INNOVATION WITH INTEGRITY: EXPLORING ACADEMIC HONESTY AND INTELLECTUAL PROPERTY IN THE MIDDLE EAST

Azizah Alogali

University Affiliation: University of Rochester - Rochester NY, USA

Abstract

In Saudi Arabia and other Arab nations, the education system has gone through major reconstructions in the last decade. Major investments have been made of time, funding, and human capital to ensure that Saudi education is on par with the academic institutions of other major countries. However, academic dishonesty and intellectual property theft among scholars in Saudi Arabia and neighboring countries has become a major problem. The prevalence of these unethical practices is harming the countries' development and their ability to compete academically with the rest of the world.

I will begin my paper with a discussion of Saudi Arabian and regional Arab culture as it relates to intellectual property and academic honesty. I will explain how culture has evolved during the recent educational expansion and restructuring. I will outline some of the successes and challenges of building up an educational system so rapidly, and I will discuss some of the ways in which scholarly culture has failed to keep up with the pace of construction and educational innovation.

I will then focus on outlining the ways in which academic intellectual property rights are protected in practice in Saudi Arabia. My explanation will concentrate on institutions of higher education. First, I will outline the past and current laws of Saudi Arabia regarding the intellectual property of scholars. I will also compare Saudi treatment of academic intellectual property with that of other countries which Saudi views as contemporaries. Next, I will direct my research focus on Saudi colleges and universities, specifically the practices they use to report, address, and protect academic dishonesty and intellectual property theft among scholars. I will compare the intent and character of the laws to the ways in which they are put into practice in the scholarly community.

I will also investigate recent breakthroughs in protecting academic intellectual property in the Arab region. My overall goal is to illuminate the most successful practices in protecting the work of scholars, outline some current problems in the field, and identify areas that can be improved upon.

Keywords: intellectual property, academic honesty, research, Saudi Arabia, plagiarism, accountability, social media

Introduction

An Education System Undermined by Dishonesty

Intellectual property has been transformed from a "sleepy" area of business law to a vibrant and contentious area of academics, especially in the Middle East (Ogada, 1999). Recent educational reforms in many Arab countries have created an immense pressure for scholarly publication, a pressure which is often beyond human limitations. Professors, faculty, and even other students are often tempted to receive scholarly recognition and compensation through less-than-ethical means. The result has been a wave of cases of theft of scholarly works in Arab higher education. Although there are many national laws to protect scholarly works, enforcement is weak and inconsistent, and scholars' morale is dropping rapidly as a result. There is a desperate need for increased accountability, enforcement, and collaboration to protect intellectual property and promote research and innovation.

This paper will examine the ways in which intellectual property law is enforced in the Middle East, as well as the ways in which enforcement is thwarted. Using examples from Saudi Arabia and Jordan, I will examine the intellectual property laws and policies in place, as well as the ways in which these laws are carried out in universities and research organizations. I will also compare the policies in Jordan and Saudi Arabia with international recommendations and standards from the World Intellectual Property Organization, a branch of the United Nations. I will outline gaps and challenges in the enforcement of these policies, and make recommendations for improving the protection of intellectual property rights in the future.

Education in the Middle East is undergoing rapid change. Under the government of King Abdullah in Saudi Arabia, a huge push for educational restructuring and professional development has led to massive spending and employment. New programs and initiatives have focused their energy and their funding on improving the development of strong research facilities and personnel (Ministry of Culture and Information, 2005). Saudi Arabia's main goals in developing education are to reduce its dependence on the oil economy, to improve human capital and to raise the standard of living for its people (Ministry of Higher Education, 1999). In Jordan, whose knowledge economy has experienced rapid growth, the motivations for improving education are similar. Jordan struggles with scarce natural resources, both in water and in arable land, and must import all of its oil from other countries (Simoes, n.d.). Jordan's King Abdullah and Queen Rania also share a humanitarian interest in improving the standard of living and the human capital of their citizens, which is the non-economic basis for developing education (Alkhudairi, 2003). Jordan's exports mainly consist of agricultural fertilizers, medicines, and other chemicals, but the country is highly interested in improving its research and development capabilities as well as growing a more powerful educational system (Simoes, n.d.). The extravagant spending on educational infrastructure carried out by both countries has created a new market where ideas are just as valuable, if not more, as physical resources. The appeal of the financial and prestige benefits available for scholars is so strong that it has tempted many into obtaining their educational credentials, dissertations, and other works by unlawful means. This controversy only makes intellectual property protection an even more urgent issue.

