Academic Leadership and Learning Analytics in Higher Education in Vietnam

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ABSTRACT

This paper will discuss key issues concerning developments in higher education in Vietnam in response to the Fourth Industrial Revolution. There is an urgent need for effective leadership in developing regional and national strategies for the development and deployment of learning analytics technologies to enhance the performance of university graduates in Vietnam. Concerns about the level of infrastructure development plus the availability of, and access to, data from public sector institutions will be discussed. The leadership experiences of ASEAN partners, such as Singapore, Thailand, and Malaysia in the development and implementation of learning analytics using learning management systems and mobile technologies will be reviewed. Several possible strategies emerge and these will be discussed before conclusions are drawn and recommendations made.

Keywords: learning analytics, Vietnam, higher education, educational leadership; 21st Century Learning Skills, culture

1 Introduction

As Vietnam continues on the path of becoming an upper-middle income country, one of the greatest challenges for business will be that of human capital ("A Review of Science, Technology and Innovation in Vietnam," n.d.).

Human capital has recently been concisely defined as "the stock of skills that the labor force possesses," by Harvard economics professor Claudia Goldin (Goldin, 2016). An earlier and expanded version of this definition, "human capital is the stock of competencies, knowledge, social, and personality attributes, including creativity, embodied in the ability to produce economic value." was used by David Lamotte, Director, ILO Office for Asia-Pacific (Lamotte, 2012) in his presentation entitled "Human Capital – A Driving Force for Business Growth."

The extension of the definition to include knowledge, social and personality attributes, and creativity reflects the need for our graduates to be well rounded individuals, capable of exhibiting the key 21st Century Learning Skills of creativity, communication, collaboration, and critical thinking.

Given the many and continuous pronouncements of the increasing rate of change in technology and work practices, two lists presented at the 2016 World Economic Forum (WEF) illustrated the different skill sets the WEF predicted as needed for working in 2020 and showed the differences from 2015 (see Figure 1). These skills are essentially soft skills.

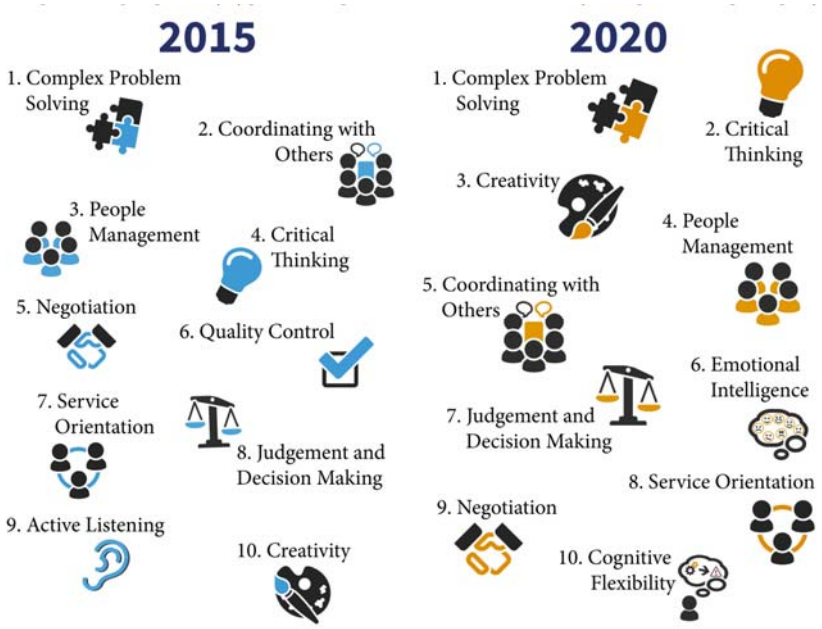

Figure 1: The 10 skills you need to thrive in the Fourth Industrial Revolution (World Economic Forum, 2016)

To improve worker quality, we must examine education (Elangovan and Karakowsky, 1999). Vietnamese employers already complain about the difficulty in finding qualified workers (Hiep, 2018; "HR training cooperation between businesses and educational institutions," 2017). As universities are the primary source of white collar labor, exploring how Vietnamese universities can take steps to improve the quality of university graduates is worthy of investigation.

This paper is the second in a series on learning analytics (LA) implementation in Vietnam. The first (Andre and Webster, 2018) provided an overview of data analytics in general and its use in business globally, including how Vietnamese businesses could leverage the experiences of existing firms.

