construction work and resolving some of the legal and operational challenges. Interviewee #4 also pointed out that Welsh universities need to invite and involve local government and communities to be part of their development plan. This can ensure good publicity as well as minimise misunderstanding.

Regarding difficulties from immigration policies, Interviewee #5 admitted that Welsh universities have limited influence to the government on this issue. However, universities can provide visa services and assistance to their international students. They can make this process as smooth as possible for them. Interviewee #9 added that universities should also continue working with other organisation to lobby the government to change its course on the tightened immigration rules. Universities can also be more proactive and engage with local and national governments, in policy making processes.

Interviewees #4, #6 and #9 emphasised that respect and honesty are the key for successful collaborations. The trust can be built up from mutual understanding. A clear objective and set goals are also required to make sure such partnerships can deliver. Additionally, there should
be long term commitment and support from senior management to safeguard the partnership and ensure it is sustainable. As well as working with their partners, the universities should proactively engage with the local government. Interviewee #10 explained that most failed business collaborations were due to the lack of monitoring. He suggested all parties in a HE cooperation need to review regularly what has been achieved and what needs to change. All parties involved need to be open, honest and flexible.

6.3 Creating a sustainable HE co-opetition framework

6.3.1 Stakeholders’ preferred HE co-opetition model between competitors

All interviewees agreed that Welsh HE lacks a strong international brand and suggested that a collaborative approach between all Welsh HEIs with support from the government and other parties could be a solution. The interviewees were presented with the most common five co-opetition business models, including strategic alliance, joint venture, franchising, licensing and co-branding (details see section 2.4.4), together with their definitions and successful business examples (shown in Figure 2.9). They were then asked to make a single choice of their preferred co-opetition model for their organisation, and give their reasons.

Table 6.4 shows the most preferred HE co-opetition model chosen by each of the ten interviewees, via a single choice question. Their choice is marked by an “X” in the table. As can be seen from the Table, eight out of the ten interviewees selected the strategic alliance model as their preferred collaboration option amongst other four co-opetition models. Two interviewees, #3 and #7, have chosen the joint venture as the most suitable co-opetition model for HE collaboration. All other eight interviewees believe that the strategic alliance is
the best HE co-opetition option. No other co-opetition models, i.e. franchising, licensing or co-branding, were chosen by the interviewees.

Table 6.4 – The most preferred HE co-opetition model chosen by interviewees

<table>
<thead>
<tr>
<th>Interviewee #</th>
<th>Strategic Alliance</th>
<th>Joint Venture</th>
<th>Franchising</th>
<th>Licensing</th>
<th>Co-branding</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td></td>
<td>X</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>#5</td>
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</tr>
<tr>
<td>#6</td>
<td></td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>#7</td>
<td></td>
<td></td>
<td></td>
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<td>X</td>
</tr>
<tr>
<td>#8</td>
<td></td>
<td>X</td>
<td></td>
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<td>#9</td>
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<td>#10</td>
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</tbody>
</table>

It is not a surprise that 80% of the interviewees are in favour of the strategic alliance option. In the co-opetition theory, it has been suggested that the strategic alliance is by far one of the most practical and widely used collaboration models for businesses (Kraus et al., 2017). It has minimal entry barriers when compared with other formats of co-opetition, such as a joint venture, franchising or licensing. It can be formed by a simple agreement between different parties to pursue a set of agreed objectives (Padula and Dagnino, 2007). The simplicity for forming a strategic alliance has made this model popular within the HE setting (Mongkhonvanit, 2014).

In the UK HE sector, this model has been adopted by many universities. For example, the prestigious Russell Group of 24 leading research institutions, the University Alliance of 19 additional universities with strong industrial orientation, and the N8 Research Partnership...
consisting eight research-intensive HEIs in the North of England. These are all examples of successful practice of HE strategic alliance (Russell Group, 2017; University Alliance, 2017 and N8 Research Partnership, 2017).

When asked the reason for their choices, the following explanations were given:

“Our preferred choice is definitely the first model (strategic alliance). This is the most straightforward option compared with other models. Most HEIs in the UK are competitors with each other, so we do not want to be legally bound together, as would be the case in other formats of co-opetition. Strategic alliance is a successful business collaboration model. We feel we can work easily with others under this model without any legal complications.”

Interviewee #1 (UK HEI)

“We very much prefer the strategic alliance model. For me, this approach has the lowest entry barriers. Throughout history, Welsh institutions have always worked together under some sort of alliance, for example, the former University of Wales model.”

Interviewee #5 (Governing body)

“Strategic alliance does not require too much capital investment. It is easier for Welsh institutions, especially for the smaller ones, to participate. It is not restricted by legal requirement, hence more operationally flexible.”

Interviewee #10 (Chinese alumni group)
6.3.2 Establishing the co-opetition value net framework for UK HEIs

As shown in section 2.4, the co-opetition theory suggests that every successful market (game) is made up of five players, which are customers, competitors, suppliers, complementors and organisations themselves. These five players need to become related to and interdependent with each other, in order to make the market and their individual businesses successful and sustainable (Mongkhonvanit, 2014). This interactive relationship develops a bond between the players and is referred to as the co-opetition value net framework (see Figure 2.8 in section 2.4). Researchers (He, 2012; Dixit and Nalebuff, 2010) suggest that this theoretical foundation of co-opetition can also be applied in the HE sector. As shown in Figure 6.2, in the HE co-opetition value net framework, the organisation can be regarded as an individual HEI. The competitors can simply be understood as other HEIs. The customers are the students. The complementors can be the government and/or funding bodies, and the suppliers could be FE colleges, education agents and/or partnered private schools and overseas HEIs.

![Figure 6.2 – The basic co-opetition value net framework for the HE sector (He, 2012; and Dixit and Nalebuff, 2010)](image-url)
As discussed in section 2.5, Mongkhonvanit (2014) argues that similar to the commercial sector, in the HE value net framework, the success of an individual institution is also determined and influenced by the success of its four external players, including its customers, competitors, suppliers and complementors. Therefore, the individual HEI should develop and maintain a collaborative partnership with all of its external players (Asaro, 2012). In the previous section 6.3.1, the interviewees already identified their preferred collaboration approach between UK HEIs is the strategic alliance. Taking these factors into account, the co-opetition framework for the UK HE sector can therefore be drawn as shown in Figure 6.3. By applying the theory, the 10 interviewees, who represent key stakeholders from the UK HE sector, can also be allocated to a specific role(s) to match one of the relevant five players in the value net framework (see Figure 6.3).

Figure 6.3 – Application of co-opetition framework into the UK HE
6.3.3 How can institutions secure an all-win outcome with external partners?

Institution to institution

Section 6.2 explained why UK universities, especially the universities based in Wales, should collaborate with each other. Although there is a broad sense of agreement among the stakeholders that they can and should work together, there are clear barriers in establishing and safeguarding this partnership (see Table 6.2). Interviewee #3 feared that if their institution shared resources and contacts with other Welsh HEIs, with regard to Chinese student recruitment for instance, they may lose students to other institutions. He admitted it is unlikely that his institution could cooperate with other universities on student recruitment. However, on international student services, he suggested that there is a definite willingness for multiple HEIs to work together to deliver better services. He added:

“After students have been recruited, Welsh universities should not see each other as competitors, rather as potential partners for improving international student services. We can work together from the early stage before they arrive in the UK and throughout their study.”

Interviewee #3 (Welsh HEI)

Interviewee #3 mentioned that many UK universities are already offering international students airport meet and greet services. These services can be coordinated easily with neighbouring institutions to bring international students from major UK airports to the same region. It could save each university tens of thousands of pounds each year. Interviewees #1 and #2 also believed that a number of other services, such counselling, library and IT services, language support, and particularly student accommodation can also be coordinated and offered on a regional level.
Additionally, interviewees #1 and #2 both said that almost all UK universities face a huge challenge of providing sustainable student accommodation on a large scale. According to interviewee #1, not a single UK university has the capacity to accommodate all of its students. He explained that throughout any academic year, students are short-term tenants, who would normally only reside in student accommodation during the term time. This means that up to six months in a year student accommodation would be empty. Many private landlords and housing providers in the UK have chosen to stay away from providing student accommodation, due to strict regulations (Feather, 2015).

Interviewee #4 argued that neighbouring universities should join forces to tackle the student accommodation challenge. Collaboratively, they can make wider plans to utilise their estates, lands and resources; have a bigger influence in local housing planning; and have greater negotiation power with local transport providers. Interviewee #4 further explained that there is enthusiasm for UK institutions to operate more cooperatively on this matter. She added:

“As with many private companies, there may be commercial or sensitive information that universities do not wish to share with each other. But they can have greater influence in many areas if they do work together. They need to agree what they can share, establish common goals, and stick with them.”

Interviewee #4 (University ranking body)
Institution to government

Interviewee #6 (from the British Council) stated that the government has an important role to play in many university to university collaborations, both at home and abroad. She explained:

“*The government, both at local level and national level, can represent authority and can provide reassurance, which is vital for any collaboration projects. This is why some of the most high-profile and successful international collaborations have government’s involvement and support*”.

Interviewee #6 (HE supporting body)

Regarding government participation, section 5.3 discovered that 75% of Chinese students in the survey have more trust on Welsh HEIs, which are in partnership with Chinese central or local government. From these international HE collaboration projects shared by the interviewees (see Table 6.1), UNNC, Bangor University's China campus, UWTSD’s Wuhan Ligong College, and the Confucius Institute at Cardiff University, all benefited from government support and reassurance, at local and national levels, from both the UK and China (UNNC, 2016; Bangor University, 2016; UWTSD, 2016 and Cardiff University, 2016).

It is evident that the government involvement was important in the delivery of these collaboration projects. Interviewee #6 further expressed that “*not only can the government provide essential support to secure large-scale collaboration projects, but also act as the facilitator between different institutions to smoothen the process*”. In addition, interviewee #4 argued that in order to monitor progress, there needs to be an independent and neutral body whose role is to safeguard a fair and consistent collaborative environment for all participating
parties. He suggested that the government or a government body could fulfil this role and provide unbiased guidance between different HEIs.

Interviewee #5 (from the Welsh Government) stated that another important role the government can play is that of working with universities to introduce international student friendly policies both at local and national levels. She also pointed out that local councils can bring localised projects around universities to improve road infrastructure, public transport links and social services for students. She added that local and devolved national governments in Wales can influence the UK central government on certain policies. They have tried to persuade the UK government to change its course on immigration policies, so that international students feel more welcome when studying in Wales or elsewhere in the UK.

“It is important that the universities become more proactively engaged with the government and keep them informed about university development plans. On the other hand, the government should listen to universities and provide the necessary support”, suggested by interviewee #2 (Welsh HEI).
Institution to overseas education agents

The British Council (2016) recognises that overseas education agents play a major role in promoting UK HE abroad and bringing hundreds of thousands of international students to the UK each year. As well as having an insight into the knowledge of local affairs, policies, culture and language, these organisations can be approached easily by potential students and parents of students outside the UK. Other services can also be provided, typically including course application assistance, translation services, student visits, HE exhibitions and visa application support (Garner, 2014). Education agents are an important source of supply for international students for many Welsh and UK HEIs.

Hexun (2015) suggests that not only can these agents in China make substantial income through receiving university commission fees, but many of them also charge a significant fee to students who are using their services. The whole education agent market is estimated to make over £17 billion annual turnover across Asia and parts of South America. The massive profit and competition involved within this industry has driven many agents to prioritise their financial interests ahead of students’ best interests (Chen, 2011 and Marcus, 2013).

Regarding Welsh universities, a report from CEC Wales (2015) shows that all Welsh institutions have employed education agents in China to assist in the recruitment of Chinese students. Section 5.3.5 revealed that the vast majority (80%) of Chinese students surveyed in Wales have used the services provided by education agents before coming to study in Wales. However, this study shows that their experiences from such services are largely mixed and divided (see Figure 5.7 in section 5.3.5). China Daily (2016) reported that misleading information and false promises are often given by agencies to both the course providers and the students, in order to secure the best financial outcome for their business.
Interviewee #8 from an education agency, which recruits Chinese students for a number of Welsh and UK universities raised a concern, and commented:

“Despite the huge revenue and profit involved, there is no proper monitoring or regulation for this [education agent] industry in the UK. The commission rate, contract type and service agreement differ from university to university. There is no clear guidance to distinguish good from bad agents.”

Interviewee #8 (Education agent)

There is an increasing level of demand and pressure for UK HEIs to become more transparent and open with their arrangements with overseas education agencies. It is important for UK universities to monitor and review the services provided by education agents to protect the interests of their international students (Chandler, 2015). Interviewee #9 (Chinese student groups) urged Welsh universities to introduce proper monitoring procedures to check their contracted education agents regularly. They suggested:

“As service users, our views and experiences [of education agents] are rarely reviewed by our university. Some students had bad experiences, but had no place to make a complaint. Universities should ask us to give them feedback on our experience with their education agents, and take action if there is misconduct.”

Interviewee #9 (Chinese student group)
In contrast, the British Council (2016) states that more and more UK universities start to recognise the increasing importance of building up partnerships with overseas institutions. Overseas partnership has also been seen as an effective strategy of attracting international students to the UK. From the UNNC example studied in section 6.2.3, not only can such partnership help raise the profile for the UK university abroad, but also deliver a sustainable level of new student recruitments every year (UNNC, 2016).

Two Welsh universities have established similar partnership with Chinese institutions. The first is Bangor University’s China campus, jointly opened with the Central South University of Forestry and Technology (CSUFT) in China’s Hunan Province in 2014. The second is the opening of the Wuhan Ligong College in Swansea in 2016, a collaborative project between UWTSD and China’s Wuhan University of Technology (WUT) (Bangor University, 2016 and BBC News, 2016).

Bangor’s China campus recruited 200 Chinese students in 2014 alone, and is working with Chinese education authorities to expand the range of courses on offer. Its ambition is to host 2,000 students in that campus over the next few years (Bangor University, 2016). The Wuhan Ligong College in Swansea has attracted over 100 students to UWTSD in 2016. It is investing significant amount of money and resources to attract high quality Chinese students from China to Swansea, by offering flexible learning pathways and scholarships which covers as much as 50% of the tuition fee (WUT, 2016).
Interviewee #5 from the Welsh Government’s office in China has personal involvement with Bangor University’s China campus project and has detailed knowledge of UWTSD’s Wuhan Ligong College. She commented:

“The success of both projects is as a result of years of preparation with clear objectives and mutual understanding. I understand the partnership between UWTSD and WUT has already lasted over a decade. There are nearly 3,000 HEIs in China, many of which still have not established international links but are keen to engage with foreign universities. This creates a huge potential for Welsh universities.”

Interviewee #5 (Governing body)

➢ Institution to students

This research carried out interviews with four Chinese students and four Chinese alumni from four Welsh universities, namely Cardiff Met, Cardiff University, Swansea University and UWTSD. All expressed that they want their universities to become highly successful, because their success is dependent on their university’s success. The students stated that:

“As more and more international students come to the UK, we want to be treated as individuals by the university, not simply as statistics. More can be done by the university to support and engage better with international students.”

Interviewee #9 (Chinese students group)

Numerous reports in recent years (Hayes, 2017 and Wainwright, 2016) expressed concerns that international students are increasingly seen as “cash cow” by UK universities and
businesses. With the average spending by each Chinese student to the UK economy exceeding £36,000 every year, it is reasonable for them to expect and to demand a good level of personalised services from their universities. Universities should invest more to understand their international students’ needs, which are considerably different from these of UK students (Daily Mail, 2015).