Background:

Educational Growth Beyond Administrative Capabilities

Current international policy recommendations suggest that "technology transfer offices" or research centers be held responsible for carrying out intellectual property law within a university (Ogada, 1999). The United Nations' World Intellectual Property Organization stated that the people or departments responsible for intellectual property should tackle a host of duties. These include but are not limited to: processing paperwork, calculating revenue percentages for stakeholders, resolving disputes, maintaining records, acting as a liaison with law enforcement, and auditing research for potential IP issues (Model Intellectual Property Policy, n.d.). In Saudi Arabia, research centers are located on the campuses of all the major universities. In addition to providing scholars and researchers with guidance on their projects, they are also tasked with identifying and addressing cases of intellectual property theft (Ministry of Higher Education, 1999). The main tools of the research center are the plagiarism detection software used to screen papers and the relationships that research center staff build with researchers — if theft or corruption is discovered, the center then reports the incident to university staff (Ministry of Higher Education, 1999). However, plagiarism detection software is not as advanced in Arabic as it is in English, and many Arabic scholars do not share their work electronically, making it very difficult to screen for plagiarism ("Collapse in Academics", 2015). Further, research centers themselves have been discovered to be susceptible to corruption themselves, or at least suffering from a lack of professionalism and efficiency (Al Askar, 2013). There are also many logistical and material obstacles that prevent research centers from doing their jobs.

Many smaller universities lack a research center entirely (Ministry of Higher Education, 1999). Those research centers which do exist are frequently severely understaffed and underfunded, often with less than twenty workers (Rbeihat & Bakeer, 2012). Many research centers have existed for less than 10 years, not long enough to have the expertise and experience needed to fulfill their duties (Cervantes, 1999, pg. 2). These research centers are the main reason why intellectual property theft is even an acknowledged problem in Saudi Arabia and Jordan - without them scholars would be left to fend for themselves in disputes over academic work. Yet the research centers are not given sufficient resources or authority to tackle the problems of intellectual property theft and plagiarism.

Research centers and unhappy scholars have turned to the Ministry of Higher Education, a branch of the Saudi national government, for solutions and protection.

The Ministry of Higher Education in Saudi Arabia has administrative control over the entire system of education after 12th grade, including universities, colleges, and research centers. The MoHE not only governs these organizations, but creates and approves curricula, distributes scholarships, and approves hiring decisions for university faculty (Ministry of Higher Education, 1999). With regard to academic honesty, plagiarism, and academic fraud, the MoHE is responsible for making policies regarding intellectual property, and also holds at least a partial responsibility for enforcing them. According to the Ministry's policy, the current penalties for intellectual property theft and plagiarism are steep. For individuals who steal others' academic work and claim it as their own, fines can be up to 250,000 Saudi Rival (about \$67,000 USD), or up to 6 months in prison ("Collapse in Academics", 2015). For companies who collectively engage in the theft of ideas or research, the fines are less steep — 100,000 SAR or \$27,000 USD — but the penalty includes shutting down the business completely ("Collapse in Academics"). These consequences are compounded by other penalties that occur at the level of an individual school. For university faculty, consequences are said to include garnishing wages, forced unpaid leave, or even termination ("Collapse in Academics"). Students face similarly harsh penalties, such as failure of their course, loss of scholarship, or expulsion ("Collapse in Academics"). These punishments are backed by another government organization known as "Nazaha", or the National Anti-Corruption Commission, which is intended to act as the Ministry's hands and feet in enforcing intellectual property and academic integrity law.