The focus of this piece is on implementing LA in higher education, including universities. A third paper (Webster and Andre, 2019) includes issues related to implementing LA systems in Southeast Asia, specifically Vietnam. A proposal for implementation using Moodle and Blackboard learning management systems (LMSs) at the course level is included. The advantage of taking this route is that it solves two important challenges to LA in higher education: Capturing the necessary data and then sharing it.

1.1 Local experiences in soft skills development

When one of the authors started working for the Faculty of International Education at NEU in 2009, the first unit he was involved in was called Managing Professional Development as part of a business management program. A key part of the syllabus and learning outcomes was increasing students' awareness of the need to develop soft skills as well as academic skills to be successful in the workplace. A current (at the time) publication used to illustrate the relevance of this area to the students was an article in Viet Nam News. Its title was "Graduates need more soft skills, says expert" (Quynh Hoa, 2009).

In September 2018, a headline appeared in the same newspaper which said "Huge gap remains between university curricula and real job requirements" (Hiep, 2018). The contents of both articles were basically very similar. They both lamented the quality of graduates emerging from local universities and a common theme was illustrated by the suggestion that "Enterprises also expect the University to provide effective soft skill training to students" by a senior manager of human resources.

What are the factors that contribute to the persistence of this problem in Vietnam and other regional countries? How can higher education institutions (HEIs), employers, and other stakeholders contribute to the debate and help find answers? One fertile area for development is that of LA.

This paper discusses how Vietnamese universities can take advantage of LA, including the potential for Vietnamese universities to leverage the experience of HEIs in other ASEAN countries as well as those in the West and elsewhere.

2. Key Issues

Before addressing what is possible with current technology, we must review some of the issues that are already known about learning in a country such as Vietnam, which has rapidly progressed to lower-middle income status (from 1990 to 2016 Vietnam's GDP increased by over 3,000%, a fantastic rate second only to that of China, which was able to start its new development path earlier).

Samsung and Intel, both major investors in Vietnam, say university graduates are not skilled enough, so these firms fund improvements; Samsung by improving Vietnamese education, Intel by enabling large numbers of Vietnamese students to study in the US to improve their skills (Sturgeon and Zylberberg, 2016). It is not just large enterprises in Vietnam that are suffering. Some IT outsourcing firms here have to turn down work from clients because of their inability to get good graduates (Sturgeon and Zylberberg, 2016). As businesses begin leveraging enterprise talent analytics, it becomes possible to share with universities exactly what skills, knowledge, and experiences they expect the students to develop during their undergraduate years, which, in turn, can inform higher education curriculum design.

2.1 Business use of data for decision-making

100 years ago, businesses were already using data for marketing purposes (Bartels, 1976) and quickly progressed into using data to improve internal operations (Weckenmann et al., 2015). Today, in western countries, any decision-maker is generally expected to support their decisions with

accurate, up-to-date data. The quality management guru W. Edwards Deming famously said, “In God we trust; all others bring data.”

As more work in companies has moved from physical labor to intellectual effort, the amount of time workers spend on computers has only increased. This has made the collection of data easier, to the point that some companies see over 100 petabytes (1 petabyte = 1,000 terabytes) of data each day passing through their systems (Gallagher and Moltke, 2018).

The tools and techniques used when dealing with petabytes (PB) of data are different from processing the relatively small scales of data from the past. “Big data” is the term used to address PB-scale data. To make these extreme numbers more manageable, big data analytics was introduced.

2.2 Analytics

Analytics is all about measuring, collecting those measurements, and analyzing the data to provide meaningful insights. It can also be used to predict the future (probabilistically) and make recommendations on what to do. Another way to think of analytics is as the next step in a sequence that includes quality management (QM) and key performance indicators (KPIs). For a more thorough treatment of the various types of analytics, see Andre and Webster (2018).

2.3 Learning analytics

LA includes the use of learner data to improve learning, including the learning environment (“1st International Conference on Learning Analytics and Knowledge 2011,” n.d.). While LA, as a topic of research, has grown immensely, actual LA implementations around the world are mainly limited to a few countries. In Australia, LA projects at HEIs are neither large nor fully developed (Colvin et al., 2016). Only 18% of EDUCAUSE members (85% of which are in the US) are making major investments in LA (Yanosky and Arroway, 2015). Research into UK universities indicated that only 2% have implemented an LA system while another 17% have partially implemented one (Newland et al., 2015). Since the remaining 81% have no substantive implementations, in many cases nothing has been done at all. Vietnam is not far behind the Global North in this area. While some of this data is four years old, and it is likely that a number of institutions have started some kind of LA initiative, it is still early in the development of this technology in HEIs.

