Learning in
Public and Private Universities in Egypt

Introduction

Early this century Bennett (2001) claimed questions about the effectiveness of university education were being ignored. Recently, however, there is growing interest in the quality of teaching and learning (Liu 2011; Shavelson et al. 2016). Students, parents, and university instructors and administrators want to know whether university education helps students function in today's world (Woodall, et al. 2014). Do students learn the basic knowledge of their chosen field, hone reading skills, and develop the ability to think critically and solve problems creatively? This is particularly important in the Middle East and North Africa where the Arab Spring is seen as an uprising of frustrated, unemployed graduates (Camplin 2011; Pellicer, et al. 2017). Education can contribute to development (Fahim and Sami 2011) and be a "tool to prevent violent extremism" (UNESCO nd.). Social science education can be particularly effective in providing youth with appropriate knowledge and critical thinking skills (Hodgkins and Purinton 2016; Packer 2016).

Many university programs focus on basic information – the "declarative knowledge" – of the chosen field (Johnston et al. 2011:75; Wagner, et al. 2014). Reading for comprehension determines academic success (Dreyer and Nel 2003); students learn by reading (Pirttimaa, et al. 2015). Knowledge and reading are pre-requisites for developing critical thinking (Johnston et al. 2011; Levin 2010).

Background in Egypt

Before 1952, Egyptian universities served the children of the elite (Arabsheibani 1988; Hyde 1978). In 1962, President Nasser promised to expand and democratize higher education (Anonymous 1962), goals codified in the 1971 constitution. University enrollments began growing in the 1950s (Szyliowicz 1973), continuing until today (MoE 2008; NCERD 2001). With expansion, the quality of education deteriorated (Richards 1992). University, and all higher, education in Egypt, as in the Arab world generally, emphasizes rote learning over critical thinking (UNDP 2003a; 2003b; 2016; World Bank 2011), and is considered poor quality (Assaad, et al. 2016).

Research Questions

We assess three outcomes – subject-specific knowledge, reading for comprehension, and critical thinking – of students at public and private universities in Egypt; comparing students majoring in a social science field in the first semester of their second year of university (when they declare their major), with those in the last semester of their fourth year. Do fourth year students perform better on assessments than second year students? Within sectors (public and private) we examine correlates of the outcome indicators.

Data

Data come from 278 students. The public universities studied are the premier social science faculty and a long established provincial university where the discipline resides in the faculty of commerce. The private universities are an old, non-profit institution and a newer for-profit university.

Student interviews, our focus, gathered information on family and secondary education background, university experience, and four "indicators" for the three outcomes of interest. Students could be interviewed in Arabic or English. Core knowledge tested 5

multiple choice questions that discipline specialists considered basic information that even second year students should know. To assess reading, students read an essay about the 2011 Egyptian uprising and were asked two questions. One: compare numbers in the text with numbers in tables we supplied. At least one number in the text was wrong. Which number(s)? Two: what does the **author** consider the causal direction between education and development? Explain. Finally, students took the online California Critical Thinking Skills Test, in either English or Arabic.

Results

Table 1 shows essential results comparing public with private universities, and 2nd year with 4th year students within each sector. Public university students are significantly better on core knowledge, private university students do better on critical thinking. Reading skills differences are not statistically significant. Comparing 2nd and 4th year students within sectors, the only statistically significant difference finds 2nd year students in public universities better able than 4th year students to answer a question related to reading ability. There is no evidence that thinking or reading or core knowledge improves with university instruction.

If student skills do not appear to improve over the course of their university career, are there family (father's education, family wealth) or educational background (secondary results, university study habits, library use, activities, etc.) factors that correlate with our outcome indicators? For private universities, the answer is generally "no" – with just one exception (type of secondary degree), neither family nor educational factors are correlated with any outcome. Those who took the national secondary school leaving exam (thanawaya ammaa - TA) score significantly lower on critical thinking than those who completed other types of secondary degrees (IB, IGCSE, etc.).

For public universities more background and educational characteristics are correlated with at least one outcome indicator. For example, score on the TA (all but one public university student did the TA) is positively correlated with both core knowledge and critical thinking. Core knowledge is also positively correlated with study hours, and critical thinking is higher among students who participate in activities outside the university.

Conclusions

While we find few correlates of our outcome indicators, the absence of any indication that 4th year students do better than 2nd year students on outcomes suggests that university education has little impact on student skills. Secondary school effects on critical thinking suggest that differences between students in higher education sectors result mainly from pre-tertiary education.

Table 1. Outcomes by Sector and Year of Study – Students of Four Egyptian Universities.

		Core Knowledge (Mean No. of Questions Correct)	Reading Question 1 (% Correct Answer)	Reading Question 2 (% Correct Answer)	Critical Thinking (% Answers Correct)	N
Public Universities	2nd Year	1.4	47.6*	28.6	32.5	63
	4th Year	1.3	30.9	34.8	32.5	70
	Total	1.4**	38.9	31.8	32.5**	133
Private Universities	2nd Year	1.1	43.1	39.4	39.6	70
	4th Year	.9	40.0	44.7	43.0	62
	Total	1.0	41.8	41.6	41.0	132

Level of Significance: * .05; ** .01.

Significance on the Total line means public universities are significantly different from private universities.

Significance on the 2nd Year line means that, within sectors, 2nd year students are significantly different from 4th year students.

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