Nazaha was born in an attempt to fight against corruption in all its forms, including academic dishonesty and intellectual property theft. It was established by King Abdullah bin Abdulaziz in 2011 as a tributary of the larger King Abdullah Project, the massive educational initiative meant to boost the country's prestige and economic sustainability (National Anti-Corruption Commission, n.d.). Nazaha's goals, according to its mission statement, include supporting the academic integrity of researchers, raising awareness about the issue of academic dishonesty, and "urging the authorities" to act when cases of IP theft or plagiarism are discovered (National Anti-Corruption Commission, n.d.). However, Nazaha does not have the power to enforce the laws itself; it merely acts as a conduit for the reporting and auditing of activity for possible cases of fraud. While Nazaha's intentions seem noble, its methods are problematic; a recent study of 1,000 Saudi university students found that 84% of students did not know to actually go about reporting suspicious activity, and many did not even know what the role of Nazaha was ("Role of Student Organizations", n.d.). The organization is only four years old, so its age may be to blame for the lack of widespread awareness of its function, yet in a country with such a centralized and government-controlled education system, it seems odd. Sharifa Ali Al Hoshani (2013), a scholar and researcher from Princess Nora University, recommends that Nazaha establish satellite offices at each Saudi university for improved visibility and efficiency in rooting out corruption. However efficient this idea may seem, it conflicts with the Saudi tendency to centralize and concentrate administrative power, and therefore has not been heeded.

This overview of the major establishments involved in the protection of intellectual property shows the dynamic of avoiding responsibility that has become commonplace. University research centers, the Ministry, and Nazaha have all spoken out emphatically about the urgent need to fight corruption, yet when it comes to enforcing the policies, their language becomes unclear and the evidence of work being done becomes harder to find. Each branch of the system points to a different culprit when asked who is ultimately responsible for protecting intellectual property. Al Askar (2013) describes the policies of his employer, Imam Muhammad bin Saud Islamic University, in fighting corruption as a three-pronged approach involving training, staff audits, and a statute of limitations on old charges. Yet Saudi universities are notoriously hesitant to actually enforce their policies by firing faculty members (Al Brede, 2012). Some university faculty point to society and popular culture as the force that is holding IP protection back. Al Dweik (2013) of Naif Arab University blames the lack of enforcement on the media and NGO's, whom he claims were major contributing factors in the success of Morocco's intellectual property protections. Representatives of King Saud University, the most prestigious school in Saudi Arabia, looked to Nazaha for the enforcement of laws regarding intellectual property, but received only workshops and guest speakers, mere "window-dressing" that was not sufficient to tackle the problem ("Role of Student Organizations", n.d.).

Another famous Saudi defender of intellectual property, Al Hoshani (2013), suggested that Nazaha establish offices at each Saudi university in order to carry out the enforcement of the law, but Nazaha denies that it is capable of doing so without the authority of the Ministry (National Anti-Corruption Commission, n.d.). When the Ministry refuses to enforce the law and pursue perpetrators of IP theft, as it failed to do for Al Khashrami (2014) when her seminal work was stolen, individual universities are the only remaining option to seek protection. And since universities frequently fail to go after cases of corruption, there is ultimately no one body who will take responsibility and actually enforce the laws. Saudi people are becoming increasingly frustrated with this cyclical, unproductive loop: as Al Ghaithi (2014) summarizes, "we all as a society are waiting to see punishments for these crimes in real life" (Al Ghaithi, 2014).