2.4 Double benefit for students

Looking at LA from the student perspective, there are two key benefits. The first, and one which is often the focus of LA research, is that it will help guide students in their learning. That is, LA will be used by students to track their own progress through the learning process. For example, allowing them to see how they perform against class averages on a multitude of factors, besides just grades (Gaftandzhieva et al., 2018; Khan and Pardo, 2016). Consider the dashboard below.

The topic of visualization of LA data is beyond the scope of this paper but this example does illustrate what some researchers have conceived.

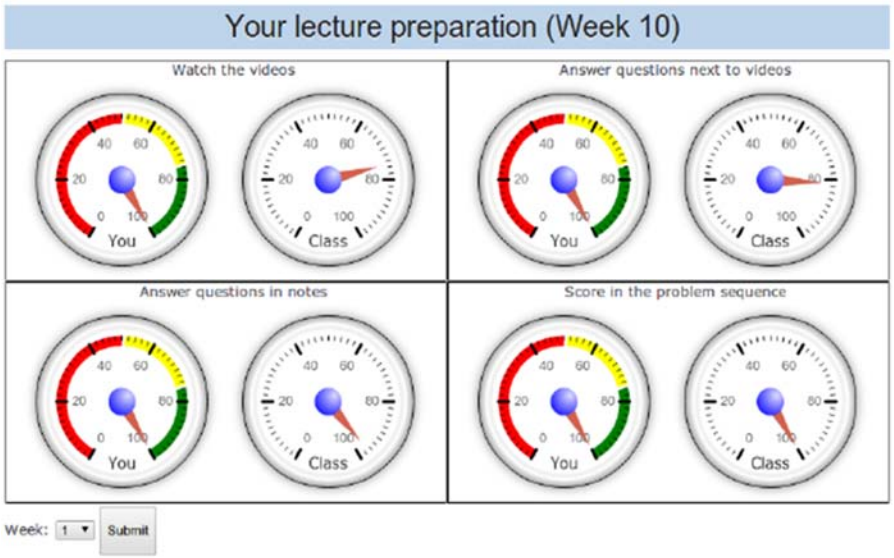

Figure 2: Source: Khan and Pardo, 2016

Key to effective performance management today is having the right data at the right time in front of the right person (Eloot and Wang, 2019). In many cases, the right person to make decisions is the learner, as they make the most crucial learning decisions. Encouraging Vietnamese students to self-study and depend less on their teachers is considered a crucial issue by educational stakeholders in Vietnam (VVOB, 2012). LA is an important tool in achieving this goal.

Analytics has become an essential technology for business, so much so that many universities recently started offering master degrees in data analytics.

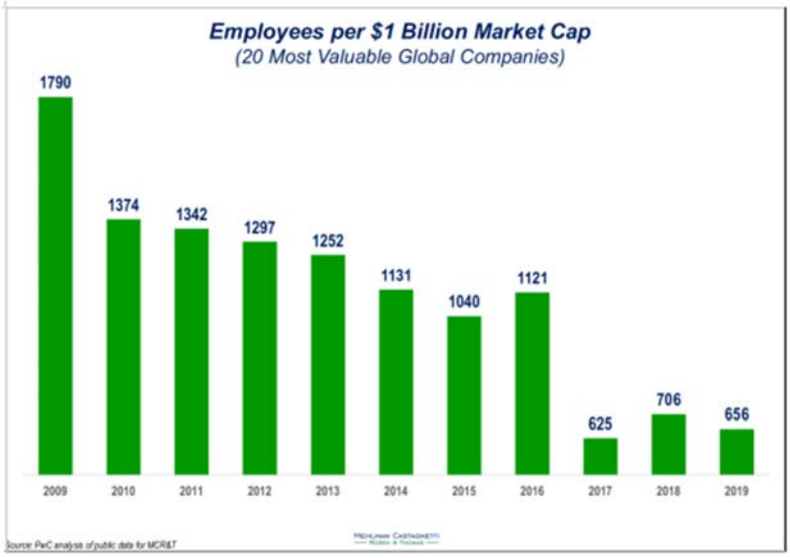

Figure 3: Source: Bruce Mehlman

In the above chart, we can see that over the past decade, the number of employees required to generate a billion dollars of market capitalization has dropped by 63%. Technology, including data

analytics of all types, has been a huge contributor to this wave of improvement in productivity (think of Amazon's and NetFlix's recommendation systems or Google's and Facebook's ad systems).