Section 5.4.4 discovered that only 29% of Chinese students in Wales would seek help from student services provided by their university, when they face difficulties. The vast majority of them (77%) would approach their family or close friends instead. This finding is alarming, as many universities have specifically trained staff to support international students on a wide range of issues (British Council, 2016). From the students’ point of view, the Chinese alumni group stressed that:

“When facing challenges, international students have to be proactive in utilising all the resources provided to them by the universities. We need to acknowledge that if many [Chinese] students do not take the first step to seek help from their university, there is not much the university can do to help them.”

Interviewee #10 (Chinese alumni group)

Interviewee #10 suggested that if the university could hire Chinese speaking supporting staff, it would be easier for Chinese students to approach them. Particularly when they already face difficulties, the last thing they want to worry about is the language barrier or embarrassment for not explaining things properly.
6.4 Creating a support network based on co-opetition for international students

All interviewees were asked to describe the main stages and milestones for the journey of an international student studying in UK. They were asked to list what support and services their organisations can provide to international students. Based on their responses, Table 6.5 establishes the international student’s life cycle, as well as lists the support different organisations in the co-opetition could offer to them. As can be seen from the first column of Table 6.5, an international student’s journey can be divided into three major stages, including the first one “before coming to the UK”, the second stage “studying and living in the UK”, and the third stage “after completion of their courses”. Each major stage consists several steps.

The interviewer also asked each participant to explain how they could work with other parties in the co-opetition framework, in order to provide better connected support and help to cover each stage of the international student’s life cycle. As summarised and listed in Table 6.5, before students come to the UK, the education agents and partnered HEIs in China stated that they can provide students with appropriate guidance and support on course application and visa application (Interviewees #7 and #8). The student and alumni groups can share their first-hand experiences and arrange pre-departure briefings and workshops, which could be a great help for these new students (Interviewees #9 and #10). The government can set clear guidance to improve the visa process (Interviewee #6), whereas individual UK HEIs should coordinate all their partners in China to ensure a smooth process (Interviewees #1 and #3).
Table 6.5 – Creating a support network based on co-opetition for international students

<table>
<thead>
<tr>
<th>International student's life cycle (Identified through interviews)</th>
<th>Support network for international students through co-opetition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1: Before coming to the UK</strong></td>
<td><strong>Individual Welsh / UK HEIs (Organisations / Competitors)</strong></td>
</tr>
<tr>
<td>- University application and admission</td>
<td></td>
</tr>
<tr>
<td>- Student finance arrangement</td>
<td></td>
</tr>
<tr>
<td>- Visa and immigration</td>
<td></td>
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<tr>
<td>- Preparation for departure</td>
<td></td>
</tr>
</tbody>
</table>

| **Stage 2: Studying and living in the UK** | **Individual Welsh / UK HEIs (Organisations / Competitors)** | **Education agents & partners (Suppliers)** | **Government bodies (Complementors)** | **Student & alumni groups (Consumers)** |
| - Arriving in the UK | 1. Progression monitor & support; 2. HEIs work together to provide sufficient accommodations; 3. Chinese language service (if possible). | 1. Act as link between students & parents; 2. Monitor students’ progression. | 1. Improve local transport links; 2. Introduce international student friendly policies. | 1. Study support and advice; 2. Sharing tips on accommodation & UK life in general. |
| - Enrolment and study progression | | | | |
| - Arranging student accommodation | | | | |
| - Living in the UK | | | | |
| - Assignment and examination | | | | |

| **Stage 3: After completing their courses** | **Individual Welsh / UK HEIs (Organisations / Competitors)** | **Education agents & partners (Suppliers)** | **Government bodies (Complementors)** | **Student & alumni groups (Consumers)** |
| - Graduation | 1. Career services; 2. Internship & work experience; 3. HEIs to organise career fairs & training; 4. Alumni service & network. | 1. Life skills training; 2. Career services from home country; 3. Work with local industry to provide work experiences. | 1. Quality assurance; 2. Relax / reintroduce work experience visa. | 1. Sharing experience on further study or starting a career in the UK. |
| - Exploring post-graduation opportunities | | | | |
| - Further study / employment in the UK | | | | |
| - Returning to their home country | | | | |
When the students arrive in the UK, their universities can offer airport pick up services to transport them safely to their destination. As well as providing continuous support during their stay, UK HEIs should work together with the local authorities to provide sufficient student accommodation, better local links and a safer studying environment (Interviewees #2 and #4). At this stage, the institution’s partnered HEIs and education agents in China can act as a link between the students and their parents, in order to provide regular updates to students’ families (Interviewees #7 and #8). The students and alumni groups could share their experiences to provide help on finding student accommodation and tips on living in the UK to the new students (Interviewees #10).

Whilst international students study in the UK, interviewee #1 suggests that UK HEIs can work with each other and with their Chinese partners to provide extra services. These can be aimed at providing work skills and interview training, organising job fairs to bring Chinese and UK companies to campus, and offering alumni services and networking opportunities. The role for the government is to continue providing quality assurances for UK HE qualifications (Interviewee #6). There is an increasing desire among universities and student groups that the UK Government should relax its immigration rules to allow international students to have a short period of work experience in the UK after graduation (Interviewee #9).
7. DISCUSSIONS

7.1 Key research findings

As explained in Chapter 3 (Sections 3.4 to 3.7), there were three specially designed stages for data collection and analysis for this research study. The first stage, secondary data analysis, covered a series of small *Case studies* for the nine Welsh HEIs. The second stage, primary data analysis, involved *Questionnaires* from 124 Chinese students and graduates from Welsh universities. The final third stage, primary data analysis, conducted *Semi-structured interviews* with Welsh HE policy and decision makers. To better link the findings from the three-stage data collection processes, Figure 7.1 shows data analysis structure that this research has followed. The research findings were presented in Chapters 4 to 6 respectively.

Figure 7.1 – Data analysis structure for this research
(In correspondence to Figure 3.2 – Data collection structure)
Findings from the case studies of Welsh universities

The first stage of data collection and analysis focused on the status quo of Welsh HEIs in relation to their current development and utilisation of co-opetition practice. From the data collected and analysed, together with the series of small case studies, it is clear that the concept and application of co-opetition is evident and well developed among all eight Welsh universities. The five most common formats of co-opetition, namely strategic alliance, joint venture, franchising, licensing and co-branding, are relevant and well developed within the Welsh HE sector. Each Welsh institution is connected with other Welsh HEIs through at least one, or in a number of cases, multiple forms of co-opetition and collaboration partnerships.

By conducting this co-opetitive assessment all of the Welsh universities, it verified that the key benefits associated with co-opetition partnerships are practical and evident within the Welsh HE ecosystem. Table 7.1 lists the key benefits of co-opetition as previously discussed in section 2.4. Through these Welsh HE case studies, Table 7.1 also highlights which benefits are relevant to the models of Welsh HE co-opetition based on the findings presented in Chapter 4. From these case studies, it is clear that Welsh universities benefit from the co-opetition strategy. Such approach can promote greater collaboration between partners, help institutions respond more quickly and effectively to challenges and opportunities, allow them to share resources and funding, and provide greater influences to the education system in Wales.
Table 7.1 – Benefits from co-opetition and the relevance to Welsh HE

<table>
<thead>
<tr>
<th>Key co-opetition benefits (Kotler and Armstrong, 2015 and Leitao et al., 2014)</th>
<th>Welsh HE co-opetition practices</th>
<th>Benefits evident in cases studied?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote collaboration and bring bigger impact in the market</td>
<td>Welsh Universities’ strategic alliances Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint venture between Welsh HEIs Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Franchising with Welsh FE colleges Y</td>
<td></td>
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<tr>
<td></td>
<td>Licensing to private HE providers Y</td>
<td></td>
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<tr>
<td></td>
<td>Co-branding of HE in Wales Y</td>
<td></td>
</tr>
<tr>
<td>Help businesses respond more quickly and effectively to challenges and opportunities</td>
<td>Welsh Universities’ strategic alliances Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint venture between Welsh HEIs Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Franchising with Welsh FE colleges No strong evidence found</td>
<td></td>
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<tr>
<td></td>
<td>Licensing to private HE providers Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-branding of HE in Wales Y</td>
<td></td>
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<tr>
<td>Allow partners to share resources and gain wider access to resources from others</td>
<td>Welsh Universities’ strategic alliances Y</td>
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<td></td>
<td>Joint venture between Welsh HEIs Y</td>
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<td>Franchising with Welsh FE colleges Y</td>
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<td>Licensing to private HE providers Y</td>
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<td></td>
<td>Co-branding of HE in Wales Y</td>
<td></td>
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<tr>
<td>Create a bigger player that brings greater influences and competitive advantages in the market</td>
<td>Welsh Universities’ strategic alliances Y</td>
<td></td>
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<td></td>
<td>Joint venture between Welsh HEIs Y</td>
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<td></td>
<td>Franchising with Welsh FE colleges Y</td>
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<td></td>
<td>Licensing to private HE providers Y</td>
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<td></td>
<td>Co-branding of HE in Wales Y</td>
<td></td>
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<tr>
<td>Improve level of creativity and innovation, offer stronger financial support for new product and service developments</td>
<td>Welsh Universities’ strategic alliances Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint venture between Welsh HEIs Y</td>
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<tr>
<td></td>
<td>Franchising with Welsh FE colleges No strong evidence found</td>
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<tr>
<td></td>
<td>Licensing to private HE providers No strong evidence found</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Co-branding of HE in Wales Y</td>
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</tbody>
</table>
Findings from the questionnaires of international students

The consumer-oriented questionnaire exercise was the second phase of data collection and analysis process, which attracted responses from 124 Chinese students who have studied their HE courses in Wales. This analysis was conducted in Chapter 5, which established thorough understanding of consumers' (i.e. Chinese students) behaviour in relation to Welsh HE, including their perception of Wales and the Welsh HE brand, their student finance, key decision-making factors, as well as the channels where they find information. The data analysis confirmed that Chinese student recruitment for many Welsh and UK HEIs is still largely reliant on commercial overseas education agents. This route of recruitment has brought significant number of international students to Welsh and UK universities. However, it has many issues and does not have the ability to address the concerns, needs and expectations provided by the Chinese students through this survey analysis.

Chapter 5 then evaluated Chinese students’ study and living experiences in Wales. Language barrier, difficulties of making friends, cultural differences and loneliness etc., as well as some unpleasant and unfair incidents experienced by them, highlighted the challenges and vulnerability amongst many Chinese students when they study abroad. Despite these challenges, the vast majority of Chinese students (86%) still feel satisfied with their overall experience in Wales, and think it is value for money.

This chapter also discovered that the expectations from Chinese students towards the Welsh HE products. The first two stages of data collection and analysis established the status quo of Welsh universities’ international development and the proper understanding of their consumers (i.e. international students). The final semi-structured interviews aimed to create a HE co-opetition framework, which promotes sustainable collaborations between Welsh-/UK
universities to address the competitive challenges facing this sector, as well as enhancing the experiences of international students in Wales and across the UK.

➢ Findings from the interviews of key stakeholders of Welsh HE

The semi-structured interviews involved key stakeholders associated with the Welsh and UK HE sectors. These interviewees were from a number of different Welsh and UK institutions, an independent well-respected university ranking body (i.e. the QS), a senior official from the Welsh Government, student and alumni groups from four different Welsh universities, as well as one Chinese university (which is in partnership with a Welsh university) and an education agency (which recruits Chinese students to Wales). Each of the interviewees were asked to share their personal experiences involving international HE collaboration projects between their organisation and an overseas organisation, their views on creating a more sustainable HE collaborative framework, and how this new framework may further benefit international students.

Chapter 6 started with the analysis of some well-known existing international HE collaboration projects shared by the interviewees. It explained why universities in the UK, especially in Wales, should collaborate with national and international partners and their competitors. The importance of these existing partnerships to international student recruitment was discussed. It then specifically studied the barriers and obstacles that each of the interviewee’s organisations faced when establishing such partnership, as well as what steps they took to overcome those barriers.

Based on the responses from the interviewees, it was established that the preferred collaboration approach between Welsh universities would be through strategic alliance. By
applying the theory, a co-opetition value net framework for the Welsh HE sector (which is also applicable to the wider UK HE sector) was created. The 10 interviewees were mapped with each of the five players in the co-opetition framework respectively. It discussed and proved that this framework could contribute to an all-win outcome for each individual Welsh institution with its competitors, customers, the government and suppliers.

Under this newly proposed co-opetition framework, individual Welsh universities (i.e. competitors) should work together through strategic alliance to achieve mutual goals, as well as build up collaborative partnerships with their students (i.e. customers), the government (i.e. complementor) and their education agents or partnered HEIs (i.e. suppliers). To make this framework successful, Welsh universities, which are at the core of the co-opetition framework, should be the driving force to initiate, establish and maintain collaborative relationships with its four external players in this framework (Padula and Dagnino, 2007).

Through the co-opetition value net model (see Figure 6.3), these external parties should interact and work together through the organisation, so that all five players in the co-opetition can become related to and interdependent with each other. A healthy co-opetition ecosystem can make the Welsh HE market and their individual business successful and sustainable (Balestrin et al., 2014). Researchers (Dixit and Nalebuff, 2010) argue that the best way to succeed is to work together and to let all players, including the competitors, be successful. This study proved that individual Welsh universities could drive collaboration with its external parties and achieve an all-win outcome under this co-opetition value net framework.
7.2 Review and discussion of research objectives

As set out in section 1.5, the aim of this research is to develop a UK HE co-opetition framework, which supports the international development of UK universities and enhances the experiences of their international students. There are five objectives as listed below. This section reviews and discusses what has been achieved for each of these objectives.

Objective 1: Examine critically the competitiveness of the UK HE industry, by studying its immediate internal and external marketing environments.

This research discovered that the UK HE industry faces increasing competition both domestically and from abroad, which is impacting on their marketing and student recruitment strategies. It is evident that many UK HEIs have developed and utilised various marketing methods, particularly with the adoption of the 4P marketing mix strategy (i.e. product, price, promotion and place) to advertise and promote their courses to an international audience. UK universities have invested heavily to widen their course delivery methods from traditional campus teaching, to work based study, distance and online learning (British Council, 2016). They have also used various pricing strategies and social media platforms to promote their universities. In recent years, an increasing number of UK universities have been opening campuses far away from their city or country of origin, in order to attract more students (The Guardian, 2016 and THE, 2015).

This research assessed both the macro (external) and micro (internal) marketing environments for the UK HE sector. It is evident that UK universities are vulnerable to a number of external factors, over which they have no direct control, for example, the UK
Government’s immigration policy, the global economic slowdown, and the social stability of the country (News Week, 2016; BBC New, 2016 and Universities UK, 2016). Nevertheless, UK HEIs continue investing in techniques to improve some of internal factors in order to make themselves more competitive. Such developments include the utilisation of modern technologies for promoting and delivering their courses; working closely with their suppliers, e.g. FE colleges and overseas HEIs, to offer flexible and more cost-effective courses; and better engagement with their surrounding public (Ritala et al., 2016; QAA, 2016 and Luca, 2015). Facing the increasingly competitive and fast-changing HE market, this research argues that improvements in international student experience in the UK is becoming vital for long-term international student recruitment and retention.