Roots of the Problem: Culture, Competition, and the Profit Motive

Saudi Arabia and Jordan both wish to coexist among the most highly-educated (and therefore powerful) countries in the world by focusing on education. Besides its national interest in competing intellectually with other nations, there are financial and economic motivations at stake as well in the development of business-university partnerships. The intellectual property produced by corporate-sponsored academics can be a massive source of revenue for both countries (Ogada, 1999). However, the fast pace of growth in the education sector has led to some unintended and unethical consequences. In Saudi Arabia, the emphasis on research inevitably has led to pressure on Saudi academics to publish their work, and to be as prolific as possible, publishing multiple works a year in both domestic and international journals. In 2003 alone the Arab world spent over 1.1 billion USD on scholarly publications (Alkhudairi, 2003). In Jordan, there is a different sort of pressure placed on academics and researchers. High unemployment rates among Jordanians have contributed to frustration and aggressive competition for jobs (Rbeihat & Bakeer, 2012, pg. 17). Further, many of the unemployed are recent college graduates, who understand the value of intellectual property as a tool for professional advancement but may be tempted to steal out of fear of joblessness (Rbeihat & Bakeer, 2012, pg. 46). In both countries, economic and cultural/political conditions conspire to create an environment where intellectual property theft is highly likely.

As teachers and graduate students struggle to keep up with the breakneck pace of the educational restructuring, cheating often becomes an attractive option. According to a study by Hosmy and Fatima (2014) among university students in Saudi Arabia, about 30% of students admit to using some form of cheating during the course of their work. A staggering 12% of students reported that they believed cheating was acceptable, saying, "I need it to succeed" (Hosmy & Fatima, 2014). Taking into account the situation as described earlier, this is essentially true. This not only affects students, but professors as well, who turn to the theft of intellectual property in their desperation to meet the unrealistic standards required of them (Alkhudairi, 2003). Students who graduate and later become professors themselves can only be expected to follow in the footsteps of their instructors.

While this may seem horrifying, it is important to consider the international context of Saudi Arabia's development and its long history of being undermined by the West (Carroll, 2013). Middle Eastern countries like Saudi Arabia want to collaborate and interact intellectually with the West, but on equal footing - hence the scramble to make up for decades of limited publication (Carroll, 2013). In Jordan, the greatest pressure is not to compete with Western countries, but with Saudi Arabia, the regional giant in economics, education, and prestige. Saudi and Jordan have a friendly relationship, but it is very important to Jordan that the caliber of their educational programs matches Saudi Arabia's. However, when it comes to enforcing intellectual property law, Jordan outshines Saudi Arabia in its effectiveness. There are a number of explanations for this discrepancy, which include cultural, political, and structural differences between the two nations.

Although discontent among the general public is growing around the issue of intellectual property theft, there are serious cultural obstacles to enforcement that bear consideration. The Arab concept of "wasta", or the social webs and networks that connect people and privilege, is a serious contributor to the failure of enforcement (Al San, n.d.). The "wasta" of a given individual in Arab society controls his or her job assignments and promotions, salary increases, conference participation, and, most importantly, how he or she is punished for breaking the law (Al Shamsi, 2014). One example of the enduring power of "wasta" is revealed in the Saudi "fake doctorate" scandal, which continues to play a role in education and politics.

During the beginning stages of the Saudi educational revival, a number of online programs became available for Saudi scholars that offered a complete doctoral degree in as little as three months (Al Ghaithi, 2014). As reported by Al Ghaithi (2014), so many high-ranking officials, professors, and even medical doctors, used these programs that to persecute them all now for their fraudulent credentials would result in a collapse of the whole system. Because of these individuals' "wasta", they can essentially continue with impunity, despite the fact that such a revelation in the United States would probably cause immediate discharge (Al Shamsi, 2014). Al Shamsi (2014) reports that many such instances are what lead to the indefinite delay and even "disappearance" of complaints and case files on intellectual property theft, corruption and fraud.

