# ACADEMIC DISHONESTY IN DISTANCE HIGHER EDUCATION: Challenges and Models for Moral Education in the Digital Era

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## ABSTRACT

Today, in the era of open access to digital-based information and communication, one of the biggest challenges in higher education to realize moral education and to build academic culture and integrity is the emergence of academic dishonesty behaviors among academic members. The paper describes academic dishonesty behaviors in Distance Higher Education (DHE) institutions within the context of moral education in the digital era. The paper reviews the results of the research on academic dishonesty behaviors and practices in DHE institutions worldwide; factors which have a very significant role for the emergence of academic dishonesty behaviors and practices. It is also discusses an integrated model of moral education as interdisciplinary strategy in combating academic dishonesty and in promoting academic culture and integrity in DHE.

**Keywords:** Academic dishonesty, distance higher education, moral education model,

## INTRODUCTION

The academic culture of university is characterized by integrity and commitment of academic members to ethics code and morale values in producing scientific works and documents. The University of California (U.C.), Davis Office of Student Judicial Affairs (2008) asserts that academic integrity exists when every academic member "seek knowledge honestly, fairly, with mutual respect and trust, and accept responsibility for their actions and the consequences of those actions". It is a cornerstone for all academic members, and is one of the constellations of commitment for maintaining a scientific discipline in the university. Anything scholarship endeavors to synthesize and integrate, to challenge and develop the science are well-known ideas and thought, so far, it be properly sourced and identified by them and without ever losing sight of the inheritance with which they work. In connection to this, Shils (1981:15) states that validity of the scientific endeavors are not only concerns to "originality" viewed from its significance to the scientific tradition, but it is should also having "conformity" to the scientific ethic code and morale values which have built, maintained, and practiced by scientific community. When conformity is compromised, "there can be no trust or reliance on the effectiveness, accuracy, or value of a scientific validity teaching, learning, research, or public service activities".Within this context, understanding the potential causes and complexities of academic dishonesty, and find solutions is critical for building an effective academic culture and system to try to counter this phenomenon (Bailie & Jortberg, 2009).

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A review of previous studies (Stephens, Young & Calabrese, 2007) found a strong positive association between academic dishonesty practices and the tendency to justify or "neutralize" of its responsibility. These neutralization techniques or disengagement may, in part, explain why so many students who report that they believe academic dishonesty practices are wrong also report doing it anyway.

The *academic dishonesty is* indicator of "*undesirable character*", deliberate dishonesty*, and is* the treason of the truth. Therefore, the scientific community must face the issues and work actively to prevent and not brush it under the rug when it occurs. The most common forms of *academic dishonesty are classified into six categories*:

- ➢ plagiarism and piracy (using another's work without citation or due acknowledgment),
- ➢ fabrication and forgery (making up information),
- ➢ falsification, fraud, invent, massage, fudge (inaccurately portraying information),
- ➢ misrepresentation, honest errors, or deception (falsely representing oneself),
- ➢ misbehavior, cooking, or trimming (behaving in ways counter to expectations);
- ➢ cheating, bribery (give or obtain assistance in a formal academic exercise) (Lorenzetti, 2010; FIT, 2010; Bauer, 1995).

In the digital era, promoting and building academic culture and integrity are one of the biggest challenges for education, including moral education. The emergence of a new generations has known as Digital Natives, Millennials, Netgens, Gen Me, iGen and Look at Me Generation, Copy and Paste Generation, Generation Y, Generation NeXt, the Loop Hole Generation, the Tethered Generation, Generation M, the Share-It Culture, or Generation M2 (Dryer, 2010:171) has made moral education more vulnerable. This generation has prompted new forms of academic dishonesty behaviors and practices by using the new types of technology. This condition has emerges a socio-technological phenomenon popularly called as "the online disinhibition effect", a phenomenon may be responsible for other forms of unethical behavior that digital technologies seem to be facilitating (Suler, 2005). Recently, therefore, moral and ethical education is crucial and dilemma issues in DHE, and promoting and building academic culture and integrity, and combating academic dishonesty practices are a crucial effort in the context of moral and ethics education in the digital era nowadays (Anitha & Harsha, 2013; Brown, 2008; Brey, 2003; Gearhart, 2001).