**Objective 2:** *Undertake an in-depth review of relevant literature, with respect to co-opetition business strategies, and how these strategies have been utilised in improving customer experience.*

The literature review studied the traditional marketing theories, including competition and cooperation, and the evolution the hybrid co-opetition strategy, i.e. a combination of cooperative competition and competitive cooperation. This research discussed why co-opetition is an innovative approach of collaboration between business competitors. It showed how a positive outcome could be achieved through shared resources and expertise, widened marketing access, lowered risks and enhanced financial security (Kotler and Armstrong, 2015 and Leitao et al., 2014). The co-opetition value network framework, which links an individual organisation with its external stakeholders and promotes a sustainable business
environment (Brandenburger and Nalebuff, 2002), was also discussed. This theoretical value
net framework formed the foundation of this research project.

The five most common formats of co-opetition strategy, which are strategic alliance, joint
venture, franchising, licensing and co-branding (Stengel and Turocy, 2015), were studied in
detail. Their application, benefits and advantages were proved by studying some of the
successful business examples for each of these five co-opetition models. These studies gave
some practical examples of the way in which co-opetition could be applied to the UK HE
sector, with potential benefits. Following on from these studies, this research moved to an
analysis of the relevance and significance of co-opetition in HE settings.

Objective 3:  Apply the commercial co-opetition theory into the non-commercial Welsh HE
sector, and testify its relevance and significance in universities’ development.

By conducting a series of case studies involving all HEIs in Wales, this research confirmed
that the common applications of co-opetition are evident within the Welsh HE setting. All
Welsh institutions have, in one way or another, utilised co-opetition models to develop
partnerships with other organisations. It discovered that the strategic alliance and joint
venture models, which are two of the most popular co-opetition strategies in the commercial
sector (Stengel and Turocy, 2015), have been employed by all Welsh universities. A number
of notable examples, such as the St David’s Day Group among five Welsh universities
(strategic alliance) and the Welsh Institute for Sustainable Environments (joint venture) were
studied in detail.
It is evident that franchising and licensing approaches were popular collaboration choices between Welsh HEIs and their partnered FE colleges or private HE providers. This research found that all Welsh universities have regional or national franchised FE colleges for delivering their courses. Some Welsh universities, including Cardiff Met, Swansea and UWTSD, have also licensed private colleges to provide their validated HE courses.

The co-branding co-opetition approach was a strong feature, in relation to collaboration between the Welsh HE and FE sectors. The USW Group and the UWTSD Group were successful examples of co-branding strategy, which brought benefits to their participating organisations. Advantages and benefits from such co-opetition partnerships, for example widened access, more flexible choices for customers, combined experts and increased customer base (Leitao et al., 2014; Ritala et al., 2016 and Broek et al., 2017), are relevant and obvious in the Welsh HE setting.

Objective 4: Establish thorough understating of consumers’ (i.e. international students) behaviors in relation to Welsh HE, including their reasons to study in Wales, specific needs, challenges, expectations and actual experiences.

The ongoing changes and tightening of UK immigration policy have caused major concerns to many Welsh and UK universities, with serious consequences for international student recruitment. Applicants from a number of major international student markets, such as India, Pakistan and North America, have fallen by nearly 40% from 2011 to 2016 (UKCISA, 2017). However, this study found out that instead of seeing a decline, the number of Chinese students coming into the UK has increased year by year from 2010 to 2017. 2016 has seen a
record number of 108,000 Chinese students (including Hong Kong) coming to the UK to study, which is more than the next eight top sending countries combined. This makes China by far the largest international student contributor for the UK HE industry (HESA, 2017).

This research also found that Chinese students are immune from the impact of immigration policy changes. Chinese students in the UK already make up over 36% of the non-EU student population. Supported by both countries’ governments, the UK and China relationship is entering the “golden era”, with trade, investment, educational and cultural exchanges expected to continue rising sharply in the next five to ten years (Chinese Embassy London, 2016).

From the questionnaire exercise, this research identified what brought Chinese students to Wales. It also covered their decision-making factors, their challenges and their vulnerability when they study in the UK. It also discovered how Welsh universities attract Chinese students by offering specific services, such as providing Chinese language support, term-time or summer internships, scholarship opportunities and local culture and history classes.

This research also shows that a large number of Chinese students do not know anything about Wales and that Welsh HE lacks a strong international brand. Although 86% of Chinese students surveyed think that their study and living experiences in Wales offer value for money, nearly half of them (47%) feel that their universities have not given them enough support or advice. This finding raises issues and urges Welsh and UK universities to work more closely with each other and with their partners to improve student services.
Objective 5: Identify the best approach of co-opetition for Welsh universities and develop a UK HE co-opetition framework that can promote sustainable collaboration between Welsh (and UK) universities and their stakeholder, as well as enhance the experiences of their international students.

Eight out of the ten interviewees for this study selected the strategic alliance model as their preferred collaboration option amongst other four co-opetition models. The eight interviewees are in favour of the flexibility, minimal legal restriction, lower entry barriers and greater access to resources and to markets created from strategic alliance, than the other four co-opetition options (i.e. joint venture, franchising, licensing and co-branding). The study then applied the co-opetition value net framework into the Welsh HE sector, and established its own co-opetive framework by linking individual HEIs with their competitors, customers, complementors and suppliers. The research argued successfully that all parties in the framework should support and work with each other to create an interactive structure, so that the market and their individual businesses can become successful and sustainable.

The research then discussed whether individual institutions can build up sustainable partnerships with other institutions, through working together to achieve mutual goals. But first, an environment of safety and trust has to be established. Further analysis also found out that the relationship between the institution and other parties are more straightforward, when compared with the relationship between competitors. It argued that it is much easier for a UK university to build up collaborative partnerships with its suppliers, complementors and customers, than with its competitors. This is because there is no direct competition involved. All other parties are willing to support the individual HEIs to become successful, so that their
own organisations can benefit. Table 7.2 briefly summarises the relationship between UK HEIs and their stakeholders.

Table 7.2 – Summary of relationship between UK HEIs and their stakeholders

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Intention for collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other HEIs</td>
<td>Competitors. They need to avoid sensitive commercial areas, but work together on other areas where can add value in improving student services or resolve problems and challenges (e.g. student accommodation).</td>
</tr>
<tr>
<td>Government</td>
<td>Complementors, with no direct competition. Both parties want each other to be successful.</td>
</tr>
<tr>
<td>Overseas education agents and partnered HEIs</td>
<td>Suppliers, with no direct competition. These organisations are dependant to the institutions. They need the institution more than the institution needs them.</td>
</tr>
<tr>
<td>Students and alumni</td>
<td>Customers, with no direct competition. Institution’s success determines students’ success and vice versa.</td>
</tr>
</tbody>
</table>
7.3 Challenges and limitations of this research

This research project has taken six years to complete from 2011 to 2017. During this period, there have been some substantial changes, such as the re-arrangement of HE funding and tuition fees, brought into the Welsh and the UK HE sector, with ongoing implications for this industry and beyond (BBC News, 2016 and Universities, 2016). The political, economic and social environments are constantly changing in the UK, which also raised challenges to this research. This section discusses how these changes and events impacted on this research, as well as addressing some of the limitations of the adopted research techniques.

➢ A dynamic research environment

In the past six years, there have been major political events taking place across the UK, all of which had an impact on the political landscapes in this country, with knock-on effects on the HE sector. These events included the Scottish independence referendum in 2014, the two UK general elections in 2015 and 2017, the National Assembly for Wales election in 2016 and the EU referendum in 2016 (Wainwright, 2016; UK Government, 2016 and Welsh Government, 2016). Furthermore, Wales is currently undertaking a major HE reform, following the most recent government appointed reviews by Diamond and Hazelkom. These two reviews concluded in 2017 and will bring a significant change in Welsh HE funding and student tuition fee arrangement from 2018, as well as organisational and governance arrangements for tertiary education (Welsh Government, 2017). All these events have had an impact on this research, because the political, economic and social environments in which this research is based, are constantly changing.
The ongoing changes and the increasingly tightening immigration policy causes confusion and frustration for UK universities, which have affected international student recruitment (Financial Times, 2017). The overhaul in university funding and student tuition fee arrangement introduced by the UK Government in 2012 continues to have an impact on universities’ financial stability (BBC News, 2016). These changes have brought significant challenges for this research. Parts of the early stage literature review and secondary data collection, which were conducted before 2014, became outdated and irrelevant, and had to be replaced by more recent data.

➢ The Brexit effect

Brexit is seen as one of the biggest challenges for the UK HE sector in modern history, with a report suggesting that the vast majority of UK universities are not ready for Brexit nor have a clear understanding of its full implications (Universities UK, 2017). Six out of the ten interviewees expressed concerns on the future of research funding, EU wide collaboration, staff and student recruitment, and UK universities’ global influence post-Brexit. The uncertainty and the lack of government clarification have caused damages to this sector. A report from UCAS (2017) shows that student recruitment from EU countries dropped by 7% from 2016 to 2017. In recent months (between March and June 2017), a number of Welsh universities, including Aberystwyth, Cardiff Met, USW and UWTSD, have all announced major job cuts and restructure. This is partially due to the uncertainty and effect from Brexit (Wales Online, 2017).

UK universities in general are also concerned that Brexit could damage their financial stability, with the loss of EU research funding. This contributed nearly 16% of all UK universities’ research grants in 2015/16 (BBC News, 2016). A number of UK universities
have already delayed or postponed their international collaboration activities or overseas campus development due to ambiguity over Brexit (Wainwright, 2016). The Independent (2017) reports that in the UK hate crime and racism incidents are at record high since the Brexit vote. This is damaging the UK’s international reputation and has an impact on foreign investment, the tourism industry, as well as international student recruitment.

➢ Data collection challenges

Conducting research interviews can be a challenge for many researchers, as it not only tests an individual’s confidence, interpersonal and communication skills, but also their logical thinking and quick response under pressure (Callegaro et al., 2014). As well as spending a significant amount of time in preparation, the interviewer needs to gain the trust of the participants, so that honest and high-quality data could be collected during the interview (Bryman and Bell, 2014). It was certainly not an easy task to interview the ten participants for this research study. The interviewees who took part in this study were from various organisations and covered a range of professions. They had different views and understanding of the co-opetition concept. It became necessary, during the interviews with two of the participants, to explain co-opetition framework and practice in detail.

As can be seen from Table 6.1, some of the interviewees hold very senior roles in their organisations. The interviewer felt under pressure whilst interviewing them. Because of their senior positions and authority, the interviewer subconsciously felt afraid of challenging their responses. On a number of occasions, the interviewer did not raise any questions or engage in further discussion about the interviewees’ responses. If the interviews were conducted again, more data could have been collected through better mutual discussions. In contrast, the
interviews with other participants, for example with an international student officer and with the student and alumni groups, were in a more relaxed atmosphere.

➢ **Multicultural and bilingual challenge**

Researchers (Bell and Waters, 2014) argue that one of the biggest challenges for conducting research in a multi-language or multicultural environment is the accuracy of data translation and interpretation. This was certainly the case for this research. Although the majority of this research was conducted through the English language, around 20% of the literature review and data collection were from Chinese language resources. Around 65% of the Chinese students who took part in the survey used the Chinese version of the questionnaires. Three out of the ten interviewees chose to conduct their interviews in Chinese. Additionally, there is also a significant cultural difference between China and the UK. It was noticed during the research that the understanding of HE international collaboration and the role of the government vary hugely between the two countries. It has taken a considerable amount of time and energy to check and translate data into English, to minimise misinterpretation and personal bias.
8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions and contributions from this research

Through the secondary data analysis, this research offered an in-depth insight into the global competition facing the Welsh HE sector. It outlined what measures are already being utilised by Welsh universities in order to maintain their competitiveness. The challenges facing this sector were also evaluated. Although the UK remains one of top study destinations for international students, they are vulnerable on account of government policy changes and political uncertainly from elections and Brexit (BBC News, 2016; and Wainwright, 2016). This research urged UK universities to collaborate better in order to improve international student services, so that they can sustain a suitable level of international student recruitment.

Furthermore, this research proved that the theoretical co-opetition strategy is applicable and relevant to the Welsh HE sector. It confirmed that that the five most common applications of co-opetition, including strategic alliance, joint venture, franchising, licensing and co-branding, have all been developed and utilised by Welsh universities, with similar benefits suggested by the theory. This study linked the co-opetition theory with real practical examples from the Welsh HE settings. By reviewing the theory, the three-stage developing process from pure competition to co-opetition between universities is shown in Figure 8.1.

Under the co-opetition value net framework and through the primary data analysis, this research established a co-opetition collaboration model specifically designed for the Welsh HE sector, linking the individual universities with their competitors (other universities), suppliers (education agents and partners), compemtitors (government) and consumers (students and alumni). It provided new guidance to Welsh (and UK) HEIs on how to achieve
and maintain sustainable collaborations with their competitors and external stakeholders. The advantages from such HE co-opetition strategy were discussed. This showed that mutually beneficial relationships can be established and maintained. With many post-Brexit uncertainties in the UK HE sector, this new model offers an innovative approach towards HE international collaboration.

![Diagram](image)

**Figure 8.1 – The three-stage developing process from pure competition to co-opetition (He, 2012 and Brandenburger & Nalebuff, 2002)**

From this research, co-opetition is proven to be an effective strategy for university collaboration, both nationally and internationally. It offers a value net framework that can guide universities to establish interactive partnership with its external stakeholders. After establishing this HE co-opetition framework, the necessary steps to make it successful were discussed. Through better collaboration and coordination developed from this co-opetition model, Welsh and UK universities can work more closely with their internal and external
stakeholders. In return, this could provide better support and help at each stage of an international student’s study journey in the UK, covering the pre-departure stage, during his/her study in the UK and after completion of his/her course.

This study of the experiences of Chinese students embraced all universities in Wales. When considering a sustainable collaboration model, this study created a platform through co-opetition that can bring fair competition and raise standards in all institutions. This research analysed in considerable detail the expectations and experiences of individuals at all stages and levels associated with Welsh HE and their overseas partners. The students recognised the importance of HE collaboration, a concept not always readily accepted by some HEIs. This study, which involved all key stakeholders of Welsh HE, demonstrated clearly that co-opetition will enhance international student recruitment, improve student experiences, and strength Welsh HEIs’ global competitiveness.

Should the co-opetition value net model be adopted by Welsh HEIs, the needs of each individual Chinese student could be met more effectively. This research offered a practical solution that enables universities to work with their competitors and external partners to deliver a more focused and personalised student service. By joining force, universities and their external partners can create a support network, providing support and services throughout international student’s life cycle (details see Table 6.5). It proved that co-opetition does not threaten the competitiveness of participating institutions. Instead, through this framework, universities can access shared resources and expertise more easily to support their development and offer better value for money for students.
8.2 Recommendations

- Recommendations for future studies

1) China remains the most important source of international students for many UK universities (THE, 2016). Further research could extend the questionnaire exercise to cover some larger scale of Chinese students studying in other parts of the UK, such as Scotland and Northern Ireland. This could offer a useful comparison study for Welsh universities to better position themselves in attracting Chinese students.

2) Similar research could also be conducted on international students from other countries. With the decline in student recruitment from the EU and a number of important international student markets, including India, Pakistan and North America (BBC News, 2016), it has become more important for UK universities to understand thoroughly the needs, concerns and experiences of students from these countries. A clear understanding would help UK universities develop specific polices to attract students from these countries.

3) As discussed in section 7.3, Brexit places huge uncertainties and challenges to universities across the UK. Many current HE policies, university research funding arrangements, the UK immigration system and devolution arrangements are expected to have major changes post-Brexit (Universities UK, 2017). Therefore, it would also be worthwhile repeating this research study in the years after the Brexit negotiation and process is complete.