Therefore, when students learn to manage their own performance through the use of LA, they are also preparing themselves to manage departments and companies through the use of data and analytics. This fits very well with employers' constant demand that universities do more to prepare graduates for the workplace.

As some multinationals are already moving towards enterprise talent analytics (Andre and Webster, 2018), by building students' understanding about LA, the new graduates will already understand that data is tracked about them, along with why that happens, how it is used, and what rights they might have over such data.

2.5 Benefits for educators

It is not just students who benefit from the implementation of LA. This data can support personalized learning and it can also be used by the course designer to make improvements (Thomas et al., 2017), even in the middle of a term or just before a lecture begins, should time allow.

Imagine how useful it would be for a lecturer, just before starting class, to see how well the class has prepared for that lesson. If there has been greater preparation, the lecturer might choose to go deeper into a specific topic. If there has been less preparation, the choice might be to stay at a shallower level.

Providing LA data to students to help them see for themselves where they need to focus their efforts is one thing. However, another potential use of LA is to give near-real-time data to lecturers and tutors so that they can change from depending only on their intuition to being more responsive to each student's individual needs by making data-driven decisions about their roles in student learning, including suggesting specific materials along with how and when to encourage students (Dietz-Uhler and Hurn, 2013). Additionally, LA allows learners to get more personalized feedback without adding to the burden of educators.

Just as companies cannot ignore using customer analytics (Flavin and Heller, 2019), universities cannot ignore LA. Regardless of whether the universities view students as customers (Currie-Knight and Horwitz, 2016) or employees (Andre and Webster, 2018) or something else, LA affords an opportunity to engage with learners that has not previously existed.

3 Issues Unique to Vietnam

Over the past decade, SEAMEO has regularly addressed and reported on related issues such as the integration of ICT in education (SEAMEO, 2010), primary learning metrics (SEAMEO INNOTECH, 2013), and assessment models (SEAMEO INNOTECH, 2015) in Southeast Asia. This paper, as the title suggests, aims to consider these themes and LA with specific reference to higher education in Vietnam.

A recent publication (Lim and Tinio, 2018) provides a comprehensive overview, via a series of regional and country-based papers, of the challenges facing countries in the Global South in adopting LA systems in education.

A useful guide to the structure and content of the concerns and challenges for Vietnam with reference to the implementation of LA in universities includes the six key questions posed by the paper to Vietnam's higher education sector:

1. What are the main trends and challenges in education in Vietnam?
2. How can LA address these challenges?
3. What models of LA adoption would be most effective in Vietnam?

4. What are the barriers in adoption of LA in Vietnam and how could these be mitigated?
5. How do you envision ethical use and privacy protection in connection with LA being addressed in Vietnam?
6. How can the operationalization of LA be future-proofed in Vietnam?

(Lim & Tinio, 2018, p.iv)

Due to the scope and focus of this paper, only the first four questions will be addressed.

3.1 Trends and challenges in education in Vietnam

3.1.1 Increased enrollment and student retention

MOET aims to more than double enrollments in higher education by 2020, from 2010 (after tripling tertiary enrollments between 1999 and 2015) (Trines, 2017).

MOET has also prioritized investing in the development of what is termed as ”applied, employment-geared training” by targeting a figure of over 70% of students to be enrolled in this type of program by 2020 (Trines, 2017).

An important part of increased enrollments is maintaining high levels of student retention. In implementing the employment-geared training, improved feedback on hard and soft skills development for students can be a key element of improving student performance. LA systems can help to achieve both of these goals.

3.2 How can LA address these challenges?

The International School of Management and Economies (ISME) at NEU already uses the Moodle and Blackboard LMSs in its academic programs. Both LMS implementations have LA capabilities, and it is suggested that the university should start to move forward and utilize these capabilities as in the following example.

The LA capabilities of most LMSs can be used to track learner behavior to both improve retention and improve student learning. For an example of the former, if an instructor posts slides before a learning session, the LMS already tracks which learners have downloaded those slides, and when they did so. If a link to some reading has been posted, the LMS can tell the instructor who, how many times, and from where learners clicked that link. When a learner is seen to never download slides before the training session, or they never look at any extra content which is available, these are all warning signs that the student is not engaged in the learning activities of that course or program.

