Use of Business Competitions to Enhance Student Employability in Higher Education

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Abstract—The research exemplifies student learning and skills gained within higher education (HE), by illuminating learning patterns and motivation through competitions that gain students skills and employability prospects.

Competition implies rivalry, contest and opposition. There is still some amount of controversy as to whether competitions in HE are a positive or negative. Having students learn through the style of competitions based on real life situations, they experience how to solve problems, and can learn both content and thinking strategies. It is evident through research that by allowing students to undertake project-based learning through competitions, it further enhances their engagement and increase motivation. By looking at three core aspects: ‘Competitions, Learning Patterns and Employability’ it will showcase positive perceptions of this theory within HE institutions, and with the key emphasis and importance of identifying how psychology plays a role in increasing a student’s skill sets that employers seek in graduates. This allows students (i.e. future graduates) to improve upon time employability prospects in the future.

The research aims to investigate and identify the factors towards improving the employability prospects through competition based learning. This research concentrates on the learning output and skill sets via competitions, therefore as a result gains a medium of skills for employability. Throughout this research, there will be many assessment components and methodologies discussed with the use of primary and secondary tools; whilst taking a deep look into psychology aspects of learning patterns in particular motivational modes of learning.

Keywords—Business Competitions, Higher Education, Employability, Learning Practices, Collaborative Learning, Competitive Learning

I. INTRODUCTION

This research mainly focuses on the perceptions of competitions within higher education (HE) institutions, and with the key emphasis and the importance of identifying how psychology plays a role in increasing student’s skill sets. This allows the HE institutions to further improve the students (i.e. future graduates) employability prospects in future. The aim is to address the growing concerns on the use of nonacademic methods such as the competitions within the learning in HE. There is still controversy whether competitions in higher education are a positive or negative effect on learning. It’s uplifting because it encourages individuals to do better and work harder. However, rivalry can also be negative because it might discourage vast amounts of people whilst it can apply pressure and stress to others. Nevertheless, it will also intend to address the lack of encouragement it provides students towards exceeding expectations not just academically but towards attaining practices towards working harder and fulfilling the necessary skills and training gap. Rivalry can be seen as negative because it can discourage vast amounts of students, whilst it can apply pressure and stress to others. Through learning via competitions the following proverb is very significant because it indicates that being involved in an activity will be more beneficial than just being told what to do in the activity.

“Tell me and I’ll forget, show me and I may remember; involve me and I’ll understand” [1]. Competitions can help extend students learning boundary and increases motivation that engages them to achieve successful learning outcomes, and initiate new learning habits [2]. Competitions and Commercial Stimulation Games help boost morale, the individual’s entrepreneurial skills blossom, bettering the student and helping gain confidence as well as employability [3]. The benefits of student engagement are well accepted, but the means to achieve it are less well established and agreed. Through this research it will concentrate on the learning output and skill set via competitions, therefore as a result gains a toolbox of skills for employability [4]. Human competition is a contest where two or more people strive for a goal that cannot be shared, usually resulting in a victor and a loser. It is an official participation of something whether it’s sports or a business agenda [5].

A theory suggests that by having students learn through the experience of solving problems, they can learn both content and thinking strategies as described within the theory of “Learning through a problem” [7]. Through these components and methodologies the students tends to gain imperative skills and thus increasing their confidence as well stimulation towards adaptive learning. It has been evident that looking at students learning patterns allows researcher to establish ways in which competitions can have a positive impact. Hence by
adoption of these techniques and methods it will allow students to attain these attributes that are very valuable to future prospective employers within real world. We are a society now made up of equal opportunities so this could be a positive step of how we enable forthcoming students to receive the best possible experience, and open their chances of employability. This research will show an overview of three vital sub sections: how competitions instigate better learning and skills, the adoptions of competitions in higher education to help initiate employability and the psychology behind competitions in higher education through learning patterns.