Academic integrity is an integral part of quality education--not least in DHE--that is losing ground is an ever changing information-based society. Whether education is delivered in the classroom or online, educators must be vigilant and relentless in upholding academic honesty. Educators must take advantage of the benefits technological advancement offers and use it to enhance academic quality and integrity (Adkins, Kenkel & Lim, 2005). Brown (2008) asserts that the basic intent of eLearning is a *moral good*, attempting to provide "the greatest good to the greatest number of people" is inherently an ethical task. As with other moral goods, however, there are ethical risks and vulnerabilities that must be an acknowledged and addressed in the process. As eLearning becomes more widespread, so the investigation and discussion of its ethical implications must become more systematic and pervasive.

However, so far, the study on ethical and moral dimensions in DHE institutions has not received much attention, few and scattered, and it was just on of the sections of the study in the curriculum or syllabus.

While, DHE institutions are can also and should fulfill the same role in serving the public good, by fulfilling the wide variety of societal functions that conventional universities have (Brey, 2003).

In such a condition, the emergences of academic dishonesty practices are also a biggest problem, "an epidemic", "a plague" to maintaining academic integrity in education system. It has become more vulnerable along with the rapid development in integrating technology into learning and examining modes (Adkins et al., 2005).

While, the use of technology in DHE was axiomatic (McGee, 2013), and becomes a major culprit for the high incidence of academic dishonesty (Butakov, Dyagilev & Tskhay, 2012; Raines, et al., 2011). Development of the sixth generation of DHE by integrating mobile technology (M-Learning) into learning and examining modes (Keegan, 2002; Taylor, 2001) with fully supported by open access to digital-based open educational resources (OER) (UNESCO, 2006) has became the problem are even more crucial.

## ACADEMIC DISHONESTY IN THE DHE

Academic dishonesty is defines any type of cheating that occurs in relation to a formal academic exercise. First scholarly study on academic dishonesty for higher education has been conducted by *Bowers* in the 1960s in the U.S. He has found that is somewhere between 50%-70% of college students, and these rates remain stable today (Wikipedia, 2013).

Various studies were found some modes of *a*academic dishonesty operations in aspects of DHE, such as: in courses, research, and or exam. Form of academic dishonesty behaviors that occurs in DHE apart is old-fashion: cheating, plagiarism, and collusion; and the others are new-fashion such as deception, technology manipulation, misinterpretation, and paid impersonation.

Based on Carroll's Handbook, Johnston (2003) explores differences and intersects between cheating, plagiarism, and collusion. He made an exercise designed into three Venn diagram purporting to show these differences and/or interacts.
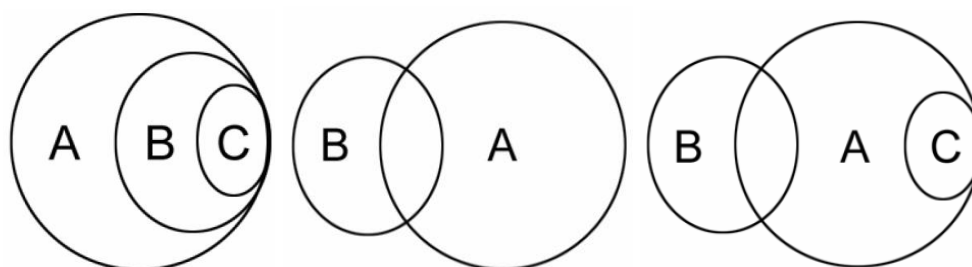


**Figure: 1**
**Three model to way of understanding cheating, plagiarism, and collusion**

**Figure 1 show three standard ways to understanding differences and/or interacts between cheating, plagiarism, and collusion.**

**The first model (*left*) show that all instances of collusion (C) are instances of plagiarism (B) and that all instances of plagiarism are instances of cheating (A). Second model (*centre*) show that some but not all instances of plagiarism (B), are instances of cheating (A); and third model (*right*) show that some but not all instances of plagiarism (B), are instances of cheating (A) and that all instances of collusion (C) are instances of cheating (A) but that no instances of plagiarism (B) are necessarily instances of collusion (C).**