This tracking data is already available but often goes unused. This is just one example of the digital breadcrumbs that get left behind that universities can use to increase retention and promote learning by focusing on the least engaged learners and finding out what they, as individuals, need to engage with the materials and the learning process.

The Blackboard LMS LA features are already in use at the Nanyang Technological University (NTU) learning environment in Singapore. NTU states that these LA capabilities help administrators and teaching staff to monitor learning and academic performance of the students. They also suggest that students benefit from their own abilities to look at how they are doing on the courses they are taking and compare their performance with that of other students (NTU, 2018).

The purposes of implementing an LA system must serve the students’ own learning and development (Slade and Prinsloo, 2013). In other words, just as the trends in teaching have moved away from educators expounding for hours on end to more engaging active-learning techniques, LA systems should learn from this and also become student-centered rather than institution-centered (Kruse and Pongsajapan, 2012).

Given that Asian students have less experience with independent learning (Go and Mok, 1995), care will need to be taken to help learners adjust to this new reality of overseeing their own development. This "reculturing" (see: Medić, 2016) of learning in Vietnam, away from a system of dependence (Gow and Kember, 1990) and toward self-directed learning, is a necessary step to successful LA implementation.

Chen and Fan suggest using LA to promote learner agency and, indeed, challenge China's existing exam-driven culture (Chen and Fan, 2018). In Vietnam, empirical research indicates that moving away from an exam-driven culture could improve both student learning and satisfaction (Andre, 2019) so following this advice is reasonable.

3.3 What models of LA adoption would be most effective in Vietnam?

In terms of models of LA adoption, fellow ASEAN member Singapore is recognized as a world leader in education and NTU is forging ahead with the use of LA to improve educational outcomes.

Analytics has been slower to enter the field of education but now it is moving into this area at varying speeds all over the world. If we look at ASEAN and East Asia we can get a sense of the great variation in the development of digital economies and the use of AI tools and techniques, including analytics, throughout the community. Singapore is, in some respects, leading the way in using these tools, especially in education in general and higher education in particular. In April 2018, the National Institute of Education (NIE) at NTU provided a short course entitled "The Impact of Big Data and Artificial Intelligence on NIE's Academic Programs."

Even with Singapore's success with LA, it must be remembered that it is a small and affluent city-state with a very different history and set of challenges than the nation of Vietnam with its population of almost 100,000,000.

3.4 What are the barriers in adoption of LA in Vietnam and how could these be mitigated?

3.4.1 LA awareness and acceptance level

While LA can improve learning, teaching, and educational management as a whole, it often involves a costly process of mining, storing, and processing data. Although the Vietnamese Government claims that education is one of most prioritized investment categories which will receive as much as 20% of the state budget, equivalent to 5.8% of GDP each year (Anh Kiet, 2019), it does not necessarily mean a sufficient amount will be allocated to the application of advanced technology in education. The issue comes back to the fact that LA has been receiving little attention from the public. More specifically, LA has not been publicly mentioned and published at any National Assembly to date. Moreover, searching has revealed that the term "learning analytics" has not been mentioned by any personnel in the Ministry of Education in the past year. This shows that LA has not received proper attention by top-level educational authorities in Vietnam.

In the academic sector, LA was specifically referred to, and discussed, at the 2017 InSITE conference in Ho Chi Minh City (Van Anh, 2017). It is also the main topic for a study conducted in late 2018 (Andre & Webster, 2018) where analytics is argued to be useful for Vietnamese firms with certain restructuring. LA in education is briefly mentioned in that paper, which is the only research regarding LA in the Vietnamese context known to date.

In addition, the level of acceptance among teachers regarding the application of technology in education is also questionable. Teachers are the people directly involved in the use of technology in education. They decide how and how much technology should interfere with the delivery of knowledge and, therefore, they play a central role in the application of technology in education (Teo, 2014). However, in Vietnam, teachers are used to being the dominant figure inside classrooms (T.-T.

Tran, 2013). For decades, Vietnamese educators have not paid attention to tailoring their curriculum for each individual while the use of LA requires the opposite. Vietnamese teachers need to receive more and better training to adapt to modern education (VNS, 2018), especially tertiary education teachers who are claimed to have a tendency to reject changes (Ha and Nguyen, 2014). What could help educators adapt and make use of LA in their job should be of great concern in the course of LA implementation.