**Recommendations for the Welsh Government**

1) This research (section 5.5) revealed that government, at both local and national levels, can play a significant role in supporting the development and securing the success of international HE collaboration projects. Welsh Government can be more proactive in engaging with such developments with Welsh universities.

2) Welsh Government currently has 16 overseas offices across Europe, Asia and North America, with existing and well-maintained trade links in these regions (Welsh Government, 2017). The Welsh Government should allow Welsh universities to utilise some of its overseas facilities and network. Large scale education exhibitions, especially promoting Welsh education, should be coordinated and supported by the Welsh Government and its overseas offices.

3) As well as leading trade delegations to different countries, the Welsh Government could also organise and financially support HE delegations or research teams from Wales to travel overseas to explore and expand overseas markets.

**Recommendations for Welsh universities**

1) Regional Welsh universities should join force and work with their local authorities to provide sufficient student accommodation, better local transport links and a safer studying environment for international students.

2) Welsh universities should also work more closely with their overseas partners to provide continuous support for their international students, for example providing guidance for course applications in different languages, academic support during their
study, and offering employment skill trainings before these international students return to their home countries.

3) Regional Welsh universities can work together to bring overseas or UK employers to campus, organise career affairs for international students, and provide more social and networking opportunities. Universities should also have the responsibility to monitor the well-being of their international students.

➢ Recommendations for international students and alumni groups

1) Instead of being reactive, international students themselves should proactively engage with a wide range of university and social activities, during their study in the UK. They should participate in a variety of events provided by the university or their local communities.

2) International student and alumni groups should help their universities in organising student events, where they can meet and socialise with other student groups. Such events will provide them a great networking opportunity, as well as help them practise their English and social skills.

3) International students should also maximise the use of social media or other online platforms for sharing their experiences with prospective and current students. They can share their first-hand experiences, knowledge and useful information with each other on studying and living in the UK.
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**10. APPENDICES**

Appendix 1 – Questionnaire

**English version:**

**Note to Participant**

Dear participant,

My name is Yi He (Edward) and I am a Professional Doctorate (DBA) student at Cardiff Metropolitan University in Wales, UK.

This questionnaire is part of my doctorate research study, which is aimed to develop a sustainable Chinese student recruitment and support framework for Welsh Universities. Your input for this questionnaire will be hugely valuable for this research.

Thank you very much for your participation!

Best regards,

Edward Yi He

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### Questionnaire: Chinese and Prospective Chinese Students Studying in Wales

#### Section 1 – Your basic information (Please ONLY choose one answer)

<table>
<thead>
<tr>
<th>1. Your gender:</th>
<th>☐ Male</th>
<th>☐ Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. How long have you been studying in Wales?</td>
<td>☐ Less than 6 months</td>
<td>☐ 6 months – 1 year</td>
</tr>
<tr>
<td>4. The level of HE course you are studying:</td>
<td>☐ Foundation degree</td>
<td>☐ Undergraduate</td>
</tr>
<tr>
<td>5. The area of your study:</td>
<td>☐ Business &amp; Management</td>
<td>☐ Marketing, economy or finance</td>
</tr>
<tr>
<td>☐ Engineering</td>
<td>☐ Arts related degrees</td>
<td>☐ Medical studies</td>
</tr>
<tr>
<td>6. Have you contacted or used an education agency to assist your university and/or visa application?</td>
<td>☐ Yes</td>
<td>☐ No</td>
</tr>
<tr>
<td>7. What is the total cost / expected total cost of your study in Wales (inc. studying and living cost)?</td>
<td>☐ Under £10,000</td>
<td>☐ £10,000 - £20,000</td>
</tr>
</tbody>
</table>
8. Do you think your study and overall experience in Wales is value for money?  
☐ Yes  ☐ No

**Section 2 – Your studying experience in Wales (Please choose max 3 answers)**

1. What are the most important factors for you to choose to study in Wales?

| ☐ Social life | ☐ Location | ☐ Tuition fee & cost | ☐ Teaching quality |
| ☐ Employability | ☐ Family or friends living nearby | ☐ Reputation & ranking | ☐ Others: |

2. How did you find out information about studying in Wales and your University?

| ☐ British Council | ☐ Education agent | ☐ University website | ☐ Wales.com |
| ☐ University fairs | ☐ Friends & family | ☐ University’s partners in China | ☐ Others: |

3. What is your view on education agencies in China?

| ☐ Provide useful information | ☐ Play a crucial part in decision making | ☐ Can speed up the application process | ☐ Giving false promises |
| ☐ Often involve with fraudulent scandals | ☐ Service fee is expensive | ☐ Not essential service | ☐ Others: |

4. What are your biggest challenges when studying in Wales?

| ☐ Culture difference | ☐ Language barrier | ☐ Loneliness | ☐ Financial pressure |
| ☐ Difficult to make new friends | ☐ Studying difficulty | ☐ Climate and food | ☐ Others: |

5. Which organisations or individuals did you contact / seek help from when you needed help?

| ☐ Family & friends | ☐ Personal tutor or lectures | ☐ Student union or society | ☐ Student services |
| ☐ Police, Emergency Service | ☐ Chinese Embassy | ☐ Government or local council | ☐ Others: |

6. What other services you wish your University can provide to international student?

| ☐ Currency exchange | ☐ Welsh & British culture classes | ☐ Local culture & history trips | ☐ Emergency support |
| ☐ Basic local law lessons | ☐ Summer internship opportunity | ☐ Language (Chinese) assistance | ☐ Others: |

7. What at the most needed University services for you?

| ☐ Study advice | ☐ Health & wellbeing | ☐ Language support | ☐ Housing advice |
| ☐ Psychological counseling | ☐ Career & interview advice | ☐ Social life (i.e. university socialites) | ☐ Others: |

8. Who are supporting / sponsoring your study in Wales?

| ☐ Yourself | ☐ Parents & family | ☐ Friends | ☐ Bank loan |
| ☐ Scholarship (Govt) | ☐ Scholarship (Uni) | ☐ Company sponsor | ☐ Others: |

9. Have you or someone you know ever encountered the following experiences?

| ☐ Robbery / theft | ☐ Language assault | ☐ Unfriendly jokes | ☐ Sexual harassment |
| ☐ Fraud | ☐ Discrimination | ☐ Unfair treatment | ☐ Others: |

10. Whilst in Wales, have you tried the following activities / events?

| ☐ Working part time | ☐ Voluntary work | ☐ Uni society events | ☐ Internship |
| ☐ Travelling (UK) | ☐ Travelling (Europe) | ☐ Parents/family visit | ☐ Others: |
### Section 3.1 – Exception and suggestions to your University (before coming to Wales)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Either agree or disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The University has not provided enough support for pre-departure preparation, during your study or after the completion of your course.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Before coming to Wales, you already have good understanding and plan for your study and life.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. You have more trusts on Welsh/UK HEIs which are in partnership with Chinese HEIs.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>4. You have more trusts on Welsh/UK HEIs which are in partnership with Chinese/local Government.</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
<tr>
<td>5. You have more trusts on Welsh HEIs which are in partnership with Chinese education agencies.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
</tbody>
</table>

### Section 3.2 – Exception and suggestions to your University (after coming to Wales)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Either agree or disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. In general, Welsh Universities are less well-known in China than equivalent English &amp; Scottish ones.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>7. You feel it is very difficult to find a job in the UK after graduation.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. It improves career prospects if your University cooperates with HEIs or businesses in China.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Comparing with graduates from Chinese HEIs, you have obvious advantages after study in Wales.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. You are very satisfied with your study progress or achievements (if already graduated).</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Thank you very much for your participation!**

### 中文版本 (Chinese version):

**问卷调查引言**

问卷参与者，

您好！

我是英国威尔士卡地夫城市大学的一名博士在读生。这份问卷调查是我博士学位研究课题的一部分。该项目研究的目的是，建立一种可持续的中国留学生招生及服务框架，以便于威尔士的各高校更好的服务中国留学生。您的参与对这项目的研究会有很积极的帮助。

非常感谢您的参与！

谢谢，

何易
### 第一部分：个人基本资料（请只选择一个答案）

1. 您的性别:
   - □ 男
   - □ 女

2. 您的年龄段:
   - □ 18 – 21
   - □ 22 – 25
   - □ 26 – 29
   - □ ≥ 30

3. 您在威尔士已经留学多久？(如您已在威尔士学习):
   - □ 低于 6 个月
   - □ 6 个月至 1 年
   - □ 1 至 3 年
   - □ 3 年以上

4. 您所学习或打算学习的课程属于:
   - □ 预科课程
   - □ 本科课程
   - □ 研究生及以上
   - □ 其他:

5. 您所学习的科目属于:
   - □ 商科及管理
   - □ 市场、经济或金融
   - □ 人文科学
   - □ 法律
   - □ 工程学
   - □ 艺术相关
   - □ 医学
   - □ 其他:

6. 您或您的家人是否联系、询问或者使用过留学中介, 如帮助申请学校或签证咨询?
   - □ 是
   - □ 否

7. 您在威尔士的学习总共费用或者预计总共费用是多少（含学费、生活费等所有费用）?
   - □ 低于 £10,000
   - □ £10,000 - £20,000
   - □ £20,000 - £30,000
   - □ £30,000 - £40,000
   - □ £40,000 - £50,000
   - □ 高于 £50,000
   - □ 其他:

8. 您是否觉得您在威尔士的学习物有所值?
   - □ 是
   - □ 否

### 第二部分：您在威尔士的学习经历（请最多选三项）

1. 您来威尔士学习最主要的原因是什么?
   - □ 丰富的社交活动
   - □ 地理位置
   - □ 学费及其他费用
   - □ 教学质量
   - □ 就业机会
   - □ 家人或朋友影响
   - □ 学校口碑及排名
   - □ 其他:

2. 您是以何种渠道了解在威尔士留学以及你现在所在大学的?
   - □ 英国文化协会
   - □ 留学中介
   - □ 大学官方网站
   - □ 威尔士中文网站
   - □ 大学招生会
   - □ 亲戚朋友
   - □ 在中国合作伙伴
   - □ 其他:

3. 您对在中国的留学中介看法如何?
   - □ 提供有用的信息
   - □ 对做决定很重要
   - □ 能加快申请进程
   - □ 虚假承诺
   - □ 会担心申请材料弄虚作假 / 影响签证
   - □ 收费太昂贵
   - □ 不是必须的服务
   - □ 其他:

4. 您在威尔士学习最大的挑战是什么?
   - □ 文化差异
   - □ 语言困难
   - □ 孤独
   - □ 经济压力
   - □ 难交到外国朋友
   - □ 学习困难
   - □ 气候和食物差异
   - □ 其他:

5. 困境中，您曾经向哪些机构或个人寻求过帮助?
   - □ 亲戚和朋友
   - □ 个人导师 / 讲师
   - □ 学生会或社团
   - □ 学生服务中心
   - □ 警察等机构
   - □ 中国驻英使馆
   - □ 政府机构
   - □ 其他:

6. 还有哪些服务您觉得大学应该向留学生提供?
   - □ 外汇兑换
   - □ 当地文化课程
   - □ 当地文化历史游
   - □ 紧急情况协助
7. 您最需要学校提供的哪些服务？
- 学习辅导
- 健康支持
- 语言辅导
- 心理辅导
- 求职及面试辅导
- 学校社团活动
- 住房咨询
- 其他：

8. 您留学威尔士，费用主要由谁承担/来自何处？
- 您自己
- 父母及家人
- 朋友/朋友借款
- 银行贷款
- 政府奖学金
- 学校奖学金
- 公司赞助
- 其他：

9. 您或您周围认识的人，是否在英国经历过以下遭遇？
- 抢劫或盗窃
- 语言或人身攻击
- 恶意玩笑
- 性骚扰
- 诈骗
- 歧视
- 不公平待遇
- 其他：

10. 您在威尔士期间，是否尝试过以下几种活动/经历？
- 兼职工作/打工
- 义务、自愿者工作
- 学校社团活动
- 实习
- 英国境内旅游
- 欧洲旅游
- 接待父母/家人来访
- 其他：

第3.1部分 – 您对就读大学的期望或建议（来威尔士前）

<table>
<thead>
<tr>
<th></th>
<th>非常不同意</th>
<th>不同意</th>
<th>不确定是否同意</th>
<th>同意</th>
<th>非常同意</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 学校在帮助学生进行行前准备的工作，在校期间的帮助和毕业后的帮助还做得不够多。</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>2. 来威尔士前，你已经对来威尔士后的学习和生活有很好的理解和计划。</td>
<td>☐</td>
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</tr>
<tr>
<td>3. 您更信任与国内正规院校合作的威尔士（或英国）的大学。</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>4. 您更信任与中国或地方政府合作的威尔士（或英国）的大学。</td>
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<tr>
<td>5. 您更信任与国内留学中介合作的威尔士（或英国）的大学。</td>
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</tr>
</tbody>
</table>

第3.2部分 – 您对就读大学的期望或建议（来威尔士后）

<table>
<thead>
<tr>
<th></th>
<th>非常不同意</th>
<th>不同意</th>
<th>不确定是否同意</th>
<th>同意</th>
<th>非常同意</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. 总体而言，威尔士的各个大学在中国的知名度不如同等的英格兰和苏格兰的大学。</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. 您认为学业结束后，能在英国找到工作非常困难。</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. 大学如果能与国内院校和企业合作，能增加就业率。</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. 您在威尔士留学回国后，跟国内院校毕业的学生比起来有明显优势。</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. 您很满意您在威尔士的学习进度或所取得的成绩（如已毕业）。</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
</tr>
</tbody>
</table>

非常感谢您的参与！
Appendix 2 – Questionnaire invite

Questionnaire (Chinese Student in Wales Survey) invite sent to all Welsh HEIs:

From: He, Yi  
Sent: 06 January 2016 15:47  
BCC: International Office; international@cardiff.ac.uk; international@swansea.ac.uk; iido@swansea.ac.uk; international@bangor.ac.uk; international@aber.ac.uk; daw67@aber.ac.uk; christine.hawdon@southwales.ac.uk; international.advice@southwales.ac.uk; internationaloffice@uwtsd.ac.uk; admissions@rwcmd.ac.uk; international@glyndwr.ac.uk; lauren.thomas@icws.swansea.ac.uk  
Cc: He, Yi  
Subject: Chinese students in Wales

Dear International Office,

I'm a doctorate research student at Cardiff Met and currently doing my research project on "Chinese Students Studying Experience in Wales".

As part of this research, I will greatly appreciate if you could forward the survey invite (see below) to the Chinese students at your University.

The Survey is completely anonymous and is in both English and Chinese languages. You can view the Survey at: https://cardiffmet.eu.qualtrics.com/SE/?SID=SV_9MQ2spadJPjXVjL

Thank you very much for your help.

Best regards,
Yi He

Doctorate Research Student  
Academic Associate  
Email: yihe@cardiffmet.ac.uk

Cardiff School of Management  
Cardiff Metropolitan University  
Llandaff Campus  
Cardiff  
CF5 2YB
**Chinese Students Studying in Wales Survey Invite**

Dear participant,

I am a doctorate research student at Cardiff Metropolitan University in Wales, UK.

This questionnaire is part of my research study, which is aimed to develop a sustainable Chinese student recruitment and support framework for Welsh Universities. Your input for this questionnaire will be hugely valuable for this research.