## Cheating, e-Cheating or Digital Cheating

**Eventually, cheating in DHE is one of the biggest academic dishonesty practices and a "corrosive problem" that should be faced by DHE (Gallant & Drinan, 2006). A summary of the past 30 years of research on academic dishonesty was conducted by Maramark and Maline (Kelley & Bonner, 2005) have indicated that it is a "*chronic problem*" that affects all levels of education and involves significant numbers of students.**

**Today, cheating is even more endemic, extremely serious matters in all levels of education worldwide. In fact, cheating has become a culture in the campus life (McCabe & Trevino, 1993).**

**Generally, cheating in DHE is classified into "*planned cheating*" (the use of crib sheets for exams, copying homework, plagiarizing a paper, and "*panic cheating*" (looking at another student's test during an exam (Hurn, 2011; Bunn, Caudill & Gropper, 1992; Dietz-Uhler).**

**These practices are conducted using technology, such as Internet, smartphones, iPhones, iPods, iMacs. Braindumps, organized cheating, wireless earpieces and high tech radio transmitters, or HT cheats sites (Vilchez & Thirunarayanan, 2011; Dryer, 2010; Howell, Sorensen & Tippets, 2009; Becker, Connolly, Lentz & Morrison, 2006).**

## Plagiarism or Cyberplagiarism

**Academic Board Policy of the University of Sydney (2010) has been classified plagiarism into "*negligent or unintentional plagiarism*" and "*dishonest or intentional plagiarism*". Negligent plagiarism means innocently, recklessly or carelessly presenting another person's work as one's own work without acknowledgement of the source. Dishonest plagiarism means knowingly presenting another person's work as one's own work without acknowledgement of the source.**

**Besides cheating, plagiarism is also one of the biggest academic dishonesty in DHE. Moreover, both cheating and plagiarism are assumed a greater problem in online class, and are can be even more vulnerable because of its remote and asynchronous nature along with the increasing number of online programs development (Butakov et al., 2012; Marais, Minnaar & Argles, 2006; Heberling, 2002).**

**Plagiarism is now "a burning issue in the education, industry, and research community" (Spafford, 2011). It is generally conducted by taking information, adoption of ideas or statements of another person without due acknowledgement from the internet in a "cut and paste" fashion (Jumani, Rahman & Chishti, 2011; Dryer, 2010) or using digital devices as a paid ghostwriter (Appanna & Goundar, 2012).**

More over, plagiarism is also occurs in online or asynchronous discussion. In this case, student posting word discussion which had been plagiarized from different Internet Websites (as StudentofFortune.com) with a venue to purchase answers for specific courses, or they copied another student's DQ response word for word (Olt, 2009). Online 'paper mill' companies are businesses that make up arguably one of the most successful internet industries after pornography and gambling. It has delivered "the New Plagiarism" which requires little effort but geometrically more powerful.

"It has moved us from the horse and buggy days of plagiarism to the Space Age without stopping for the horseless carriage" (Williams, 2003).

## Collusion

The 5th International Plagiarism Conference (Plagiarism Today, 2012) has repeatedly called the "*Elephant in the Room*", is the unauthorized collaboration with another person or working together in using class notes, textbooks, Internet resources, and other useful course materials. In DHE, barriers of time and place that once created or faced on isolation, disconnection, distraction, and attrition has caused collaboration or working together is really keys to DHE students for their teaching and learning approach and success, and to foster their social sense or commitment (Dueber & Misanchuk, 2001; Rovai, 2002; Rovai & Lucking, 2005).

However, the collaboration which tends to unauthorized collusion like in preparing written work for fulfillment of course requirements, projects, or while taking online tests, quizzes or assignments, it is a form of unacceptable behavior or academic dishonesty (Vilchez & Thirunarayanan, 2011). At the recent, collusion practices in DHE are still possible occurs now, although it has also used proctors, the usual test security, or collusion detection tools on an ongoing basis (Rowe, 2004).

## Deception

The term is refers to as "*digital deception*" or technologically mediated message (such as the telephone, Email, Instant Messaging, chat-rooms, newsgroups, web-logs, list-servs, multiplayer online videogames etc.). It is one of the most significant and pervasive social phenomena in the context of information and communication technology of the age (Hall, 2008; Hancock, 2007).