Another contributing factor to the continued presence of IP theft is the strong distaste for public humiliation in Arab culture. In Arab society, an individual's success is largely dependent on reputation and public opinion. To destroy another's reputation, especially without hard evidence, would be unthinkable; even with evidence it is largely frowned upon to "name-drop" when reporting on or sharing news of a crime (Al Dweik, 2013). This is precisely why it is so difficult to determine the size and scope of the IP problems in Saudi Arabia — even when cases are reported, the perpetrators are almost never directly named (Al Dweik, 2013). This also makes it difficult to draw the connections between reported cases and complaints and the resulting pursuit or punishment (Al Hoshani, 2015). In order to better mesh with international standards on IP protection, some compromises must be made between traditional Arab values and the Saudi Arabian education system's desire to compete and flourish on a global level. As Al Askar (2013) recommends, "a culture of professionalism needs to evolve" that fuses directives from bodies such as WIPO with the Saudi law and culture (n.pag.). One way to begin this transformation, as suggested by Al Hoshani (2015), is to enact "whistleblower laws" that protect those individuals brave enough to break the cultural taboo and name their aggressors (p. 10). Currently, there is no legal support for whistleblowers, but there are a few high-profile Saudi scholars who have begun to promote the idea of IP equity and academic integrity solely on the stakes of their own reputations.

It is important to bear in mind the relative youth of the educational reforms in Saudi Arabia when considering the state of IP protection — the reactions of Saudi people to instances of IP theft may be "baby steps", but they are not insignificant ("Role of Student Organizations", n.d.). One of the first press outlets to ever broach the topic of academic integrity, an electronic newspaper called SABQ, began in 2007 and is still subject to the cultural taboo against naming perpetrators of IP ctime (Al Brede, 2012). Since 2007, only a select few scholars and journalists in Saudi Arabia have been brave enough to speak out against academic corruption; two of the foremost voices in the debate are Shura Council representative Dr. Muwafig Al Ruwaili and King Saud University professor Sahar Al Khashrami.

Al Ruwaili began his work as a spokesperson for anti-corruption by using the hashtag "#halkony" on his social media platforms, particularly on Twitter (Al Ghaithi, 2014). The phrase "halkony" is an Arabic phrase expressing frustration and outrage, and Al Ruwaili invokes this emotion on his social media pages, pointing out instances of corruption, fraud, and IP theft with - against cultural taboos - the perpetrators' names attached (Al Ghaithi, 2014). Remarkably, people in Saudi have responded to the breaking of this taboo not by attacking Al Ruwaili, but by commending him for his altruism, some even suggesting he be given a government award for pioneering this new initiative (Al Ghaithi, 2014). Following in his footsteps is Sahar Al Khashrami, a professor at King Saud University who became an anti-corruption vigilante for very personal reasons (Al Shamsi, 2014). Al Khashrami had just completed a dissertation on alternatives for special needs students when her entire work was plagiarized by a highranking colleague with a position in the Ministry of Higher Education. Her attempts to seek justice were met with disdain from law enforcement authorities and she was vilified for "slandering" her colleague (Al Shamsi, 2014). Al Khashrami took matters into her own hands, creating the hashtag "#sarkony" - roughly "Stop, thief!" in Arabic as a companion to Al Ruwaili's "#halkony" (Al Shamsi, 2014). Since her own failed campaign to protect her work, Al Khashrami has exposed dozens of instances of plagiarism at major Saudi universities, including Al Jouf University, where one infamous scholar published a whopping 6 stolen papers in a row (Al Shamsi, 2014). Al Khashrami was contacted by the MoHE to pass on her information about the suspects, but not once has she had her complaints lead to concrete arrests, terminations, or pursuit by the law (Al Shamsi, 2014). It is safe to say that an ordinary person in Saudi could not get away with this kind of bold statement; Al Ruwaili and Al Khashrami are bolstered by their professional status and the popularity that allows them a wide audience.