II. LITERATURE REVIEW

The first outline the research depicts is that all academic degrees (whether or not they are integrated with competition based activities) are part of academia and have relevance. Competitions are a vital role for students: it enables them to work in a team, gain invaluable skills, become self-motivated and gain confidence. The problem and key issues lie when UK universities don’t use competitions in their vicinity, which results in students’ deficient of bettering themselves and gain employability prospects. This could be down to various reasons ranging from non-competitive streaks in individuals, no incentive to take part or enough time. Another factor could be the cost implications involved or for the simple fact it’s not heavily publicized. (If it were named e.g. ‘business competition’ students not studying a business disciple would maybe not apply). Psychology/Marketing aspect of the wording needs to be altered in order to change views. Through extensive research and methodical evidence the research aims to demonstrate if there are any indications as to why there is controversy in competitions. There is empirical evidence that suggests that there is a higher success rate of employability for graduates who have been associated with competition based learning. With such great outcomes from competition-based exercises, this should prompt all universities that don’t currently undergo any internal/external competitions to start.

A. Economy and Employment

England is the driving force behind the UK economy; it does in fact rank one of the highest in the world. England in particular was the powerhouse for manufacturing and foreign trade (pre-recession). London is renowned as the financial center. However the UK took a turn for the worse, the recession hit Britain and countries across the world. This stemmed as a result of the credit crunch (2007) and as a result, the British economy was officially declared to be in recession in January 2009 [8]. The study also states that the reason the UK came into a recession was because the UK’s economy wasn’t growing fast enough, according to statistics over a twenty five year period, Britain was always in the 2.5% and 3% area, which is below par and has no spare capacity or room. The first thing that the recession targeted was jobs. Research also suggests that the private sector was the first to increase its employment after the boom. Figures showed that in 2008-9 employment decreased by 4.2% and only rose by 1.5% in 2009-2010 and up 1% in 2010-2011 (Corry et al, 2011).

As we are now in a highly competitive market, the economy stipulates new ways of working and thinking. As the years progress the type of jobs and tools have altered, the level of schooling and skills necessary have also reformed. Research also suggests that there are two concerns for employers in today’s market: seeking good employees and secondly training them accordingly [9].

Employability in the UK is a very crucial aspect for the UK to succeed, which is why HE bodies are feeding employability skills to their students, as part of the curriculum. According to research the government is constructing a strategic policy that will enhance employability of those students completing a degree to extend skills across the UK [10]. One of the greater skills that employers seek is how to solve a problem in a creative and methodical approach [11] [12]. Nearly everything in life is a problem and is a central part of our lives. When a person has a problem, they need to know how to identify it and solve the problem in hand. Once this process is adopted, the individual must define the scope and goals. Davidson and Sternberg [13] followed this process formally known as the problem solving cycle (PSC) that is broken down into seven steps:

- Recognizing or identify a problem
- Define and represent the problem mentally
- Acquire a solution strategy
- Organize his/her knowledge about the problem
- Allocate mental and physical resources for solving the problem
- Monitor his/her progress towards the goal
- Evaluate the solution for accuracy

Not all PSC need to go into this level of detail and certainly shouldn’t imply that all problem solving has to be in this sequence. To be a successful problem solver, is to be flexible. Another way to explain a problem to put it simply, is where you have a scenario where you need to act to find a solution but you don’t know how to solve it or what to do. A published definition as to what a problem is: within problem solving there are two problem classes: problems that are considered well defined and those that are classed as ill defined. Well-defined problems are those that are a clear goal or path to resolving the problem (for example: a sale in a shop, working out the discount, finding out the new price) this is a straightforward problem based on the information given. An ill-defined problem is not so clear; it has no direct path to resolve the problem. With this vague scenario it is deemed challenging and more work does need to be involved (for example - how to find your life partner?). It is not a question that can have an easy answer as the well-defined problem can. In life, we often make unwarranted assumptions in our everyday problem solving. Such assumptions can interfere with our ability to discover a novel solution to an ordinary problem.

B. Competitions and Learning Environments in HE

The following section provides an overview of the use and impacts of competitions towards learning environments in HE. Research studies states that competition implies rivalry, contest and opposition [3]. In educational terms it implies that
a student goes above and beyond the usual effort, through working on a competition based activity to seize better marks. Competition suggests the need to do better than other/student(s)/teams in order to flourish rather than just do well overall. It has also been seen that competitions engage students and motivate their learning patterns [3]. Literature also states that competitions are seen as ubiquitous [14].