Deception can be classified into two broad types, these are "*identity-based digital deception*" refers to deception that flows from the false manipulation or display of a person or organization's identity; and "*message-based digital deception*", refers to deception that takes place in the communication between two or more interlocutors or agents (Hancock, 2007: 4). Further, Hancock explains that both identity-based and message-based digital deceptions are result of the intersection of deception and technology and having complex and complicated answers.

Generally, in DHE the student deception to accommodate their late assignments, with providing false information to a tutor concerning assignment e.g. giving a false excuse for missing a deadline or falsely claiming to have submitted assignment(s) (Jumani et al., 2011).

## Technology Manipulation

Is using technology to manipulate opportunities or instructor oversight of student actions? It may be that course management systems and Internet connectivity failures are "the-dog-ate-my-homework" excuse for the 21st century.

Technology can facilitate dishonesty as well as record actions that can provide evidence of misdeeds. Students who have grown up problem solving with technology may find opportunities to bypass laborious course tasks and assignments (McGee, 2013). They quickly learn that technology interruptions can provide acceptable excuses for not turning an assignment in on time or getting permission to re-do an assignment or assessment. Students may intentionally break or crash an Internet connection in order to re-take an assessment. Depending on the system is being used there may exists other loopholes to retake an assessment without instructor permission or knowledge (Rowe, 2004).

Technically savvy students may be able to figure out how to access pre-set answers (such as those associated with automatically graded objective tests) or how to see what other students are doing in their own work, such as accessing files submitted into an assignment area (Howell, Sorenson & Tippets, 2009; Rowe, 2004). As systems developers make progress in providing secure systems such tactics may subside. However, it may be that student's motivation to be dishonest heightens efforts to beat a system.

### Misinterpretation
Is the temptation of falsifying identity when a student registers of open courses offered for non-credit and those taken for credit (McGee, 2013). Strategies for misrepresentation occur in two main forms. *First*, students purchase papers or projects written by an individual or a service (Sileo & Sileo, 2008) such as Wetakeyourclass™ (*http://www.wetakeyourclass.com*), Boostmygrades™ (*http://boostmygrades.com*), and Unemployed Professors™ (http://www.unemployed professors.com/index.php).

Given the expense of college tuition and the cost of paying for college assignments to be written, it does not seem feasible that students could afford such services, and yet they appear to flourish. *Second*, is facilitated by an online environment is work for hire: a student pays someone else to take a course for them or to participate in some capacity during the course (Smith & Noviello, 2012; Bailie & Jortberg, 2009; Schaefer, Barta & Pavone, 2009).

### Paid Impersonation
Is a fraudulent action with the aim of imitating a legitimate user and defrauding the security system (Apampa, Wills & Argles, 2010).

Furthermore, Apampa et al., have classified and explored paid impersonation forms into three types: type A is *a connived impersonation*, the ability of an invigilator/tutor to collude with fraudulent students to allow the fraudulent act. Type B is *a password impersonation,* the ability to login details one student who will be impersonated his/her when requested by the security system. Type C is *a fingerprint impersonation,* the ability to record biometric fingerprint and a template to store into system.In e-assessments, the issue of impersonation is considered as a major cause of concern and it is perceived as an even greater risk by the academic community (Kerka & Wonacott (2000). Students may hire or persuade another student to "impersonate" or do his/her work for him for a fee (Ravasco, 2012; Vilchez & Thirunarayanan, 2011; LMC, 2008; Shyles, 2002). According to Vilchez and Thirunarayanan (2011) this practice is one of unique or particular cases of academic dishonesty besides misinterpretation that occurred in distance education. It was also occurred in exams at Universitas Terbuka Indonesia. They are "*exam jockeys*", someone who paid to impersonate another student and look to replace their own entrance exams.

## ACADEMIC DISHONESTY: *A* COMPLEX AND MULTIFACETED FACTOR

Science is a human, social and cultural endeavor, therefore, academic dishonesty practices are "*a complex system*", which involve various factors are inter-related, overlapping, and influence each other (sometimes simultaneously) in complex and sometimes unpredictable ways, individual, social, cultural, and institutional.