This survey is completely anonymous and would only take 5 - 10 mins. You can choose either English or Chinese for completing the survey:


Thank you very much for your participation!

Best regards,

Yi He
Appendix 3 – Semi-structured interview

- Selecting the interviewees

The interview process aims to build a complete HE Co-opetition model by applying its theoretic Value Net framework, which defines each market (game) is composed by five interdependent players, including customers, competitors, suppliers, complementors and organisations themselves (Brandenburger and Nalebuff, 2002). As can be seen from Figure 1, by applying the theory, the author redefines these five players for a HE Value Net framework should correspond to students (customers), other HEIs (competitors), education agents or FE colleges (suppliers), Government bodies (complementors), and individual HEIs (organisations).

Figure 1 – Co-opetition value net framework into HE sector (He, 2012)
The interviewees are therefore chosen to represent these five players in the Value Net framework. Their relevant experiences in the UK / Welsh HE and HE collaboration, both nationally and internationally, and the insight knowledge they could contribute into this research, have been considered. The interviewees are experts, officials and academics mainly from HE governing bodies, authorities, HEIs and independent HE organisations etc from Wales / UK. Table 1 gives the detailed list of interviewees and their corresponding roles in the Co-opetition (Value Net) framework.

Table 1 – Identified interviewees and their role in the Value Net framework

<table>
<thead>
<tr>
<th>#</th>
<th>Interviewee position</th>
<th>Organisation</th>
<th>Role in Co-opetition framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International Recruitment / Marketing Officer</td>
<td>Welsh / UK HEIs</td>
<td>Organisations* / Competitors*</td>
</tr>
<tr>
<td>2</td>
<td>International Students Alumni Officer</td>
<td>Welsh / UK HEIs</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lecturer with close contact with Chinese students</td>
<td>Welsh / UK HEIs</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Academic with international HE collaboration experience</td>
<td>Welsh / UK HEIs</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>International Development Official</td>
<td>Welsh / UK Government</td>
<td>Complementors</td>
</tr>
<tr>
<td>6</td>
<td>Higher Education Official</td>
<td>Welsh / UK Government</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>International Development Official</td>
<td>Chinese HEI which is in partnership with UK HEIs</td>
<td>Suppliers</td>
</tr>
<tr>
<td>8</td>
<td>Education Agent Official</td>
<td>Chinese education agent recruiting for UK HEIs</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Chinese Student Union / Society Representatives</td>
<td>Welsh / UK HEIs</td>
<td>Customers**</td>
</tr>
<tr>
<td>10</td>
<td>Chinese Alumni Group</td>
<td>Welsh / UK HEIs</td>
<td></td>
</tr>
</tbody>
</table>

*During the interview process, these interviewees can act on behalf of both the organisations (i.e. individual HEI) and the competitors (i.e. other HEIs).

**Interviews with Chinese Student Groups will be conducted at last. They will be asked to verify the benefits of Co-opetition proposed by other parties.
Interview question list and structure

At the start of the interview, the interviewer will briefly explain will greet and introduce himself to the interviewee. The “Information Sheet” detailing the purpose of this research and ethics statement, will be presented and explained to the participant. A brief description of the theory, i.e. Co-opetition and Co-opetition in HE, will also be given. The role each participant fits in the Value Net framework (i.e. Figure 1) will also be explained to them. The interview includes the following four sections and questions. The questions are asked in either English or Chinese language, depending on interviewee’s choice.

Section 1: Interviewee's introduction

1. Could you please briefly introduce yourself, including your role and responsibility?

    请您自我介绍一下，包括您的职务和责任？

Section 2: Existing HE collaboration

2. UK HE faces intensified competition from abroad when recruiting international students. Do you agree or disagree that collaboration between UK HEIs (or with overseas HEIs) can strengthen UK HE’s goalball competitiveness? And why?

    威尔士（及英国）各高校面临全球很激烈的竞争。你是否同意威尔士各高校间的合作（以及与海外高校的合作）能够加强威尔士高校的国际竞争力？为什么？

3. Think about one successful UK-China university collaboration project that you have been involved with (or are aware of). Can you explain its benefits and significance, in terms of international recruitment and improving student services?

    想一个您参与到的（或者知道的）中英高校合作的项目，您能介绍一下它的好处
和意义么？尤其是在提高国际留学生服务方面。

4. What were the main obstacles for establishing this partnership? How did your organisation overcome them?

在这个合作项目中，遇到的最大的障碍是什么？您的机构又是怎样克服它们的？

Section 3: Co-opetition model in Welsh HE

5. This research revealed that Welsh HE is lack of a strong brand internationally. A collaborative approach between all Welsh HEIs with the support from the Government and other parties could be a solution. Bear this in mind, which one of the Co-opetition formats (see Figure 2) would be your most preferred collaboration option, and why?

此博士研究发现威尔士高校缺乏一个国际品牌。威尔士各高校共同合作，并加上政府和其他机构的支持，能够解决这个问题。图一所列出的五种最常见的高校合作模式中，请选出一种您最满意的合作模式，并解释原因。

6. Following the collapse of the University of Wales (a primary example of Welsh HE collaboration), its surrounded scandals and the recent overhaul in Welsh HE (i.e. successful and unsuccessful mergers), this research discovered the trust in between Welsh HEIs and with the Government is very fragile. What steps and assurances are necessary, both internally and externally, to establish and safeguard this partnership?

近年来威尔士大学的解体（曾是威尔士高校合作式竞争的典型例子），加之它带来的一些负面影响，这份研究发现威尔士各高校与政府间的信任关系很脆弱。在高校内部和外部，都需要什么步骤和保证来建立和保护这种合作关系？
7. Co-opetition theory argues the success of individual HEI is determined by the success of its customers (students), competitors (other HEIs), suppliers (FE colleges, education agents etc) and complementors (Government etc). Do you agree or disagree, and why? And what role can your organisation play to promote an all-win outcome?

协同竞争理论认为，各高校的成功取决于客户（学生），竞争对手（其他高校），供应商（学院，教育中介等）和补充机构（政府等）的成功。你同意还是不同意，为什么？您的组织可以发挥什么作用来促进各方双赢？

Section 4: Benefits of Co-opetition to consumers (i.e. students)

8. Thinking about the life cycle of an international student, what are the main stages and milestones of for an international student’s studying and life in the UK?

试想一下国际学生留学周期，哪一些主要环节和里程碑是一个国际留学生在英国读书期间会经历的？

9. Language barrier, difficulty to make new friends, cultural difference and loneliness are some of biggest challenges facing international students. How can your organisation help international students overcome the challenges?

语言障碍，难交到新朋友，文化差异和孤独是国际学生在威尔士学习时面临的最大挑战。您的组织如何帮助国际学生克服这些挑战？

10. Many Welsh / UK HEIs find it is difficult to thoroughly understand their international students and their needs, due to large variety of cultures and limited resources they have. Can a joint approach between all parties help resolve this issue, and why?

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许多威尔士/英国高校发现，由于文化多样性和资源有限，它们很难彻底了解国际学生及其需求。高校及其他相关机构间的合作能够解决这一问题么？为什么？

11. What extra services and support can university offer to international students if all parties in the Co-opetition framework work together?

如果所有各方一起合作，各大学能为国际学生提供什么额外的服务和支持？

Figure 2 – Common formats of Co-opetition and benefits (Kotler and Armstrong, 2015; and Leitao et al., 2014)
Appendix 4 – Research ethics approval document

Yi He
Cardiff School of Management
Llandaff Campus
Cardiff, CF5 2YB

Dear Yi,

Re: Research Ethics Approval

We note from your letter of approval from the “Cultural and Educational Consortium” that they have confirmed approval of your research project to analyse and develop a framework for international marketing and student recruitment in China for Welsh universities.

Following on from this we have an Ethics Committee Reference Number for your file as follows: 201405123.

Yours sincerely,

Professor Eleri Jones
Associate Dean (Research)
Cardiff School of Management
gjones@cardiffmet.ac.uk
02920 416937
Appendix 5 – Information sheet for participants

To be given to the Participants for the Questionnaire and Interview

a. Purpose of study

The aim of this research is to explore and develop a sustainable international collaboration and Chinese student recruitment strategy for Welsh HEIs. Since China is the largest HE exporting country to the UK, this research will also specifically design business strategy to enable Welsh HEIs to better collaborate with their Chinese counterparts, hence to attract more qualified Chinese students to Wales. Your participation will contribute to the primary data collection stage of this research. The objective for the data collection is to gain first-hand and comprehensive knowledge in relation to Chinese students studying in Wales, and more importantly to explore the possibility of developing a sustainable Chinese student recruitment strategy which will benefit both the Chinese students and the Welsh institutions.

b. Confidentiality and ethics statement

➤ This research has had ethic approval from the sponsoring body (CEC Wales) and the University’s Research Ethics Approval committee;
➤ You will make a voluntary decision on whether or not to participate in this study;
➤ You are not required to provide any personal or sensitive data for the study;
➤ Data collected from you will be analysed anonymously;
➤ Your answers will only be used for the purpose of this study, and your identification will not be exposed to any third party;
➤ You are free to withdraw from the study at any stage, and you can also refuse to answer any of the research questions which you might feel unconformable with.
11. PROFESSIONAL DEVELOPMENT PORTFOLIO

Professional Development Portfolio (PDP)

Submitted in conjunction with the professional doctorate thesis for the award of

Doctorate of Business Administration (DBA)

This research was undertaken under the auspices of

Cardiff School of Management | Cardiff Metropolitan University

Director of Studies: Dr Jason Williams | Supervisor: Professor Tom Crick MBE

Yi He (Edward)

BEng (Hons) MBA (Dist) MRes CEng MIET

May 2018
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Section 1: Introduction

According to Ali (2013), a professional development portfolio (PDP) is a continuous, structured and supported process undertaken by individuals throughout their academic studies and career development. It should be used to assess and reflect upon personal learning, performance and achievement within a timeframe, which can provide individuals the opportunity to identify areas for further learning and improvement. It is recommended by the Quality Assurance Agency for Higher Education (QAA) that every HE providers in the UK should offer students formal guidance on PDP through their courses (QAA, 2013).

Figure 1.1 – Gibbs’ reflective cycle of learning (Gibbs, 1988)
The widely adopted Gibbs’ reflective learning cycle, introduced by Professor Gibbs at the University of Oxford in 1988, outlines the six critical stages of reflective learning (Gibbs, 1988). As can be seen from Figure 1.1, this process involves description of what happened, the feelings from the event, evaluation from the outcome, description of the sense you make from the situation, conclusion and action plan if the events reoccur. This Professional Development Portfolio will largely follow the Gibbs’ reflective learning cycle to reflect the key stages of this Professional Doctorate (DBA) study and highlight what I have achieved through this course.

PDP is also important throughout any research based courses and projects, as it can help cover critical reflection, planning, implementing and evaluating activities (Ali, 2013). Cameron and Price (2012) argue that the PDP process should be integrated firmly within the curricula itself but not as a separate part. This will then allow the researchers to develop themselves of becoming independent, autonomous and self-motivated learners. PDP should be embedded into all stages of a research course and involve more than academic achievements, such as working experience, vacation and curricular developments (Collis and Hussy, 2013).

Personally, the PDP learning and reflection process played an important part in supporting my academic study and my professional development. The reflection from what went well and what did not go well through the process provided a valuable tool for further improvement and development. Completing this PDP over a period of six years has enabled me to assess my current skills, identify development needs, arrange further training and learning, and improve my skillset over this period of time. The following sections provide an insight of my learning journey through this DBA course.
Section 2: Personal reflection

Section 2.1 My journey in the UK

After finishing my high school education in China, I decided to study the International Foundation course and then I came to the UK for my higher education at the age of 18. My UK journey began in 2004, when I started my BEng (Hons) study at the University of Birmingham. As can be seen from Figure 2.1, since graduating from my BEng (Hons) degree in 2007, my professional career has been in the engineering and manufacturing sectors first with Tata Steel in South Wales, and more recently with GE in the Aerospace Sector.

Figure 2.1 – My journey in the UK
During my 5.5 years at Tata Steel from 2007 to 2013, I have also completed the following two part time Masters Degrees:

- **MRes (Master of Research) in Materials Engineering**
  - Swansea University, 2008 – 2011 (Part time)
  - Integrated Graduate Development Scheme, sponsored by Tata Steel UK
  - Accredited by the Institute of Materials, Minerals and Mining

- **MBA (Master of Business Administration), awarded with Distinction**
  - Swansea Metropolitan University (now known as University of Wales Trinity Saint David), 2009 – 2012 (Part time)

Coming from a very different academic and professional background, this DBA project is considerably more challenging in many aspects for me personally, comparing with some other peer students, who may have had relevant qualifications and experiences. I become to realise this self-reflective evaluation process (i.e. the PDP) has become particularly important and essential. Not only it helps acknowledge pervious experiences which might be relevant to this doctorate project, but also help me identify weaknesses which needed to be addressed and improved at the early stage of this project.
Section 2.2 Relevant professional experiences

Despite my engineering background, working in and with the Higher Education setting, both academically and professionally, is not completely unfamiliar to me. First of all, my MBA final year research project, from 2011 to 2012 at the former Swansea Metropolitan University, evaluated the large scale Higher Education reforms in Wales. During the study, I carried out a thorough case study for one of the largest university merger cases in Wales involving four HE institutions in the South Wales region.

Based on business collaboration and acquisition theories, the study critically analysed the drive and motivation from different stakeholders for the change in Welsh HE (i.e. more intensive collaboration between institutions, merger and reform plans), the obstacles and uncertainties, the impact to the students, the staff and wider communities. In the recommendation for future studies session for this MBA research, the possibility and opportunity for taking this research to a higher level was discussed. The application for this DBA course was submitted to Cardiff Met during the last phase of my MBA research, after a meeting and discussion with the research team at Cardiff Met’s Cardiff School of Management (CSM).

Figure 2.2 – A summary of relevant working experiences
In addition, as listed in Figure 2.2, I have also worked for and with a number of organisations, with direct links to the Welsh and UK culture and education areas. These previous work, through internship, placement and voluntary work, involved with promoting Welsh and UK education in China, with the UK authorities and universities, Chinese student recruitment, student and alumni services, as well as, working directly with both UK and Chinese governments on joint development projects. These working experiences are extremely valuable for this research project, as they have established a strong foundation with first-hand knowledge in terms of international promotion of UK education, government policies and the Chinese student market etc.

Section 2.3 Membership of professional body

Many professionals nowadays join their relevant professional bodies to enhance their career development opportunities, widen their resources and network, and receive guidance and training courses for further development (The IET, 2014). I have been a qualified member of the Institution of Engineering and Technology (IET) since 2007 and have become a committee member serving the IET Youth Professionals Community in South West Wales since 2010. Since then, I have been benefited from the IET's structured professional development guidance and have attended numerous career development workshops, conferences and training courses. As can be seen in Figure 2.3, the learning philosophy and cycle from the IET is very much similar to the PDP process, with a focus on the personal reflection on skills and knowledge learning, as well as, attitude and personal value changing.
My other involvement with the IET is that I have been serving as a Professional Registration Advisor (PRA) since 2013. This role requires ongoing development and training on professional development, with detailed developed knowledge of the requirements and routes to professional registration with the IET and the Engineering Council UK. This role has allowed me to continuously develop new engineering skills and management skills. I have also been successfully mentoring a number of professional engineers throughout their engineering development. Details of the PRA role is given in Appendix 1.
Section 2.4  A special Chinese interest in Wales and Welsh HE

Figure 2.4 shows some of the social activities I have taken part in the recent years, which are also directly linked to Wales. The networks and contacts built up from these events are closely linked to this professional doctorate project. For instance, the annual Wales Week Events in China (Figure 2.4 (a)), organised by both the Welsh Government and the UK Foreign and Commonwealth Office (British Consulate General in China), are particularly for promoting and strengthening links between Wales and China, in the areas of education, culture, business and science etc (British Embassy in China, 2012).