Whilst relating it to a working environment, employees eagerly try to achieve a promotion, create an innovative idea or win a race. Another research suggested learning in a cognitive way of gaining skills, the different approaches to thinking, acting and knowledge [15]. The cognitive style emphases on the in-house practices and another cognitive view are through psychology, by looking at how we as beings understand the world. With the information of what we know already and understand, we as beings link this with new knowledge and piece all the parts together, to build our own understanding of a concept. As humans we are born intrinsic: we have the desire to learn. However, it has also been argued in literature that universities goals are primarily to prepare students in higher education towards work. This is the same view of employers and educators so collaboration between both should be considered.

1) Competitions and Relation to Learning

Competition can stimulate learning by enhancing student engagement and encouraging student motivation. By harnessing their natural competitive nature, student centered learning can be increased and active learning takes place. Researchers look at why competitions are a good stimulant for students. If competitions were well organized, then it would certainly increase their learning and undoubtedly stimulate and enhance the student(s) learning and motivation [16]. One example follows the traditional assumption of learning, whereby learning through education via your educators, and then putting into practice on real life situations within the student’s future [17].

In the business world a key thing employers look for is problem solving which is discussed further in section 3.6. It has been evident through research that by allowing students to undertake project-based learning through a competition, it can be used as further engagement of students and towards motivation of teaching [3]. By using a competition based method it also meets skills that employers seek in graduates. Another study encourage students to engage in skills based competitions as they set a high benchmark not only for the student, but employers they wish to work for and those other students applying to the same type of role [18]. Skills based competition benefits everyone from the learner, educator, management and employers. Both research studies [6] and [22] agree that competitions not only encourage students to have an active learning, but also increase their motivation. The significant thing about competitions is that it involves every type of student from the intellect ranging to a challenged student. They each have a place in a competition; it not only shows off their strengths, but is also an enabler for learning new things, and attributes that are in high demand of the world after academia. Competition can develop employability skills of a high standard that employees seek [18]. By undergoing such activities this also enables students to gain:

- Business knowledge
- Work experience
- Working as a team
- Motivation
- Self esteem
- Learning new things
- Fun and confidence booster/better morale

2) Competitions and Employability

The skills that are learnt during competitions are the same skills sought by employers. This also explains by saying it’s ‘giving learners the edge’. This type of (extra) curricular activity is an additional advantage and looks fantastic on a student(s) CV. By gaining these proficiencies and experiences at university, it allows students to then become familiar with these surroundings and put them into practice at interviews, and in front of employers when seeking employability [18].

3) Disadvantages of Competitions

According to literature it has shown that competitions can develop a negative effect on students because it’s said to focus more on the goal than the actual learning process [7]. Another undesirable effect that competitions may impose on students is the stress that may develop. These two are the core underlying reasons why competitions are very controversial and can be seen as a negative. However, it has also been argued that if you provide students with artificial competitions, then this will teach them what we (the older generation, the educator) to believe what the real world consists of and not by using their own initiative or findings [22]. To avoid competitions having no sense of importance or real value, the competition needs to be short. The length of the competition is crucial. It reciprocates how motivated the students will be throughout the activity. If it’s too long, students will become less inclined to work at it and it will not be fun or motivating any longer [6].

By relating this back to students working in a team for a competition, this makes the students play off each other in a hostile, rivalry manner in order to attain a praiseworthy mark. By doing this, it exposes a negative influence as it makes the competition about the prize or outcome rather than what the students are meant to gain from the experience; which is learning, motivation, skills, self-esteem and real life experience. Through a lot of research a popular feedback that is aired is the amount of preparation it takes to conduct a small competition internally. This being said the benefits are outstanding and really does increase a students learning and motivation [18]. Another factor is the cost implications competitions seem to have. Internal competitions don’t need to have a budget or a large one that will be expensed via the university, as it would benefit all students.