### Individual Factors

These factors are well known as the "*Fraud Triangle*": opportunity, incentive or reward, rationalization (Bailie & Jortberg, 2009; Becker, et al., 2006). Opportunity is related to the weak of preventing and control systems and technology ineptitude to detect academic dishonesty practices. Incentive or reward is related to students' internal desire and motivation to get a high GPA (Grade Point Average) (Roberts, Eshet, Grinautski & Peled, 2012; Hai-Jew, 2009; Iyer & Eastman, 2006; Bunn et al., 1992); or to remain academically competitive, and reap the benefits of advancement (Vilchez & Thirunarayanan, 2011).

Rationalization is student's personal reasons, predispositions, or perceptions to justify the academic dishonesty practices. The number of researchers have been identified a variety of students' reasons engage in academic honesty: a way of achieving success or high grades, procrastination, too busy, not enough time to complete assignment or study for test, lack of organizational skills, fear of failing a course (loss of time and money), have a poor understanding of academy dishonesty, or it just for engaging in the practices (McGee, 2013; Eshet et al., 2012; Jone, 2011; Raines, et al., 2011; Dryer, 2010; Synder & Cannoy, 2010; Sheard, Carbone & Dick, 2002). Even, they do not consider that the practices a serious crime (Bunn et al., 1992).

### Social Factors

These factors are connecting to social learning theory emphasizes that much of human behavior is learned through the influence of example and observing other people's behavior and its consequences for them (Bandura, 1986). Numerous studies (Dietz-Uhler, Hurn, 2011; Vilchez & Thirunarayanan, 2011; Jumani et al., 2011; Whitler & Kost2006) founded that peer influence, peer's acceptability, perceived support from peers or pro-attitudes about dishonesty, and perceived social norms regarding academic dishonesty, or domestic/job circumstances compel students to make malpractice or dishonesty. These factors are considered as the most powerful influence to academic dishonesty (Carpenter, Harding, Finelli, Montgomery & Passow, 2006; McCabe, Trevino & Butterfield, 2001; McCabe & Trevino, 1993), and are the social instrumentals have been created an 'egocentric climate' in which an 'individual conscience takes precedence over the claims of the community' (Kaplan & Mable, 1998, p. 24). It can exacerbate and complicate the tasks of reinforcing academic integrity on campuses" (Gallant & Drinan, 2006, p. 847).

### Cultural Factors

These factors are most related to the "*competition culture*" to achieve good grades or succeed in school (Roberts, Hai-Jew, 2009), and "*a collaborative, sharing culture*" (Kulmala, 2010). In many studies on DHE, desire and motivation the students to achieve success, high grades, or procrastination (Eshet et al., 2012; Roberts, Hai-Jew, 2009; Iyer & Eastman, 2006; Bunn et al., 1992) with supported by rapidly development of social technology has made it easier and more pervasive for everyone to do academic dishonesty behaviors (Dryer, 2010).

Pervasiveness of faculty members or peers-students to this issue is also as a factor contributes those (Bedford, Gregg & Clinton, 2009, 2011; Bailie & Jortberg, 2009; McCabe, 1993). They are also the lack of uniformity in handling academic dishonesty, consider it is "not a serious problem that need to be addressed" (Coalter, Lim & Wanorie, 2007); and too lazy to stop it (Dryer, 2010). They were also tendency to handle academic dishonesty issues individually and rarely pursue formal sanctions. So, using formal sanctions as a deterrent has not been effective because it has not been adopted by the majority of faculty members. As a result, students consider dishonesty practices is a low-risk activity (Kelley & Bonner, 2005).

The other factors are a phenomenon commonly called "*psychological distance*" (Geerhart, 2001), a condition in which there are barriers of time and place for students to interacts, communicates or socializes with others. It have caused once excluded from the academic community, or anonymity, not much face-to-face interaction with instructor to build trust or a relationships (Grijalva, Kerkvliet & Nowell, 2013; Eshet et al., 2012; Coalter et al., 2011; Black, Greaser & Dawson, 2008).