The last but most important group, learners in Vietnam also pose a challenge arising from their passivity. This syndrome, with origins in the Confucian heritage culture (T. T. Tran, 2013), could be a major obstacle for the implementation of LA since it becomes difficult for data gathering and clarification when the learners themselves do not proactively seek knowledge nor want to develop comprehensively as human beings. What difference could it make if students only visit educational websites that have been provided by teachers but never dare to wonder the realm of knowledge?

Recommendation: Realizing the importance of LA and improving public awareness of it should be the first concern for educational leaders in Vietnam. In addition, motivating and providing training programs for teachers to better understand and make use of LA (and advanced technology) in education is also important as is encouraging learners to find learning paths that best suit their personal styles.

Autonomy facilitates the internalization of regulation, or self-regulation, by guiding students to internalize the locus of control (Ryan and Deci, 2000). The use of LA supports learner autonomy as they become responsible for tracking their own progress.

3.4.2 Long-term vision versus short-term achievements

The American Institute of Social Research pointed out one of the significant characteristics of Vietnamese people is that they are highly intelligent and creative in dealing with immediate issues but tend to avoid long-term considerations (Ha & Nguyen, 2014). In education, this characteristic is reflected in tertiary students being heavily oriented towards passing exams (T.-T. Tran, 2013) and university students caring more about obtaining graduation certificates to find jobs rather than broadly developing themselves.

This mindset impedes the implementation of educational strategies that focus on long-term goals but may not bring immediate success. Meanwhile, the application of LA in education focuses on understanding individual characteristics of each learner so as to shape (and personalize) educational programs towards them (Dietz-Uhler and Hurn, 2013; Ferguson, 2012). This learner-centered approach requires time to gather useful data, analyze it, and apply it. Thus, its usefulness may not be recognized and supported by the community.

Recommendation: Organize conferences and public events to propagandize the positive short-term and long-term impacts LA may bring to education. The success of any policy implementation often starts with public support.

3.4.3 Other concerns

Added to the aforementioned concerns, several other issues should be taken into consideration as LA is applied in the Vietnamese education system.

Firstly, the difficulty in gathering and verifying data. As stated above, the Vietnamese learners' mindset can prevent them from revealing their preferences and characteristics in a formal context. This impedes the gathering of formal data and reduces its clarity and reliance while the quality of data decides the effectiveness of its usage (Daniel, 2015). A way around this problem is to make use of informal data, such as data available on students' social networks. However, the vast topic range this kind of data covers, its complexity, along with the diversity of language easily add more burden to the already complicated process of analytics (Tran and Nguyen, 2017). Whether or not data

gathered will be sufficient for LA is another question since, in countries like Vietnam, teaching and learning are mostly taken in the form of direct verbal communication (Nazarenko and Khronusova, 2017). Data can be easily gathered on e-learning devices, so changing to focus more on LMSs and similar technology-mediated teacher-learner relationships would help.

Secondly, the current law in Vietnam, like many other countries, has not been able to keep up with constant changes brought about by the 4IR (fourth industrial revolution) era. In the case of LA, it is to ensure privacy protection and the ethical use of data. Several guiding principles have been proposed by academics around the world but discussion is beyond the scope of this paper (see: Ifenthaler and Schumacher, 2016; Pardo and Siemens, 2014; Slade and Prinsloo, 2013; Willis et al., 2016).

Lastly, the rapidly changing nature of education in the 4IR age demands that national leaders react and make timely decisions with the aid of LA (Alblawi and Alhamed, 2017). It is therefore of great importance that the government seek in-depth knowledge about LA and build a framework to facilitate the harmonization of cross-sectional data (Lim and Tinio, 2018) in order to make the best out of LA and drive society forward.

4 Leadership experiences from ASEAN

In research which was carried out in both Australia and Malaysia (West et al., 2018), several important points were found which can inform LA development in Vietnam

- There is great interest in LA but the two countries use LMSs very differently with less access to data in Malaysia.
- Teachers will spend more time learning about LA if they understand the benefits it brings; therefore, professional development will need to be provided.
- Teaching staff need to be fully consulted on the implementation of LA.
- Any LA plans need to include considerations of institutional readiness, including technical infrastructure and organizational culture.