4) Advantages of Competitions

By inserting competitions to the curriculum it will not only motivate the students but also enable them to learn in the style they learn best which is very good tool for the educators or assessors. It is important to remember that it is not just about external competitions; they can be embedded in lessons within
student learning is enhanced by competitions [18]. By implementing a rival type activity into a classroom this is enjoyed by students and they find the problem solving a very insightful practical approach [3]. It also goes on to say how learning stimulates students and consequently harnesses their competitive spirit in a positive light. Studies claim that competition based learning brings out the best in students individually making them want to learn more [21]. By focusing on real life situations it will prepare them for similar encounters outside education. It has been agreed by [6] that:

(a) The competitive/rivalry aspect of competitions is used as an incentive for students including the weaker ones; and

(b) That there is a substantial amount of evidence that conclude competitions are beneficial and also not harmful

There needs to be certain guidelines for this theory to work however: the prize of winning needs to have no symbolic value, the competition as a whole needs to be completed in a short amount of time, students need reassurance that they individually or in groups can and might win, there needs to be learning development and a reflection for students to gain something productive from the activity.

5) Adoption of Competitions within HE Environment

Universities that take part in competitions can raise their profile and enhance their overall prospects towards employability [18]. The initial planning for an educator setting up internal competitions or workshops may take some time. The amount of progress or learning students can gain and benefit should outweigh the preparation as it results in better motivation, good grades and an increase of learning. If budgets are the main concerns for universities to conduct competitions, internally or externally, then another approach may be to seek funding from employers as they request graduates with the skills competitions seem to possess [18].

It has already been seen through research and practice evidence that higher education institution should be adopting towards competition based learning and to adopt the following key options:

- There should be a realistic budget for competitions;
- Competition should be seen in the curriculum and in the government agenda;
- Employers should be backed by the competition to raise awareness;
- Competition should be seen as enhancing a students learning and motivation;
- Competitions are not about the winning – it’s the taking part;
- Data collection after competitions to see how they enrich students’ progress and identify areas of improvement;

By allowing students to take part in competitions, it enables them to develop skills, be within those surroundings and become comfortable, greater their motivation and understand what to expect around employers. Students will learn from the experience and know what to expect at the next competition, whilst gaining more skills and development [18]. This should outlay a solid foundation that through competitions, students get a real life business approach; problem based solving and portrays business competition learning in a positive light.

C. Competitions and its Psychological Aspects within HE Environments

It is also important to address the psychological aspects within higher education environments and its relevance towards competition based learning. However, within psychology there are many areas that can all be linked and addressed, but the research will only aim to address the ones which are linked towards students learning and its relevance towards competitions. Through the use of competitions in higher education, there is an element of student engagement and motivation. To reach these parameters, PBL has been the trigger and is a learning style. By looking at learning styles this would address why some students are motivated in different ways as a result by their individual learning style.

Additionally psychology can also be known as a science discovering a person or groups mental attitude. Psychology is a new discovery, so there are many theories and few facts on the subject. The difficult topic of psychology is that it is difficult to prove some things, which is why it is measured and observed. Social psychology is the exploration of how people are influenced by others in thoughts, goals, feeling and behavior. The reason behavior is monitored is because it can be observed and measured. The reason it is called ‘social’ psychology is because it deals with how people are affected by other beings that are present at the time or imagined to be present. The main difference of the two types of psychologies is that in psychology, a psychologist would generally be concerned to why a person might overestimate the size of a coin. Whereas a social psychologist would want to understand why a person might emphasize if the coin has value (if an individual or group has influenced that person), it changes their initial perception and therefore influences them. Social psychology looks at how people affect each other.

D. Problem based Learning

Problem based methods are renowned to support experience-based learning [6]. The key to this type of learning style is to learn through solving a problem and develop a holistic range of lifelong skills such as:

- Flexible knowledge
- Problem solving skills
- Working in a team
- Intrinsic motivation

Research studies explains PBL as student based strategy that student learn collectively to solve problems and learn from the experience. Within PBL a student is expected to problem solve and gain a real sense of learning. Literature also goes on to portray just how important PBL is when it comes to gaining employability skills [20]. The idea is that the problem is based upon a real life situation so the skills you develop, will aid you in profession. Students are more motivated when the task is personalized and the student values what he or she is learning. Students work in collaborative groups to identify what they
need to learn in order to solve a problem. Educators are interested in PBL because of emphasis on active, transferable learning and its potential for motivating students. Teachers and lecturers acknowledge that motivation is a core aspect of student learning within higher education environments [6] [7].