## Institutional Factors

These factors are related to whether or not the institutional policy on honor code and integrity system (Roberts, Hai-Jew, 2009; Spaulding, 2009); and ineffective disciplinary actions taken by educational institutions (Vilchez & Thirunarayanan, 2011). The other factors are overloaded simultaneous study schedule and hard working students whose assignments are not properly evaluated (Jumani et al., 2011).

In the number of nations, it is may also caused by DHE reforms and liberalization programs. This affects to emerge "*a business model*" that allows the loss of institutional autonomy and the commercialization of education (Brey, 2006); and increase the number of new providers enter to operate in a "deregulated" environment. Over time, it would lead to an intensification of competition, which was supposed to deliver its regulatory expectations (Appanna & Goundar, 2012).

## INTEGRATED MORAL EDUCATION:
## A Model for Combating Academic Dishonesty

By the very nature of DHE, academic dishonesty practices in are more conducive to both detecting and combating than are in a traditional class (Heberling, 2002). But, the causes are complex and multifaceted and never completely eradicate all academic dishonesty behaviors, a changing and revisiting pedagogical approach of moral education is necessity. Moral education should become integrated efforts and strategies not only focused on a skill to be mastered, and a knowledge of the discipline, but it should also be build within the university culture which inspires every academic member to expect, think, behave, and act well (Niels, 1997). As Valentine (2006) has asserted that academic dishonesty practices are "part of a practice that involves participants' values, attitudes, and feelings as well as their social relationships to each other and to the institutions in which they work" (p. 89).

Academic dishonesty behaviors are "a complex system" which involve various factors are inter-related, overlapping, and influence each other (sometimes simultaneously) in complex and sometimes unpredictable ways, individual, social, cultural, and institutional. This is relates in a complex set of interactions that ultimately lead to a moral intention rather than in any sequential fashion.

Any attempt to understand moral reasoning's influence on moral obligation, intention, and behavior should ultimately include these other components (Harding et al., 2007). Therefore, moral education should a continuous self-formation and self-development activity, open to improvement at intellectual, moral, technological, esthetic and physical level (Schiller, 2002).Singular moral approaches to *academic dishonesty behaviors* are ultimately insufficient and can shed light on the problem. Moral solutions should be developed as an integrated model for pedagogy, policy, and technology (Maruca, 2003). In their research on plagiarism by adult learners online, Jocoy and DiBiase (2006) conclude that "*raising awareness and managing expectations about plagiarism may be worthwhile, but is no substitute for systematic detection and vigilant enforcement, even among adult learners*" (p.1). The moral education should be "a comprehensive values education" in methodology, takes place in all phases of the university life cycle, goes back to the future, and progressive (Kirschenbaum, 1992), include *policing, prevention,* and *ethics* efforts.

## Policing

Is moral efforts to identify academic dishonesty, and develop the honor codes, integrity system, and the sanction system. Policy is consists of a set of rules or ethical principles governing a community based on ideals that define what constitutes honorable behavior within that community. Those who are in violation of the honor code can be subject to various sanctions, including expulsion from the institution (Wikipedia, 2013).

According to "deterrence theory" (Gibbs, 1975) academic dishonesty may depend upon the sanction system, particularly how effectively academic integrity rules and guidelines are enforced. Deterrence theory suggests that for misconduct to be inhibited, wrongdoers must perceive, first, that they will be caught and, second, that severe penalties will be imposed for the misconduct. McCabe asserts that "*penalties should match the intent of the cheater but also acknowledges it is a difficult position [to evaluate] the individual motivation of each student*" (Howell et al., 2009:3).

At a number of universities in the world, the policy has been used, for example, by the University of Maryland (1990), Kansas State University and Penn State University (1999), Barton Community College in Kansas (Kansas, 2003); Wichita State University in Kansas (Wichita, 2005); Simon Fraser University in Canada (Weeks, 2009); South Dacota University (The USD, 2003).