Furthermore, in January 2012, along with many other Chinese and Welsh government officials, delegates and Chinese students in Wales, this author had attended the Chinese New Year Reception at the Wales National Assembly (see Figure 2.2 (b)), after receiving an invitation from the First Minister of Wales. Latest updates, including Wales-China education collaboration plans, were shared by some delegates at the event. There were also valuable contacts being made, which would be very useful for this research (for example at the interview stage for primary data collection). Since 2012, I have been consecutively invited to the Chinese New Year Reception each year.
It is also worth mentioning that since moving to Wales in 2007, I have taken great interests in exploring and learning the Welsh culture and language. I have started my Welsh learning journey in 2009, through evening classes in Swansea, and have published a number of articles on a local Welsh newspaper (see Figure 2.5), sharing my Welsh experiences and views on the developments between Wales and China. I also regularly attend the National Eisteddfod for Wales, taking various voluntary roles in promoting the Welsh education, tourism, culture and language (see Figure 2.5). I had the privilege to be awarded the Welsh Learner of the Week.
on S4C’s Dal Ati programme in 2013, and competed at the semi-final of the Welsh Learner of the Year as part of the National Eisteddfod. Appendix 2 also shows the Cardiff Met's news coverage on my Welsh learning journey.

These events have not only given me the opportunities to learn great insights of how HE system and policy making work in a Welsh context, but also to meet various people with knowledge and expertise in the Welsh HE sector and the China-Wales development. The networking opportunities, as well as knowledge sharing, from such events, are absolutely invaluable to me personally, which are also a great resource to this DBA research project. It was also through these events, where I have developed keen interests in the Welsh culture, language and education, as well as, made me want to use my first-hand experience as an international student to explore ideas and new ways that UK HEIs could use for their international student recruitments.

Figure 2.5 – Published Welsh article (left) and interview on BBC Wales (right)
Section 2.5 Motivation of pursuing this professional doctorate course

Studying this DBA course is largely due to personal expectation and career aspiration. By completing this course, apart from achieving doctor level academic and research skills, the author also expects to achieve certain level of expertise in the Welsh HE field, especially in the areas of international marketing, student recruitment, HE globalisation and collaboration. There is also a great potential of further strengthening and developing existing networks and contacts, by working with officials and experts in the HE sector in both Wales and China, throughout this project. Therefore, this project would be seen as a platform for a potential career change, with the following possible future career options for the author to consider:

- Senior Officer at relevant Government Departments (e.g. HE Division)
- Senior Officer at International Office or Marketing Department of Welsh or Chinese University
- Civil servant working in developing and improving international collaboration opportunities for Wales/China
- Diplomat working for enhancing UK-China relations and HE links
- Policy Advisor (especially for International Education Collaboration) for the education authorities, universities and education agencies in Wales/UK or China
- Self-employed business for providing services for International Student services in Wales (including student recruitment)
Section 3: Learning and reflection

Section 3.1 Challenges and highlights

This DBA course has taken much longer to complete than initially planned. I originally planned to complete it in 2014. One of the main reasons was the significant distraction from the redundancy from my former employment within the UK steel industry in early 2013. Prior to the event, there were company-wide speculations on job cuts and plant shutdown and I was constantly worried about my job security for a considerable period of time. I became unemployed for a short while and had to travel frequently to various places across the UK for job interviews.

Very fortunately, I managed to secure a new job in East Midlands. However, to take this job, I also had to make the very difficult decision to leave Wales and move everything to relocate to the Midlands region. Studying this DBA course on a part time basis whilst doing a full time is already challenging enough. Living far away from the campus has made the studies more difficult. But thanks to the flexibility of my supervisors and modern technology (i.e. Skype), the studies were carried on with minimal interruption.

Table 3.1 – A summary of my language skills

<table>
<thead>
<tr>
<th>Language skills</th>
<th>Competence level</th>
</tr>
</thead>
<tbody>
<tr>
<td>中文 (Chinese Mandarin)</td>
<td>Proficient (first language)</td>
</tr>
<tr>
<td>English</td>
<td>Proficient</td>
</tr>
<tr>
<td>Cymraeg (Welsh)</td>
<td>WJEC Level 3</td>
</tr>
<tr>
<td>日本語 (Japanese)</td>
<td>Conversational</td>
</tr>
</tbody>
</table>
Despite the difficulties, what have made this DBA journey very interesting and special are the multilingual and multicultural contexts throughout this research. Having learnt some other languages (see Table 3.1), I was very keen to carry out this research project in a multilingual environment. This has maximised the research capacity by adding multi language resources. The ability of speaking some level of Welsh (I was the Welsh Learner of the Week on S4C and the semi-finalist for Welsh Learner of the Year competition in 2013) was a great help when I was arranging interviews with a number of Welsh HE institutions, organisations and with the Welsh Government.

Since this research focus is largely on Chinese student experiences in Wales, a large proportion of secondary and primary data collection was completed in the Chinese language. For instance, the questionnaire exercise sent to Chinese students in Wales was offered in both Chinese and English languages. Some interviewees participated in the semi-structured interviews also decided to use Chinese language when answering my questions. The significant cultural difference between the UK and China also means the interpretation and analysis of bilingual data had to be conducted carefully to avoid any misinterpretation or loss in the translation. This process was an uneasy but rewarding task for me.
Section 3.2 Project improvement work

During the last two years of the study and after completing the first two key stages of data collection and analysis (secondary data and first phase of primary data collections), the research focus was changed to international students (i.e. consumers of Welsh HE) experiences in Wales, rather than the initially planned marketing strategy for Welsh HE. After proper discussions with the supervisor team, the decision for these changes was led by the fresh and primary findings from the questionnaires analysis, in which over 120 Chinese students in Wales shared their experiences when studying in Wales. The research project title was updated to “Enhancing International Student Experience in the UK through the Development of a Higher Education Co-opetition Framework”. Details for the change and the discussion are given in Appendix 3.

Following meetings and discussions with the supervisor team in late 2016, I have also set out and completed the following improvement work (see Table 3.2 below) to the DBA thesis and project structure, as part of the learning and reflection process.

Table 3.2 –Chapter by Chapter improvement plan

<table>
<thead>
<tr>
<th>Initial content</th>
<th>Changes / improvements made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Background of the research</td>
<td>Added:</td>
</tr>
<tr>
<td>1.1.1 Overview of the UK HE system</td>
<td>- Key challenges international students face: loneliness, vulnerability, fear to speak out, some unfair treatment;</td>
</tr>
<tr>
<td>1.1.2 Milestones of the UK HE development</td>
<td>- Recent reports &amp; academic studies highlighted their vulnerability. Many argue they are being treated as ‘‘cash cows’ by some UK HEIs and there is a need to improve their overall experience s in the</td>
</tr>
</tbody>
</table>
1.2 Importance of international students to the UK
1.3 Research rationale
1.4 Aim and objectives

UK;
- International students’ needs and consumers’ behaviors totally different from home students, and the lack of research to understand their behaviors and specific needs;
- Prove that there’s increasing demand to thoroughly understand international students’ behaviors and the need for a collaborative approach between UK HEIs for improving their experience and stratification.

Chapter 2: Literature Review

<table>
<thead>
<tr>
<th>Initial content</th>
<th>Changes / improvements made</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Introduction</td>
<td>New focus:</td>
</tr>
<tr>
<td>2.2 International marketing theory</td>
<td>- Keep marketing theory (its application to the UK HE) and the analysis for the external &amp; internal marketing environment for the UK HE sector.</td>
</tr>
<tr>
<td>2.3 External marketing environment for the UK and Welsh HE sector</td>
<td>- Expand on Co-opetition:</td>
</tr>
<tr>
<td>2.4 Internal marketing environment for the Welsh HE sector</td>
<td>- Origin, theories and benefits</td>
</tr>
<tr>
<td>2.5 Exploring an innovative strategy for international marketing (Co-opetition)</td>
<td>- Common formats and practical examples</td>
</tr>
<tr>
<td>2.5.1 Introduction</td>
<td>- Establish the Value Net framework</td>
</tr>
<tr>
<td>2.5.2 Competition and cooperation in marketing</td>
<td>- Requirement and determinants of successful Co-opetition (through business case analysis)</td>
</tr>
<tr>
<td>2.5.3 The hybrid “Co-opetition” strategy</td>
<td>- Use theories and industrial applications to prove that this is a well developed model of improving customer satisfaction, and why it is better than other models</td>
</tr>
<tr>
<td>2.5.4 Key benefits of Co-opetition</td>
<td>- Attempt to apply the Co-opetition Value Net framework in to HE and prove that it is highly relevant to the HE sector and could bring similar benefits to HEIs involved and to their consumers</td>
</tr>
<tr>
<td>2.5.5 Common formats and business examples</td>
<td></td>
</tr>
<tr>
<td>2.6 Summary</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 3 & 4: Research Methodology

<table>
<thead>
<tr>
<th>Initial content</th>
<th>Changes / improvements made</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Chapter will largely stay unchanged, but</td>
</tr>
</tbody>
</table>
the following addition / amendment will be made:

- Amend the structure, questions & participants list for semi-structured interviews.

  The aim is to verify this framework through semi-structured interviews with HEIs, their competitors, suppliers and complementors.

- Add a sub section for consumers (i.e. international students) interviews.

  The aim is to confirm if this new framework could enhance their UK study experience & satisfaction.

---

**Chapter 5: Secondary Data Analysis (Case Studies)**

<table>
<thead>
<tr>
<th>Initial content</th>
<th>Changes / improvements made</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Introduction</td>
<td>- This Chapter will largely stay unchanged. Through small case studies covering all Welsh HEIs, this Chapter successfully linked the Co-opetition theory to the UK/Welsh HE sector, with successfully HE examples. It also confirmed the relevance and significant advantages of Co-opetition to the HE sector;</td>
</tr>
<tr>
<td>5.2 Overall finding: Co-opetition in Welsh HE</td>
<td>- This Chapter will outline the HE version of Co-opetition Value Net framework based on these findings;</td>
</tr>
<tr>
<td>5.2.1 Brief reminder of theory and application</td>
<td>- It will also list the requirement and determinants in order for this model to succeed.</td>
</tr>
<tr>
<td>5.2.2 Link Co-opetition theory with Welsh HE</td>
<td></td>
</tr>
<tr>
<td>5.3 Co-opetition case studies in Welsh HEIs</td>
<td></td>
</tr>
<tr>
<td>5.3.1 Welsh Universities’ strategic alliances</td>
<td></td>
</tr>
<tr>
<td>5.3.2 Joint venture between Welsh HEIs</td>
<td></td>
</tr>
<tr>
<td>5.3.3 Franchising with FE colleges</td>
<td></td>
</tr>
<tr>
<td>5.3.4 Licensing to private HE providers</td>
<td></td>
</tr>
<tr>
<td>5.3.5 Co-branding of HE in Wales</td>
<td></td>
</tr>
<tr>
<td>5.4 Summary of the secondary data analysis</td>
<td></td>
</tr>
</tbody>
</table>

---

**Chapter 6: Phase 1 (of 2) Primary Data Analysis (Questionnaires)**

<table>
<thead>
<tr>
<th>Initial content</th>
<th>Changes / improvements made</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3 Respondents' demographic profile</td>
<td>- This Chapter will largely stay unchanged,</td>
</tr>
</tbody>
</table>
Chapter 7: Phase 2 (of 2) Primary Data Analysis

- Verify the HE Co-opetition framework through semi-structured interviews with HEIs, their competitors, suppliers and complementors;
- Focus group interviews with consumer groups (i.e. international students) to confirm if this new framework could enhance their UK study experience & satisfaction.
- The structure, questions & participants list for semi-structured interviews need amending. A sub section with consumers (i.e. international students) interviews will also be added.

6.4 Consumers' (Chinese students) behaviour in relation to Welsh HE
   6.4.1 Perception of Wales and the Welsh HE brand
   6.4.2 Student finance
   6.4.3 Key decision making factors
   6.4.4 Most accessed sources of information
   6.4.5 Significance & controversy of education agents
   6.4.6 Alternative options other than education agents
6.5 Chinese students' experiences of Welsh HE
   6.5.1 Key challenges during their study
   6.5.2 Most needed university services
   6.5.3 Some unfair and unpleasant experiences
   6.5.4 Where do Chinese students seek help from?
   6.5.5 Activities outside university
6.6 Overall satisfaction rating

but will add argument to emphasise the fact (backed by existing literature) that many UK HEIs do not have thorough understanding of international students’ behaviours and the contribution from this primary data analysis into the practice.
Section 3.3 Professional achievement

After several years of working in the engineering profession, successfully completing the accredited Tata Steel Graduate Development Scheme and the part time MRes in Materials Engineering at Swansea University, as well as passing all the assessments, I have finally earned the prestigious professional status of Chartered Engineer (CEng) in 2012, registered both with the IET and the Engineering Council UK. The copies of the certificated are shown in Figure 3.1. This CEng professional qualification required the applicant to demonstrate a high level of competence in the field of engineering and manufacturing, together with many transferable managerial and organisational skills. These skills include marketing, research and analysis, the ability to resolve complex issues, communication, strategy planning, as well as budget and resource management.

Figure 3.1 – Chartered Engineer Certificates
Studying this professional doctorate course has helped me in many ways of developing many of these required “soft skills”. This professional development portfolio (PDP) process also played a big part in helping me document, record and reflect my learning and skills development. The CEng qualification has demonstrated my commitment to the profession and continuous professional development (CPD). The concept and skills I have learnt through this PDP process will continue benefiting me in my careers development.

Section 4: Conference participation

David (2014) states that publication and conference contribution “force” the researchers to provide material and structure for reflection and learning for the current achievements. It gives distance and perspective with a demonstration of an in-depth understanding and interest in the research field. Additionally, it permits selection and focus for the future stages of the research. In compliance with Cardiff Metropolitan University’s guidance for postgraduate researchers, I was encouraged to participate in a wide range of conferences and research initiatives, in disciplines including business management, science and technology, and professional development. During this DBA study, I have participated in the following research and professional conferences and have developed many invaluable skills not only relevant to this doctorate study, but also for my career development.
Management Research Conference (Swansea, 2012)

Figure 3.2 – Management Research Conference at the former Swansea Met
In association with the Chartered Management Institute (CMI), the Management Research Conference was held on 21 June 2012 at the Swansea Business School of the former Swansea Metropolitan University (now known as University of Wales Trinity Saint David). I was one of the guest speakers among other researchers, academics and business representatives from Wales. A full list of guest speakers with their profiles is given in Appendix 4. My conference presentation was based on my MBA research (2009 to 2011) and the early stage of my DBA research (2011 to 2012), both relating to the Co-opetition development in the Welsh HE sector. The poster of this research conference and my presentation title are shown in Figure 3.2. The full slides are given in Appendix 5.