III. RESEARCH METHODOLOGY

Through the literature review conducted has allowed the authors towards a structure and three key areas to focus on which are: competitions, learning patterns and employability.

As seen below is how the three sections are divided, within each section they then indicate the core three points that stem from the hypothesis of this research study. The arrows depict the starting point being at ‘competitions’. This then has a psychological impact on the student(s) that makes them use motivation/cognitive elements to gain new styles/learning patterns or skill set. Subsequently, this transacts to the next segment ‘employability’. The ultimate reason behind the three sections is:

1) To discover the reasons why competitions are an important learning curve for students and understand what skills and knowledge students get from competing
2) Exploring how employers recognize the student(s) skills set and what they believe to be valuable. Thus this should expose employer’s perspectives on how business competitions make a student more employable
3) Through learning and new learning styles this will convey a new type of skill and the psychological impact to the student

Figure I: The Research Framework

It is important that the information inputted within the survey is reliable, designed in a methodical and flowing approach for the participant, ethical and appropriate for the target audience. In each of the surveys there are very short opening statements to ask appropriate questions based on the information found through the literature review.

A. Student Survey Design

Starting with the student survey, the first segment after the generic questions is competitions. By asking if the participant has taken part in competitions or elaborates on what they enjoy most by taking part and if they achieved better marks by competing in a competition this would give the author a good reason to believe or assume that competitions are a good spectrum of learning. The second segment is learning patterns. These styles of questions ask the student to give an opinion in a closed question scenario on how they learn best. By adding factual information this encourages the participant to read the text before answering the questions, so when faced with problem solving questions and how they learn in a problem solving situation they can relate back to a real life example from their past, and way of thinking is already focused on learning so should trigger them to be honest and as thorough as they can be within the survey. The final segment is employability and this is the most interesting data that will be collected as this is the vital part of the thesis that will indicate whether or not learning through a competition would give a student employability prospects. The design of the questions is aimed to discover if students find employability skills and business acumen a valuable thing to acquire.

B. Employer Survey Design

After the three nonspecific questions the competition segment aims to get the employer to identify their understanding of what a competition is. This is an actual question in an open question format to employers. If there is a collective response in the same direction then it will emphasize their knowledge of competitions whether it is through student competitions or simply competition within the work environment. By having four questions on competitions this will verify if the employer believes that competitions are a valuable learning tool in HE. The second part of the survey is learning patterns. This is a series of five closed questions that ask the employer if completion based learning is a good stimulant for learning and if they see students who have the skills they require through competitions. Finally if there is a link between learning and the psychology behind learning. Then concluding with employability, this section again is a vital part of the thesis that will indicate whether or not learning through a competition would give a student employability prospects. One of the questions is an open question to get the insight from an employer on what makes a student employable when applying for their company.
C. Alumni Survey Design

The alumni survey has five generic questions as they have already graduated; the final two of the five generic questions asks what the person’s current state of employment is and how long it took them to find the role since graduating. This allows the author to recognize how useful their degree course and experience of competitions were along with what employability skills they acquired. The importance of the learning patterns section tried to indicate whether they were able to link their prior experience of competition gained skills into their current work practice. By adding factual information as a background, this encourages the participant to read the text before answering the questions, so when faced with problem solving questions and how they learn in a problem solving situation they can relate back to a real life example from their past, and way of thinking is already focused on learning so should trigger them to be honest and as thorough as they can be within the survey. The final segment is employability and this is the most interesting data that will be collected as this is the vital part of the thesis that will indicate whether or not learning through a competition would give a student employability prospects. The design of the questions is aimed to discover if students find employability skills and business acumen a valuable thing to acquire.