As members of the United Nations, and signatories to the UN's intellectual property agreements, Saudi Arabia and Jordan are technically answerable under international law to the standards of the World Intellectual Property Organization, WIPO. WIPO (2014) defines intellectual property as "creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce" (n.pag.). Besides their accountability to international laws, Saudi Arabia and Jordan have drafted many laws of their own governing intellectual property and the consequences for those who steal it (Ministry of Culture and Information, 2005). The Ministry of Higher Education in Saudi Arabia's laws appear impressive (albeit vague) on paper, but enforcement is inconsistent and unreliable (Mahmoud, 2012). Further, in practice, the Ministry of Higher Education seems to push the responsibility for identifying and prosecuting intellectual property thieves away from itself and onto individual universities, who have nowhere near the Ministry's power to punish and enforce (Ministry of Higher Education, 1999). In Jordan, laws are enforced much more consistently, and public perceptions of intellectual property are much more in line with international standards, but limited resources, staff, and funding still make it difficult to master the issue (Rbeihat & Bakeer, 2012, pg. 14).

There are also cultural and spiritual reasons why intellectual property theft is antithetical to educational reforms in Arab countries. Those students who refused to cheat in Hosmy and Fatima's (2014) study cited the Hadith (the words of the Prophet Mohammed *[pbuh]*), which speaks out against taking the work of another as one's own, as a reason not to cheat. In Jordan, intellectual property officials cited the historical precedent of Islam and the meticulous crediting of writers of the Hadith in scripture (Rbeihat & Bakeer, 2012, pg. 13). The teachings of Islam are the foundation on which many Arab governments are built, so the governing authorities have a religious duty to honor their meaning in their practices and policies. Most schools in Saudi Arabia also have a "mission statement" of some kind explaining their moral commitment to the development of education for its own sake and the improvement of the human condition in the country. However, there are many practical and financially beneficial reasons to protect the intellectual property of scholars as well.

Saudi Arabia and Jordan have both faced serious difficulties with unemployment in recent years. Both nations have seen a significant rise in the number of college graduates, but neither country's job market has been able to grow sufficiently to accommodate the glut of new graduates (Rbeihat & Bakeer, 2012). The results of this disparity have been growing increasingly dangerous; in Jordan, "frustration among youth" has led to violent demonstrations, and in Saudi, though public protesting is discouraged, social media have been aflame with dissent (Rbeihat & Bakeer, 2012, pg. 17). It is in the best interests of both countries to contribute to the generation of new job opportunities for their citizens in any way possible. One of the ways they can do this is to invest in the copyright and intellectual property industry.

Benefits of Academic Integrity: Prestige, Profit, and Preservation of Human Assets

According to Rbeihat and Bakeer (2012), copyright enforcement has a "significant impact" on job creation and income generation (pg. 9). In 2006 alone, the Jordanian copyright industry brought in 258.4 million JD (Jordanian Dinar) or US \$3.6 million in income to the country (Rbeihat & Bakeer, 2012, pg. 9). That number has only continued to grow in recent years. Constructing and fortifying "technology transfer offices" or research centers as directed by WIPO would result in the creation of thousands of jobs for both Jordanian and Saudi citizens, jobs which would be at an appropriate level of skill and income for college graduates who are in need of work. With a moderate amount of additional training, recent graduates could become equipped for a new career instead of turning to protests and remaining unemployed. Between income from patent sales, legal fees for disputes regarding intellectual property, and the increase in research and investment that would result from a more secure intellectual property industry, the potential income generated for each country is significant.

Another potential benefit to these two countries in protecting intellectual property is the possibility of stopping the destructive and frustrating process known to developing nations as "brain drain". According to Ogada (1999), "brain drain" is what occurs when scholars from developing countries leave their homes, either to study abroad or after their course of study is complete, and refuse to return home because of low pay, poor job opportunities, or lack of infrastructure (pg. 6). One of the reasons many scholars do not wish to go home (aside from the unemployment issue previously discussed) is that many feel their intellectual property is not safe in their home country (Ogada, 1999).

The problem of "brain drain" is highly damaging to countries developing their education sector, because it prevents them from keeping their most skilled and experienced members of the community in order to continue improving the country's infrastructure. If the best and brightest members of the intellectual community in a country simply leave and cease to contribute to that country's development, the investment in education has little to no return. Protecting intellectual property in a more consistent way will make possible "brain drain" defectors more compelled to stay, as the intellectual climate at home will be more appealing if it is safer and better-regulated. It will also be more attractive for investors and other scholars to perform their research in the country if they feel secure in knowing their intellectual property is protected.