They use assigns an "XF/F" (*cheating-failure*) for a student who "failed a class because they cheated" or "FD/H" for a student who "failure due to an academic dishonesty"; and "XW/WF/W" (*cheating-withdrawal*) for a student who "withdraws from a class before the end of the semester". The grades will appears and recorded on a student's transcript. Since 2009, Universitas Terbuka Indonesia has also been developed this strategy to identify academic dishonesty in exam and given sanction who those by given "E" and assigned a "*H=Hukuman*" (guilty) for a student who collusion or cheats in exam.

Of course, the system was may not fully enabled to eliminate the practice of academic dishonesty but it can reduce the occurrence of academic violations in exam. However, the number of studies (Roberts, Dane & Granzow, 2012; Hai-Jew, 2009; Engler, Landau & Epstein, 2008; Williams, 2003; McCabe et al., 1999; McCabe & Trevino, 1993) found that through the use of the honor codes and integrity system, students enable to clarifying their expectations regarding appropriate and inappropriate behavior; to shift their responsibility for control of academic dishonesty from faculty and administrators; and to give frequently privileges for them such as un-proctored exam.

**Preventing**

Is moral efforts should be prevented and secured the emergence of *academic dishonesty behaviors and practices using* automated detection tools or devices such as banning/controlling electronic devices, photo and/or government identification, fingerprinting and palm vein scanning, cheat-resistant laptops, computer-adaptive testing and randomized testing, statistical analysis, or commercial security systems (Howell et al., 2009).

These strategies are very important to Distance Higher Education Institutions which have faced with a formidable challenge to ensure the identity of test takers and integrity of exam results, especially since students are physically removed from the classroom and distributed across the globe.

Around the world, the *kinds of* detection devices which have been popularly used are the Digital Rights Management (DRM), Plagiarism Detection Services (PDS) to check submitted digital artifacts without any noticeable effort by either professor or student (Butakov et al., 2012); or the Electronic Assessment Management (EAM) in streamlining plagiarism detection and deterrence particularly used for distance and multiple-campus provision (Ellis, 2012). The text originality check systems (TOCS)—Turnitin, GenuineText, and Urkund-has also *examined by Heyman et al. (2012)* at Swedish Universities and Stockholm University *to* automated detection detect plagiarism. Test documents are submitted simultaneously to the TOCS at selected times with identical test documents, resulting in a systematic assessment and in accurate results.

*Another user security models used are* secure remote proctor software using biometric verification (uni-modal or bimodal biometric), visual identification (Webcam) as well as proctored test environments was also used to identify and authenticate learners identity (Coalter et al., 2009; 2011; Apampa et al.,, 2010; Bailie & Jortberg, 2009; Trenholm, 2007; *Adkins et al., 2005;* Curnow, Freeman, Wisher & Belanich, 2002). Frank (2010) has introduced a Dependable observable Distributed online Testing (DoDoT) reference model to enable full realization of the Dependable Distributed Testing (DDT) system in a distributed environment to increase the testing integrity of DE programs.

For those, he examines three DDT systems: the Pupilcity ProctorU, Kryterion Online Proctoring (Webassessor), and Securexam Remote Proctor as remote proctor software. According to him, however, DDT systems are not yet in use in most DE frameworks. These systems have been used to continued pursuit and adapt new, innovative technologies and methods to make dependable distributed testing increasingly more computerized, reliable, affordable and prevalent.

Besides, genealogist has also been used the originality content analysis, "*genealogical system*" for tracing family history links of a piece of plagiarized material and to identify the origins of content over a ten-year period. At the centre of this strategy is Turnitin, Altavista, and/or Google search engines can be used for the submission, originality checking, marking and return of student work (Baggaley, 2012).

Filtering or blocking the types of content Web, bulletin boards, or messages that does not support to moral and ethics education should also be done. In DHE, filtering or blocking actions are may be an efficiency reason, because it is found that certain sites generate a large amount of web traffic that causes net congestion for students or staff (Brey, 2006).

In the misinterpretation practices, Schaefer's et al. (2009) survey report that the student identity verification methodologies was agreed or strongly agreed by faculty members and administrator to be used, because this methodology is definitively confirm the identities of the students and ensure that the students who are registered actually are the students taking the course.

The same result was shown by Kaplan's study (Acxiom, 2011) that faculty members feel improving students identity methodology in distance education ensure integrity of their online courses, improves the reputation in the marketplace and the quality or credibility of its graduates.