IV. PRELIMINARY RESULTS

The total number of participants for the student survey conducted was 137; however within the survey there was a selected few questions that were only designed for students that had participated in competition based projects. One of the key questions aims to identify what students gain from being involved within a competition. The question was derived to find out what incentives were being taken part, and learning behind being involved in competition based activities. The major response from the survey as seen in graph 1 was towards new learning styles at 19% (which equated to 71 persons), being recognised for what you do 18% (68 persons) and 18% also said meeting new people (67). The other end of the spectrum indicated that working in a diverse group and winning something was not an important aspect. Ultimately, the general consensus was that students gain one core-learning objective through a competition: gaining a new learning style. Authors agree that competitions not only enhance an active learning but they pose as an enabler for learning new things [19].

With regards to the data collected based upon the incentives behind being involved with in competition based activities, the two major responses from the survey was towards strongly agreeing (43%) and agreeing (45%). This is indicating that PBL and problem solving was a crucial part of the learning within a competition. Figure 4 indicated actual numbers of where the participant fell into the categories. It is evident that there were a lesser amount of students unsure of either the question, how relevant it is to them or where problem solving fits into their curriculum if they do not take part in competitions. The key thing to remember about PBL is that the student learns through a problem and/or experience that make the challenge more motivating. Literature also identifies this by stating motivation is the underlining reason for such activities to be set by lecturers, teachers within academia [7].

![Figure IV: The Benefits of Problem Based Learning in HE](image)

Having analysed the data, the research has shown how competitions impact a students learning, thus making them have better employability prospects. By looking at competition based activities (internally or externally) they enable great engagement and interaction between students. It increases many things from motivation, confidence and most importantly skills. The most imperative attributes that students gained whilst being involved within a competition was:

- Learning through new styles
- Being recognised for what the individual does
- Meeting new people
- Motivation to go above and beyond to achieve better grades
- Problem solving skills

This has been the same positive result through primary and secondary recourses. The data does strongly back up the quantitative studies within the literature review. The analysis collected indicates that competitions are seen as a positive outcome by the student audience group. The surveys target three core attributes that are the underlying basis of this paper; ‘competitions, learning patterns and employability’.

V. CONCLUSIONS

The existing research outlined in this paper has laid a solid foundation and basis for the research. The introduction presents how competitions develop a students learning and increase motivation and skill set that ultimately makes the student employable. Based on the obtained knowledge and research carried out, the overall aim of the research is to identify the importance of business competitions in HE and
their learning outcomes. The research covered both primary and secondary data; this was used to discover findings and analysis. Throughout this paper there were two types methodical tools used to collect data both Qualitative and Quantitative research methods were implied within the research.

These methods are used to gather information and increase knowledge on the chosen subject. A literature review and in-depth survey methods were applied within the research. The literature review explored theorist’s views on how competitions impacted academia and a student’s skills set. The survey accumulates data and analysis to develop further findings. From the start of the research it was evident that there was controversy as to whether competitions in HE are a positive or negative. A key aspect of the research was to identify the importance of students gaining employability skills, thus making the individual more employable and gaining business acumen. By starting with a brief history of the British economy and the aftermath of the recession in 2008, this really illustrated just how important the next generation of students and employees will have on the industry. With years passing by, there are new ways of doing things and markets are constantly innovating to be the best in the current climate and market. By educating HE students with this knowledge and offering a toolbox of skills they are ready and prepared for the workplace of their generation. By implementing competition based activities to the curriculum, it is important to acknowledge that it doesn’t have to only be for business students. Future work is currently been carried out through the use of case studies which aims to exemplified how existing business competitions are backed by employers and to identify how the skills gained benefited a student and made them more employable.

There will always be pros and cons to any given scenario so this area could still be further researched and developed. Research studies agreed with this theory and state that a competition is not harmful for student and only increase their learning and skill set [6]. The literature studies and analysis from the three surveys conveyed a high level of correlation in many ways. In literature, the skills that are found through business competitions are the same as those from the existing/alumni students taking part in business competitions. Business competitions should be introduced to more degree programs as students really benefit from such activity. Employers want to employ more students with business acumen skills. The role of competitions improves a students learning, motivation and skill set. Competition based skills are invaluable and give students ‘the edge’

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