Concluding Thoughts

There are two main problems at the heart of the intellectual property debate: the corruption of administrators, faculty members, and those with corporate interests, and the ignorance or lack of understanding of inventors, students, and researchers. There is an interesting system of trade-offs and compromises that occur when a graduate student performs research at an educational institution — one that offers numerous opportunities to be abused. According to Ogada (1999), "A university would normally own any IP that is made, designed, discovered, or created by a member of staff in the course of activities that make significant use of the institution's resources" (pg. 15). In this case, the intellectual property is given to the institution as a reward or compensation for using the university's resources, which makes sense in a business context. However, this situation puts an unequal amount of power in the hands of the institution, especially for students who are encouraged to work closely with their advisors, who may then take the students' work (as their own) to conferences and publishers with a degree of impunity. Many graduate students in Saudi Arabia and Jordan do not understand that they still have rights and privileges regarding their work, even within the framework of institution-owned IP from their research. It is extremely important to educate students and researchers about their rights and their options for self-advocacy if a dispute over IP should arise.

Author biography:

Azizah Alogali is currently working on her second Doctoral degree in Teaching, Curriculum, and Change at the University of Rochester, NY. She holds a Bachelor's degree in English Language from the College of Education in Saudi Arabia, a Master's degree in Higher Education Administration from the University of Akron, and a Ph.D. in Educational Leadership from the University of North Dakota. Her current research interests include educational administration, educational leadership, and teaching English to speakers of other languages.

References

Al Askar, F. A. (2013). *Mhadr bmnasb l mkafh alfsad alywm al 'almy* [Lecture on the occasion of World Anti-Corruption Day]. Retrieved from http://www.nazaha.gov.sa/

Al Brede, A. (2012, August 5). *Wzara altrbya walt lym al aly ayn anta srqat khwfa 'la mşalhhm alkhaşa a wmkafha alfsad* [Ministry of Higher Education, Where are You?]. *Al Jazirah News*. Retrieved from http://www.al-jazirah.com.sa/

Al Brede, A. (2013, May 7). *Imadha fshl al 'rb ltasys hmjtm' alm 'rfa a srqat khwfa 'la mşalhhm alkhaşa a wmkafha alfsad* [Why Have Arabs Failed to Establish a "Knowledge Society"?]. *Al Jazeera*. Retrieved from http://www.aljazeera.net/

Al Dweik, A. G. (2013). Alasalyb alhdytha almstkhdma fy almssat alt'lymya lhmaya almlkya alfkrya wmkafha alfsad

[Modern methods used in educational institutions for protecting intellectual property]. Retrieved from http://www.nazaha.gov.sa/

Al Ghaithi, S. (2014, May 8). Tkrym hlkwnya mhakma wal 'qwba ayn anta srqat khwfa 'la msalhhm alkhasa a wmkafha alfsad [Honoring Halkony: Trial and Punishment]. OKAZ News. Retrieved from http://www.okaz.com.sa/ Al Hoshani, S. A. (2013). Dwr wrsh al 'ml walbramj alt 'lymya fy mkafha alfsad aha alakadymya lfkrya wmkafha alfsad

[The role of workshops and educational programs in fighting corruption]. Retrieved from http://www.nazaha.gov.sa/ Alkhudairi, G. (2003). Research and Intellectual Property: Jordan Experiment. Riyadh: King Abdullah Design and Development Bureau. Al Shamsi, A. (2014, November 15). *Aljam 'at als 'wdya ttsamh albhth al 'lmy alsrqat khwfa 'la mşalhhm alkhaşa a wmkafha alfsad* [Saudi Universities Tolerate Scientific Research Thefts out of Fear for their Own Interests]. *Khaleej Times*. Retrieved from http://www.khaleejtimes.com/