Rodrigo stated that ICT needs to be used in Vietnam for assessment more (2018). Stakeholders surveyed by VVOB concur (2012). This supports the point above about institutional readiness.

As LMS use is instrumental to data gathering for LA, the differences in its use can help Vietnam understand why solutions that worked for the Global North might need modification to succeed in Vietnam. As an example, the research (West et al., 2018) found that Malaysia depends more on face-to-face and blended learning rather than fully online courses which are more popular in Australia and this is a major driver of how much learner data is available for LA.

Research done in Thailand (Phanchalaem et al., 2016) showed that teachers need more training in how to analyze student data in order to take full advantage of the benefits offered. This supports the point from the West research above that educators will require training to take advantage of LA.

In a Thai university, it was discovered that, by monitoring students' internet traffic, students at risk of dropping out were more likely to have problems with time management (Trakunphutthirak et al., 2019). That is, watching the amount of time students spend on irrelevant websites can indicate how at-risk as a student is. As time management is an issue for Vietnamese undergraduate students, this can provide even more insights into what we should be watching.

As Vietnam's culture is closer to that of other ASEAN countries than the Global North, there is much to be learned from how ASEAN countries have altered solutions from western universities to fit local needs.

5 Recommendations and conclusions

As the VVOB reported, stakeholders believe it a crucial issue that all HEIs in Vietnam should have a learning management system (VVOB, 2012), combined with the fact that efforts are more easily leveraged across organizations if everyone uses the same underlying technology, it makes sense for MoET to strongly recommend a common LMS to be used by all Vietnamese HEIs. Given Moodle's effectiveness and its open nature, it is our recommendation that Moodle be the recommended LMS.

Care must be taken not to believe that a one-size-fits-all approach will work. Higher education is not a commodity (Blumenstyk, 2019) and solutions will be different within different cultures. Not only does Vietnam have a different culture than the Global North, there are differences of culture within Vietnam. We even see different organizational cultures between two universities in the same city. That said, the more uniformity there is between HEIs, for example in the LMS they choose, the greater the potential sharing of benefits between institutions. For example, if one university develops a system for their Moodle installation which successfully predicts students at risk of failing or dropping out, any other institution which uses Moodle could use that same system, perhaps making minor changes to fit their unique characteristics.

It is not just the data scientists that need to understand how this technology works. The head of an organization needs a strong working knowledge this area, at a minimum (Burkhardt et al., 2019). Other research supports this showing that when the president is more involved in leadership of LA projects, those projects have a higher priority, which in turn leads to higher levels of analytics maturity (Yanosky and Arroway, 2015).

Internally, university IT departments will need new training. They will need to understand the issues, methods, and tools around analytics such as long-term data management, data mining, etc. (Campbell et al., 2007).

The following is a subset of the recommendations to school educators and administrators made by the US Department of Education (Bienkowski et al., 2012) which we believe are particularly relevant to any LA implementation in Vietnam.

- Develop a data-driven decision-making culture
- Leverage IT departments in data collection planning efforts
- Start small, using data to make clear improvements, then expand based on that initial success
- Help students (and parents) understand both the source of data and how it is used

Other researchers support these points. For example, when making a change, like implementing LA, it is recommended to start with a low-risk project which can show some early wins as it will help convince others of the potential for success (Karam et al., 2019).

While there may be a lack of clarity at this early stage, we should be considering how Vietnam will develop LA. If we use a bottom-up approach, wherein the HEIs build their systems, then it is possible to have different universities competing to identify the proper model for Vietnamese students. While there could be differences between students at different HEIs, one HEI could see improved effectiveness by starting with existing models from other HEIs.

In the business world, bottom-up goal setting (as opposed to top-down by senior managers) leads to 20% higher targets (Darino et al., 2019). Could the same be true of students?

One way to ensure a major change is successful is by empowering those most impacted by the change to actually design the change (Andre, 2013). As educators are both closest to the students and perhaps the most impacted by an LA implementation (with the exception of the students), allowing educators to lead the way on such a project will by key to overcoming the resistance to change. This is supported by West's research (West et al., 2018) in Malaysia.

Some have complained about LA, referencing the large amounts of data that get collected with very few successful interventions identified (Young, 2018). It should be expected that data comes first, then insights, then interventions. Expecting too much from LA too soon could cause some to abandon the efforts before giving it the necessary time to bear fruit. This will require leadership from MOET to educate stakeholders on the long-term benefits of LA.

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