Other relevant professional conferences and events I have participated in include:

- Science and the Assembly event in Cardiff, 2013. Organised by the Royal Society of Chemistry (RSC), in cooperation with the National Assembly for Wales, the Welsh Government and the Welsh science and engineering community;
- Presenting young engineers in Wales at the National Assembly for Wales’ Cross Party Group on Science and Technology in 2013;
- Science Festival in Cheltenham in 2016.
Section 5: Skills development and training courses

Table 5.1 summarises all the training courses that I have undertaken during this DBA course. The skills developed from these courses are also briefly explained.

Table 5.1 – Summary of training courses attended and learning reflection

<table>
<thead>
<tr>
<th>Programme &amp; Date</th>
<th>Venue / Provider</th>
<th>Reflection &amp; skills developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Researcher Workshop</td>
<td>Cardiff University</td>
<td>- Interactive and intensive two-day course with lectures, tutorials, group exercises and group projects.</td>
</tr>
<tr>
<td>2 – 3 July 2012</td>
<td></td>
<td>The course covered:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- PhD project planning;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Effective working practices;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Working with others in the research environment;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Maximising your impact;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Managing your supervisor;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Negotiating;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Getting feedback;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Making the most of your PhD.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The course covered:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Effective project planning;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Effective working practices;</td>
</tr>
<tr>
<td>Postgraduate Researcher Skills</td>
<td>Cardiff Metropolitan University</td>
<td>- The 4-day training covered many aspect of postgraduate researches and helped develop many valuable research and management skills;</td>
</tr>
<tr>
<td>Week 2015</td>
<td></td>
<td>Presentations and training attached included:</td>
</tr>
<tr>
<td>25 – 28 March 2013</td>
<td></td>
<td>- Information literacy skills;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Academic writing;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Oral communications;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Academic associate forum;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Making poster presentations;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Effective job applications for researchers.</td>
</tr>
<tr>
<td>Effective Learning and Management</td>
<td>Ashorne Hill College of Management</td>
<td>- Course accredited by the Institute of Leadership and Management (ILM);</td>
</tr>
<tr>
<td>Course</td>
<td></td>
<td>- Provided specific managerial training for effective learning, time and project</td>
</tr>
<tr>
<td>27 – 29 May 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Monitoring Report and Review 2011 – 2016</td>
<td>Cardiff Metropolitan University</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------------------------</td>
<td></td>
</tr>
</tbody>
</table>

This core element of this course is to enable participants to build up an effective and reflective learning cycle for their projects or researches and utilise it into their business projects or researches.

- The formal review and reflection process carried out annually throughout this DBA study;
- The aims are to reflect the progresses and achievements and to set out and agree plans for further project development;
- This provided opportunities to monitor and reflect the progress of study made in the past year;
- I also used such opportunity to discuss improvement plans, further development needs and training courses, with the supervisor team;
- The annual monitoring report also gave me the chance to raise any concerns and issues during the study. Both the CSM and the University have provided excellent support throughout the study;

<table>
<thead>
<tr>
<th>Annual Professional Standards Workshop (&amp; Refresher Workshop) 2013 – Ongoing</th>
<th>The Institution of Engineering and Technology (IET)</th>
</tr>
</thead>
</table>

- The annual workshop provided by the IET is for the IET's Professional Registration Advisors (PRA) and Assessors to familiarise the latest Engineering Council specifications and standards on professional registration;
- I have served as a voluntary PRA for the IET since 2013. My role involved advising and providing guideline to engineering candidates / professions seeking for professional registration;
- The workshop also covers developing skills such as communication, managing multiple tasks, building up effective personal relations etc.
Section 6: Summary

Although my professional background is very different from my research discipline, there have been many transferable skills from my engineer profession that I brought into my research, and vice versa. These skills include project planning, resources and budget management, interpersonal and communication skills and academic writing etc, which will benefit in my future career development. Additionally, my former MBA study and research, focused on the Welsh HE and its strategic development. This has built up a strong foundation for this doctor research after gaining significant Welsh HE development knowledge and research skills. I strongly feel this PDP process is equally important to the research project itself, as it has allowed me to learn and reflect on achievements, identify weaknesses and overcome shortcomings.

The part time study has been very challenging, especially after I was relocated to a different city outside Wales for a new job. It has been difficult to balance between work, personal life and this demanding doctorate study. I was fortunate that the flexibility from the supervisor team and the variety of support offered from the school and the University meant that this DBA study could fit into my life over the past six years. I have also made many valuable contacts throughout this course and some of them have become very good colleagues and friends.

On reflection, I am convinced that I have made the right decision to pursue this professional doctorate course, rather than a traditional PhD. The "career focus" and "change nature" of this DBA course has given me great opportunity to develop many management and professional skills. They have made me much more confident of identifying and driving changing projects in my organisation.
Section 7: References


CSM, (2012), *Effective Researcher Workshop notice to academic associate*, Cardiff School of Management, Cardiff Metropolitan University


The IET, (2014), *Be supportive, Supporting candidates towards Professional Registration*, the Institution of Engineering and Technology publication, London
Section 8: PDP appendices

PDP Appendix 1 – IET professional registration advisor

Professional Registration Advisor

Professional registration advisors (PRAs) are appointed to cover a Local Network.

Primary focus:

PRAs are members with detailed knowledge of the requirements and routes to professional registration. They are able to review individual cases and advise on whether a candidate is ready to apply to the IET for professional registration. They will also be able to advise on the presentation aspect of making a formal application.

Main duties and responsibilities:

- To assist candidates to complete their applications and to present their case in a way that will assist the registration panel in their assessment. You may recommend that candidates send you a completed application form or CV;
- To give specialist advice, particularly when a candidate for professional registration has been unsuccessful. In such cases copies of the application form and where appropriate, the interview report, are made available to the PRA;
- To nominate any local IET members who may be interested in assisting as interviewers for professional registration;
- You will receive queries from candidates mainly in your own network, but occasionally from adjacent networks or in your technical field, if specialised;
- Meet a candidate face-to-face, or correspond by telephone and email;
- Occasionally you may also be asked to act as a supporter for a candidate’s application. This will only be required if the applicant has not worked with, or not maintained contact with, another engineer. You would need to meet the applicant and be satisfied that the evidence available matches the competence requirements for registration. In acting as a supporter, the PRA must be confident that they will be able to complete an inquiry form after the completed application form has been received by the IET. The applicant must be able to find a sponsor that has known him professionally;
- Adhere to the IET’s data protection policy for volunteers.

Appointment method:

- Recommendations for PRAs are made to IET staff. A CV is requested and submitted to a panel of at least three members of the registration group for approval;
- Following approval by the registration group, nominated PRAs will be advised of their formal appointment.

Period of appointment:

- Fixed three year term;
- Possible reappointment for another three years, if appropriate.
Training:

- Newly appointed Advisors attend a PRA Development Workshop organised by the IET;
- Refresh training bi-annually;
- Registration & Standards Annual conference;
- Option of attendance of registration group meeting.

Point of Contact:

The point of contact for all roles is Registration & Standards Support Unit (RSSU) rssu@theiet.org

Communications:

When undertaking this role you can expect to receive requests to review such applications as are applicable to your geographical area.

Resource:

The following resources are available to support this role:

- Volunteering Handbook
- Volunteer Gateway

Policies and Procedures:

This role is supported by the following policies and procedures:

- Criteria and procedures for processing of all applications as regulated by Registration & Standards Committee (R&SC).
- Anti-bribery and corruption policy
- Bullying and harassment policy
- Business cards policy
- Code of conduct for volunteers
- Confidentiality of IET documents
- Data Protection policy and guidelines
- Equality and Diversity policy
- Expenses policy (if applicable)
- Information Security guidelines
- Managing disagreements guidelines
- Plagiarism policy
- Safeguarding against legal action
- Safeguarding children and vulnerable adults policy and guidelines
- Social Media policy
- Travel insurance guidelines

Person specification:

UK PRAs should ideally be fellows (members) of the IET and an Engineering Council registered engineer. Wherever possible, they should have had experience in an active role on an IET committee or group, or as an interviewer.

Date Updated: July 2015

Professional Registration Advisor

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PDP Appendix 2 – Cardiff Met news coverage on Chinese Welsh learner

“Chinese Cardiff Met academic learns Welsh in order to meet political leaders”

Date: 10/05/2014

Link: http://www.cardiffmet.ac.uk/news/Pages/Chinese-Cardiff-Met-academic-learns-Welsh-in-order-to-meet-political-leaders-.aspx

Chinese Cardiff Met academic learns Welsh in order to meet political leaders

10/05/2014

A Chinese Cardiff Met student has added the Prime Minister to his long list of political encounters, which includes meeting leaders of three Welsh political parties and The Prince of Wales.

Edward Yi He learnt Welsh at night classes five years ago, which has presented him with many opportunities. He was thrilled to be invited to meet David Cameron at last month’s Welsh Conservative Party conference in Llangollen and has previously photographed his meetings with HBI The Prince of Wales; Plaid Cymru leader Leanne Wood; Welsh Conservative Party leader Andrew RT Davies; David Jones, Secretary of State for Wales; and First Minister of Wales Carwyn Jones.

Edward, who reached the semi final of the Welsh Learner of the Year Awards last year, said: “I recently became a British citizen as I have been living, working and studying here for nearly ten years; so I was really proud to be invited to meet the Prime Minister and speak to him about my wonderful experiences in Wales.

“As well as a great interest in politics, I have also always been interested in different cultures and while my mother tongue is Chinese, I learnt Japanese when I was at University too. I was keen to learn Welsh – I just thought, ‘Pam iaf’ or ‘Why not?’

Leicestershire-based Edward, who works full time as an Advanced Manufacturing Engineer at GE Oil & Gas Chartered Engineer after starting his career at Tata Steel; started his part time professional doctorate degree at Cardiff Met in 2011 and is aiming to complete it next year. He said: “The research facilities and support here has been fantastic and Cardiff School of Management is a great and modern building to work in. I am thoroughly enjoying my time here.”
PDP Appendix 3 – Changing DBA research focus

Email discussion with the Supervisor Team on changing research focus

From: He, Yi
Sent: 30 November 2016 16:20
To: Williams, Jason J.; Thomas, Andrew; Crick, Tom
Cc: He, Yi
Subject: Updated DBA plan & conceptual framework

Dear all,

I have updated my Conceptual Framework poster (PPT) as per Andrew’s suggestion. Please find the updated version attached.

You will notice I have changed the research title to “Enhancing the Experience and Satisfaction of International Students Studying in the UK through the Development of a Higher Education Co-operation Framework”, as well as a few changes in the aim & objectives. The decision for these changes was led by the fresh and primary findings from Chapter 6 (questionnaires analysis which were responded by 124 Chinese students in Wales on their experiences and satisfaction in studying in the UK).

The questionnaire structure and content were previously discussed and reviewed with Jason, and the data collection and responses were completed in April 2016, before Andrew joined the supervisor team. The data analysis was then completed in October 2016, and were emailed to you together with my other Chapters work.

Chapter 6 analysed consumers’ (Chinese students) behaviours in relation to the UK HE and discovered some critical insights from their first-hand experiences, with the key findings below:

- 77% of surveyed Chinese students think “Welsh universities are less well-known in China than equivalent English and Scottish ones”;
- Nearly 80% of them are financially supported by their family and parents, which is completely different from UK students;
- Average cost to study in Wales for Chinese students is £25-40K / year;
- Nearly 50% of them do not feel their universities have provided them enough support before they arriving in Wales;
- More importantly, the study found Welsh/UK HEIs are too heavily relying on education agents to recruit Chinese students for them;
- As much as 80% of these Chinese students used education agents for their university and visa applications;
- Divided views among students on education agents and their services. Reports also show huge controversy and scandals involving education agents and UK HEIs in recent years. Examples: Nottingham Uni paid over £1 million in 2014 alone to their overseas education agents as commission for successful international student recruitment;
- Education agents often put their financial interests before students’, and give students false promises. Cardiff, Glyndŵr, USW and the former UoW have all been involved with controversy.
and scandals in international student recruitment in recent years, which caused huge damage to the Welsh HE brand;

- The study also identified the challenges Chinese students face whilst studying in Wales, some unpleasant experiences they have had (inc. unfriendly jokes, unfair treatment and racism incidents etc), and their vulnerability (i.e. loneliness, language barrier, cultural difference, unawareness of where to seek help);

- This Chapter then concluded that education agents are not a sustainable way of recruiting Chinese students and do not have the capabilities to address these issues and meet Chinese students’ demand and needs. It also found 70% of surveyed Chinese students would prefer their Welsh HEIs establishing HE partnerships with Chinese institutions, rather commercial partnership with education agents;

It is also worth pointing out that Chapter 5 (based on case studies and secondary data) analysed and confirmed the relevance, the application and significance of Co-opetition to the Welsh HEIs.

Following on from Chapter 5 & 6, my plan is now to develop a HE Co-opetition framework by employing the theoretical Value Net model. Through collaboration and co-opetition between UK HEIs and their partners in China, the aim is to deliver a better student care system to address these issues identified from Chapter 6.

As you will see from the attached PPT, this framework will be verified and tested through semi-structured interviews with key stakeholders and decision makers of Welsh/UK HEIs. Consumers (i.e. international students) focus group interviews will also be added to confirm the benefits of such framework.

Regarding the Literature Review, my plan is now to re-align it to focus on the theories and academic studies on consumers behaviour, and how the Co-opetition strategy and its Value Net framework has been utilised in the business world to enhance consumers’ experiences.

I attached my current work on Chapters 1 – 6 (which were sent to you in Oct), so that you can have a look at the analysis on Chapters 5 & 6.

I will discuss these points with you in details when we meet. I will really appreciate to have your thoughts / suggestions on this plan.

Could you please let me know if you would be available for a supervisor meeting on Friday 9 Dec (apologies for changing the date)? I’m flexible with the time.

Diolch yn fawr!