Anhyar fy alakadymya fy aljam 'at als 'wdya bsbb alsrqat al 'lmya a lfkrya wmkafha alfsad [Collapse in Academics in Saudi Universities Linked to Scientific Thefts] (2015, May 6). *MBC News*. Retrieved from http://www.mbc.net/Carroll, J. (2013). Intellectual property rights in the middle east: A cultural perspective. Fordham Intellectual Property,

Media and Entertainment Law Journal, 11, 555-600. Retrieved from http://heinonline.org

Catching Intellectual Property Theft. (2012, February 28). Al-Arabiya. Retrieved from

http://www.alarabiya.net/articles/2012/02/28/197553.html

Cervantes, M. (1999). Academic Patenting: How universities and public research organizations are using their intellectual property to boost research and spur innovative start-ups. *World Intellectual Property Organization*. Domenech Rodriguez, M., Baumann, A., & Schwartz, A. (2010). Cultural Adaptation of an Evidence Based Implementation: From Theory to Practice in a Latino/a Community Context.American Journal of Community Psychology, 47, 170-186.

Hosmy, M., & Fatima, S. (2014). Attitude of students toward cheating and plagiarism: University case study. Journal

of Applied Sciences, 14(8), 747-757. Retrieved from http://www.academia.edu

Ismail, M., & Shalebi, E. (2010). Intellectual Property Rights Guide: Standards of Credibility and Ethics. Banha: Continuous Improvement and Qualifying for Accreditation Project.

King Saud University. (n.d.). Dwr almnzmat altlabya fy mkafha alfsad wt zyz alnzaha alakadymya lfkrya wmkafha alfsad [The role of student organizations in fighting corruption and promoting academic integrity]. Riyadh. Retrieved from http://ksu.edu.sa/en/

League of Arab States. (n.d.). Dwr althqafa wal 'dala alajtma 'ya fy mkafha alfsad aha alakadymya lfkrya wmkafha alfsad [The role of culture and social justice in fighting corruption]. Cairo: Al San, A. A.

Mahmoud, Y. (2012). Guidelines for Intellectual Property in Egypt. Cairo: Aim Shams University Press. Ministry of Culture and Information. (2005). Implementing Regulations of Copyright Law. Retrieved November 4,

2014, from http://www.tatweer.sa

Ministry of Higher Education. (n.d.). Retrieved June 5, 2015, from http://he.moe.gov.sa/en/

Ministry of Higher Education. (1999) Guidelines for Academic Research in Saudi Arabian Universities. Retrieved November 4, 2014, from http://www.tatweer.sa

Model Intellectual Property Policy for Universities and Research Institutions. (n.d.). Geneva: World Intellectual Property Organization.

National Anti-Corruption Commission. (n.d.). *Missions and Goals*. Riyadh. Retrieved from http://www.nazaha.gov.sa/en/

Ogada, T. (1999). *Guidelines for Developing Intellectual Property Policy for Universities and R&D Organizations*. Geneva: World Intellectual Property Organization.

Organizational Structure. (2012, May 28). Retrieved November 3, 2014, from http://ipa.kau.edu.sa/Pages-1-1.aspx Rbeihat, S., & Bakeer, A. (2012). *The Economic Contribution of Copyright-Based Industries in the Hashemite Kingdom of Jordan*. Amman: The South-North Center for Dialogue and Development.

Simoes, A. (n.d.). Learn More About Trade in Jordan. Retrieved April 8, 2015, from

https://atlas.media.mit.edu/en/profile/country/jor/

Social Entrepreneurs. Building and sustaining effective collaborations: Research Brief. Alliance for Nevada Nonprofits. Retrieved from http://alliancefornevadanonprofits.com/wp-content/uploads/2011/08/ Research-Brief-Building-and-Sustaining-Collaborations.pdf

What is intellectual property? (2014, January 1). Retrieved November 8, 2014, from http://www.wipo.int/about-ip/en/