## Ethics

Is moral efforts to promote academic integrity values and to reduce academic dishonesty. These efforts can be considered as a proper vehicle for cultural transmission of moral and ethics value as one of the major functions of universities include of the virtual universities or DHE institutions (Brey, 2006). The efforts can be done through development, socialize, demonstrate, and enforcement of institutional policies/practices/standards/manuals on academic integrity, and also incorporate ethic and moral values within assignments, lessons, tutorial, syllabus, the core curriculum, area-specific within degree plans (Geerhart, 2001; McCabe & Trevino, 1993); the class book Web course interdisciplinary (Toner, Toner & White, 2000); and/or designing an effective cheat-proof online assessment, keeping online courses current (Toprak, Ozkanal, Aydin & Kaya, 2010; Olt, 2002).

A research review by Bombaro and Mitchell's (2012) found that the strategy were effective to supports faculty confidence that their students have been given fundamental information about academic integrity, academic dishonesty, and its consequences. This ethical strategy is the best social norm approach to behavioral intervention to puncture the inaccurate perceptions that individuals use to justify their behavior, and to develop an academic culture that supports an honor code and discourage academic dishonesty behaviors (Jordan, 2001; Carpenter et al., 2006). Cano and Sams' (2009) field observation found that this strategy was enabled to advance the students' sensitivity to the importance of ethical and moral behavior in academic activities. Furthermore, a number of the students made a conscience effort to cover up their actions.

Today, some DHE institution like Los Medanos College (Puccioni & Huffman, 2008), the WCET, UT Telecampus, and ITC (2009), and CCLF (2011) has developed best practices strategies to promote academic integrity in online education consist of five dimensions: institutional context and commitment, curriculum and instruction, faculty support, student support, and assessment and evaluation.

Students' guidelines for avoiding academic dishonesty or students' handbook about cheating and plagiarism are also important to provide the basic information, bound for them by the values, and expected behaviors of an academic community (Jones, 2011; Yeo & Chien, 2005).

"Moral education founded in an ethics of virtue", therefore, the virtue approach is also the important aspects to moral education for building traits of students' character (Steutel, 1997). Several authors and researchers suggest virtue approach need to be considered in the designing of curricula, syllabi, program, assignment, and so forth.

The content of design should be focused on attempting to "cultivate a sense of belonging and community" by using the "virtues" (Christe, 2003; Olt, 2002). Education program design is also not just in terms of costs and academic integration, but also in terms of cyber behavior, digital ethics, and other confounding issues. Students should have more information about what happens in cyberspace and involve them to allow and engage in important conversations about living digitally that simply aren't happening (Ohler, 2011).

Assessment should also be design as "original" assignments and readings, or even considering alternative, project-based assessments, which require creativity, encourage critical thinking rather than rote memorization (Christe, 2003; Williams, 2003; Olt, 2002). Assessment is also be designed as set a trap which do not permit outside assistance from the Internet by creating a web site with incorrect answers (Krsak, 2007), and difficult for students to plagiarize because of their specificity, their reliance on course materials, or their relevance to their lives and individual opinions (Maruca, 2003). Bailie and Jortberg (2009) suggest the use of challenge questions derived from third-party data providers that are not student driven.

## CONCLUSIONS

Along with increasing the use of digital-based information and communication nowadays, the emergence of academic dishonesty behaviors and practices among academic members are one of the biggest challenges to realize moral education and build academic culture and integrity in DE. The study shows that those are more easily to do and sophisticated, because the use of technology in DE is axiomatic. Academic dishonesty behaviors and practices at Distance Education was carried out in various modes of operation such as cheating, collusion, deception, plagiarism, technology manipulation, and misinterpretation by utilizing advanced technology. Individual, social, cultural, and institutional is factors have a very significant role for the emergence of behavior and practice dishonesty at Distance Education. To combat academic dishonesty and promote academic culture and integrity in Distance Education, ssingular moral approaches to academic dishonesty behaviors are ultimately insufficient and can shed light on the problem. Moral solutions are should be developed as an integrated model of pedagogy, policy, and technology. Several approaches can be done by policing, prevention, and ethics.

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