Best regards,
Ed
SBS/CMI Management Research Conference, 21 June 2012

Steve Osborne, Lecturer, ‘The Challenge of Developing Graduate Employability Skills: A Sports Management Case Study’

Leigh Jenkins, Dean FoBM, ‘Trade Shows and Exhibitions: Making Them Work For Your Brands’

Yoko Ariyoshi, MBA graduate, Freelance Translator and Consultant, ‘Transparency in the Age of Truth - An Analysis of CSR/Sustainability Communications of Soap and Detergent Multinationals’

Edward Yi He, MBA Graduate, Process Improvement Engineer, Tata Steel Strip Products UK, ‘Co-opetition in the Welsh HE Sector’

Jamie Tavender, Visiting Lecturer and Researcher, ‘Research Plans for Analysis of Internet Behaviour’

Caroline Jawad, PhD cand., Researcher and Visiting Lecturer, ‘The Good, the Bad and the Ugly: Policy Making, Social Responsibility and Online Gambling’

Owen Lewis, MBA Director, ‘Public Service Strategic Finance Challenges’

Will Fleming, Senior Lecturer, ‘Marketing by Agreement: a marketing co-opetition arrangement in a Welsh tourist destination’

Steve Griffiths, Assistant Dean, ‘Hyper reality: a challenge for internet business research’
Co-opetition in the Welsh Higher Education Sector

Yi He (Edward) BEng (Hons), MRes, MBA (Distinction), MIET
21st June 2012

Management Research Conference
Swansea Business School
Swansea Metropolitan University

About me

- Academic background
  - BEng (Hons) Electronic & Communication Engineering, University of Birmingham
  - MRes Materials Engineering, Swansea University
  - MBA (Distinction), University of Wales (SMU)

- Profession
  - Process Improvement Engineer, Tata Steel
  - Committee Member, IET SW Wales

- My connections with Wales 🏴
Presentation overview

- Research background
- Aim and objectives
- Literature review (co-competition theory and applications)
- Research methodology
- Results analysis
- Limitations, conclusions and recommendations
- References

Research background

- Overview of Higher Education (HE) in the UK

Table 1 – Numbers of UK HEIs and enrollments in 2010 (Universities UK, 2011 and UKCISA, 2011)

<table>
<thead>
<tr>
<th>Country</th>
<th>HEIs (inc universities)</th>
<th>% out of UK HEIs</th>
<th>Student enrollments</th>
<th>% out of total UK enrollments</th>
<th>Non-UK student enrollments</th>
<th>% of non-UK students</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>131</td>
<td>79.4%</td>
<td>2,093,460</td>
<td>84.1%</td>
<td>334,655</td>
<td>16%</td>
</tr>
<tr>
<td>Scotland</td>
<td>19</td>
<td>11.5%</td>
<td>215,816</td>
<td>8.7%</td>
<td>41,005</td>
<td>19%</td>
</tr>
<tr>
<td>Wales</td>
<td>11</td>
<td>6.7%</td>
<td>126,474</td>
<td>5.1%</td>
<td>22,030</td>
<td>12%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>4</td>
<td>2.4%</td>
<td>52,854</td>
<td>2.1%</td>
<td>5,815</td>
<td>11%</td>
</tr>
<tr>
<td>UK (in total)</td>
<td>165</td>
<td>100%</td>
<td>2,488,622</td>
<td>100%</td>
<td>403,805</td>
<td>Average: 14%</td>
</tr>
</tbody>
</table>
Higher Education Institutions (HEIs) in Wales

The “broken” UoW Alliance

Cardiff Metropolitan University
Prifysgol Fetropolitan Caerdydd

University
of Wales
Newport

UWIC

The St David’s Group

University
of Wales
Aberystwyth

PRIFYSGOL
BANGOR
UNIVERSITY

PRIFYSGOL
CARDIFF

Y Drindod Dewi Sant
Trinity Saint David

Total student enrollments in 2010: 39,142
30% of total student enrollment in Wales
10% of university research activities in Wales

Total student enrollments in 2010: 91,807
70% of total student enrollment in Wales
50% of university research activities in Wales

(HEFCW, 2011 and BBC News [2], 2011)

Challenges facing the Welsh HEIs

- Average enrollment number per HEI: 15,000 (in UK) vs. 11,000 (in Wales)
- In 2010, only Cardiff and Glamorgan > 15,000 (average UK HE enrollments)
- Too many, too small and not sustainable (HEFCW, 2010)
- Mergers and intensive collaborations would create bigger and stronger universities and increase the competitiveness and financial stability (Welsh Government, 2011)

Figure 1 – Welsh Government’s plan for future Welsh universities (BBC News [1], 2011)
Aim and objectives

- **Aim**

  To conduct a critical co-operative assessment for the corporate strategy of HEIs in Wales, with an in-depth evaluation of the relevance to SMU, in the context of its current institutional changing environment (caused by the merger).

- **Objectives**
  - To conduct a critical review of the relevant literature;
  - To evaluate the development and utilisation of co-operation in Welsh HE sector;
  - To analyse the status quo, in terms of strategic development, of SMU;
  - To conduct an in-depth co-operative assessment for SMU, to analyse the influences and implications from its current merger strategy;
  - To provide recommendations for future strategic development for SMU, other Welsh HEIs and the Welsh Government.

Literature review (Co-opetition)

- **Definition**

  Co-opetition is one of the most common corporate strategies, where individual organisations work in rivalry as a result of conflicting commercial interests, as well as, simultaneously, cooperating for mutual benefits (Brandenburger and Nalebuff, 2002).

- **“Redefinition”** (author’s application of Brandenburger and Nalebuff (1999) Co-opetition theory)

  Co-opetition = Cooperative Competition + Competitive Cooperation (the 4-C approach)

![Co-opetition Venn Diagram](image-url)
Advantages and disadvantages of Co-petition

Table 2 — Key advantages and disadvantages of co-petition
(Author’s application from Nalebuff & Brandenburger, 2002 and Furmer, 2010)

<table>
<thead>
<tr>
<th>Co-petition</th>
<th>Key advantages</th>
<th>Key disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Providing a new model to set strategies that incorporate both competitive and cooperative tactics</td>
<td>Strengthening competitors at your expenses</td>
</tr>
<tr>
<td></td>
<td>Access to greater resources, opportunities, expertise, marketing places and sale channels etc</td>
<td>Potential legal disputes if agreement / partnership breaks</td>
</tr>
<tr>
<td></td>
<td>Increased level of creativity and innovation</td>
<td>Monopolising the market by joint efforts from involving parties</td>
</tr>
<tr>
<td></td>
<td>More financial support for investigating new products / services</td>
<td>Potential unfairness of competition to other players and customers</td>
</tr>
<tr>
<td></td>
<td>Lower risks for investors and potential increase share prices</td>
<td>Potential loss of intellectual properties and other resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential job loss due to work sharing</td>
</tr>
</tbody>
</table>

Co-petition in practice and in the Welsh HE sector

(Author’s application from various Competition, Cooperation and Co-competition theories. More details see Dissertation)

Common Forms Of Co-petition

- Strategic Alliance
- Franchising
- Licensing
- Outsourcing
- Joint Venture
- Co-branding

- STAR ALLIANCE
- McDonald’s
- Apple
- TESCO
- Home Insurance
- British Airways
- American Airlines
- M&S
- H&M
- University of Wales
- Franchised FE colleges across Wales offering HE courses
- ICWS
- LSC London
- go Wales
- SWWHEP
- St David’s Group
Competition, Co-petition and Exclusive Collaboration (i.e. M&A)

Stage (1): Pure competition (Rivalry)
Stage (2): Early stage of collaboration
Stage (3): Ideal balance (Co-petition)
Stage (4): The imbalance
Stage (5): Exclusive Collaboration (i.e. M&A)

Figure 3 – The five-stage evolution process from Rivalry to Co-petition and to exclusive Collaboration (e.g. M&A)

Research methodology

Secondary data collection (content analysis)

Table 3 – Main resources for the content analysis

<table>
<thead>
<tr>
<th>Institution</th>
<th>Website</th>
<th>Prospectus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swansea Metropolitan University</td>
<td><a href="http://www.smu.ac.uk">http://www.smu.ac.uk</a></td>
<td>Undergraduate and Postgraduate Prospectuses from 2009 to 2013</td>
</tr>
<tr>
<td>University of Wales, Trinity Saint Davd</td>
<td><a href="http://www.tsd.ac.uk">http://www.tsd.ac.uk</a></td>
<td>Undergraduate and Postgraduate Prospectuses from 2009 to 2013</td>
</tr>
<tr>
<td>University of Wales</td>
<td><a href="http://www.wales.ac.uk">http://www.wales.ac.uk</a></td>
<td>Marketing materials and brochures</td>
</tr>
</tbody>
</table>
Primary data collection (semi-structured interviews)

Table 4 – The list of participants for the semi-structured interview

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Position and organisation</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Vice-Chancellor at SMU</td>
<td>University (Organisation)</td>
</tr>
<tr>
<td>#2</td>
<td>Assistant Dean and principal lecturer at SMU</td>
<td>University (Organisation)</td>
</tr>
<tr>
<td>#3</td>
<td>Course director at Swansea Business School, SMU</td>
<td>University (Organisation)</td>
</tr>
<tr>
<td>#4</td>
<td>Senior lecturer at Swansea Business School, SMU</td>
<td>University (Organisation)</td>
</tr>
<tr>
<td>#5</td>
<td>Senior marketing officer at SMU</td>
<td>University (Organisation)</td>
</tr>
<tr>
<td>#6</td>
<td>Student service officer at SMU</td>
<td>Student (Customer)</td>
</tr>
<tr>
<td>#7</td>
<td>Student society president at SMU</td>
<td>Student (Customer)</td>
</tr>
<tr>
<td>#8</td>
<td>Student union member at SMU</td>
<td>Student (Customer)</td>
</tr>
<tr>
<td>#9</td>
<td>Senior HE Officer of the Welsh Government</td>
<td>Government (Complementor)</td>
</tr>
<tr>
<td>#10</td>
<td>HE Officer at the Welsh Government Office in China</td>
<td>Government (Complementor)</td>
</tr>
<tr>
<td>#11</td>
<td>HE Officer at the British Consulate General in China</td>
<td>Government (Complementor)</td>
</tr>
<tr>
<td>#12</td>
<td>Managing Director of one education agency of SMU</td>
<td>Education Agency (Supplier)</td>
</tr>
<tr>
<td>#13</td>
<td>General Manager of one education agency of SMU</td>
<td>Education Agency (Supplier)</td>
</tr>
</tbody>
</table>

Results analysis

- Applying the theoretical Co-competitive framework to SMU to assess the merger strategy

![Diagram](Image)

Figure 4 – The utilisation of Value Net model to SMU
(Author’s application of Co-petition theory from Nalbitt and Brandenburger, 2002)
The organisation (SMU)

(-ve)
- Concerns of losing its strong financial status (see Figure 5)
- Concerns over senior management arrangement
- Duplications of non-academic and academic operations

(+ve)
- Cost reduction, better efficiency through sharing best practice
- Access to greater resources, opportunities and expertise
- Enhance services with a stronger branding

![Financial status of UoW Lampeter, TUC and SMU in 2010](source: Welsh HEI's Financial dataset, 2010)

Competitors and competitiveness

![Student enrolment comparison with the current largest four universities in Wales](source: HEFGW [2], 2011)
Figure 7 – Subject distributions (student enrolments) for SMU and UoW TSD
(Content Analysis Results, Sources: SMU and TSD Prospectuses 2010 and HEFOW, 2011 [1])

Figure 8 – Subject distributions (student enrolments) after the merger (Combined Analysis of Figure 7)
Customers (Students)

(−ve)
- Concerns of monopoly competition and increase of tuition fees (see Figure 9)
- Different standards at different campuses
- Travel and accommodation concerns

(+-ve)
- Wider recognition in the UK HE sector
- Strong position in the UK University ranking table
- Enhanced services and wider course choices

![International Students Tuition Fee Comparison (FT)](image)

Figure 9 – International student tuition fee comparison, SMU and UoW TSD
(Content Analysis Results, Sources: SMU and UoW TSD Prospectuses 2009 – 2011)

Complementors (Government and funding body)

“There are too many and too small universities in Wales. With a population of three million (in Wales), it has 10 universities, compared with 14 in Scotland, which has the population of 5.2 million, and two universities in Northern Ireland, where the population is 1.7 million. This leads to extremely high administrative costs for the Welsh high education sector as a whole”. – Interviewee # 9

![Average HEI student enrolments across the UK in 2011](image)

![Staff costs at UoW Lampeter, TUC and SMU in 2009/10](image)

Figure 10 – Average HEI student enrolments across the UK in 2011 (Source: UCAS, 2011)

Figure 11 – Staff costs at UoW Lampeter, TUC and SMU in 2009/10 (Source: Welsh HEIs income and expenditure review, 2007 to 2010)
Suppliers

Table 5—Summary of interview responses from identified “suppliers” for SMU
(Summary of data from interviewees #11 and 12)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Responses</td>
<td>Concerns</td>
</tr>
<tr>
<td>➢ Enhanced services for students</td>
<td>➢ Government intervention, e.g. cap on student enrolments</td>
</tr>
<tr>
<td>➢ Potential more course choices and shared and wider services</td>
<td>➢ Uncertainty of its future</td>
</tr>
<tr>
<td>➢ Increase in the UK University ranking tables</td>
<td>➢ Marketing difficulties</td>
</tr>
<tr>
<td>➢ Raising reputation and wider influence</td>
<td>➢ Potential religious issues (i.e. university name: Saint David)</td>
</tr>
<tr>
<td>➢ Royal connection</td>
<td>➢ Too wide spread of the new university</td>
</tr>
</tbody>
</table>

Limitations, conclusions and recommendations

➢ Limitations

➢ The dynamic environment
➢ Weaknesses of the adopted research methods
➢ Early stage interviews in China involving UK diplomatic institutions
➢ A multi-lingual research environment and the data interpreting challenge
➢ The complexity of HE sector
Conclusions

Stage (1): Pure competition (Evanale)  
Stage (2): Ideal balance (Coe-operation)  
Stage (3): Exclusive Collaboration (i.e. Merger)

Figure 12 - SMU’s evolution process from Rivalry to Co-operation and to exclusive Collaboration (e.g. Merger) with its competitors (author’s application of Competition, Co-operation and M&A theories from Brandenburger & Nalebuff, 2002; Donald, 2006 and Brown, 2009)

Table 6 - Reflecting the theories with actual findings for SMU’s merger case (Author’s application from Nalebuff & Brandenburger, 2002; Furrer, 2010; Donald, 2008; Channugan et al, 2008; Gadiesh et al, 2008 and McDonald et al, 2005)

<table>
<thead>
<tr>
<th>Advantages of a merger (theory)</th>
<th>Evident to SMU?</th>
<th>Disadvantages of a merger (theory)</th>
<th>Evident to SMU?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cost reduction as a result of closing duplicated costs</td>
<td>Yes</td>
<td>1. High risks of redundancies and job cuts</td>
<td>Possibly</td>
</tr>
<tr>
<td>2. Access to greater resources, opportunities, expertise, marketing places and sale channels etc</td>
<td>Yes</td>
<td>2. Time consuming and huge cost involved with the M&amp;A processes</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Increased level of creativity and innovation</td>
<td>Yes</td>
<td>3. Legal expenses and takeover cost</td>
<td>Yes</td>
</tr>
<tr>
<td>4. More financial support for investigating new products/services</td>
<td>Yes</td>
<td>4. Potential devaluation of equity</td>
<td>Possibly</td>
</tr>
<tr>
<td>5. Lower risks for investors and potential increase share prices</td>
<td>50% relevant</td>
<td>5. Suppression and threat to other competing businesses</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Become more efficient by taking best practices from the invading companies</td>
<td>Yes</td>
<td>6. Potential monopoly, price fixing and unfair competition</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Enhance services with a stronger branding. This can potentially attract customers from other competitors</td>
<td>Yes</td>
<td>7. Drawbacks from the existing consumers and shareholders, caused by fears of the uncertainty of its future</td>
<td>Not evident</td>
</tr>
<tr>
<td>8. Improve competitiveness and bring more investment opportunities</td>
<td>Yes</td>
<td>8. Differences/conflicts in culture, working style and other HR related issues</td>
<td>Possibly</td>
</tr>
<tr>
<td>9. Bring wider geographical diversifications and opportunities for vertical integration development for the new organisation</td>
<td>Yes</td>
<td>9. Differences and disagreement in management would lead inefficiency, power struggle and potential conflicts in the new formed organisation</td>
<td>Possibly</td>
</tr>
<tr>
<td>10. Create greater financial stability and security</td>
<td>Yes</td>
<td>10. Forced changes of organisation’s shape, function and production</td>
<td>Possibly</td>
</tr>
</tbody>
</table>
Recommendations

- Recommendations to SMU and other Welsh HEIs
  - Expanding international co-operative partnerships
  - Strengthening partnerships with local employers
  - Innovative products
  - Research development through joint venture

- Recommendations to the Welsh Government and HEFCW
  - Better communications, consultations, encouragement and involvement

- Recommendations for future research

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Professional Doctorate Programme – Research Proposal

Doctor of Business Administration

Yvette Leppard

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