

Importance of Mathematics and English from Prior Education in a First Year Accounting Subject

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ABSTRACT

The purpose of this study is to identify the factors that influence a student's performance in a first year accounting subject in university. The data were collected from Western Sydney University (WSU) database for 3011 students who undertook the first year accounting unit - Accounting Information for Managers (AIM) during 2009 and 2010. The results reveal that students who had studied higher level mathematics (with calculus) and advanced English in the High School Certificate (HSC) were better equipped to undertake AIM. In contrast, students who had only studied general mathematics (without calculus) and standard English in the HSC were found to be disadvantaged.

Keywords: Education, Accounting, Mathematics, OLS.

JEL Classification: A20, A22

INTRODUCTION

Accounting education has been in the Australian university sector for several years as accountants play a vital role in our society as investors and depositors need to have faith in the ability of the accounting profession to perform the job which has a unique function of assuring the integrity of the financial information on which our society expects. Most accounting degrees have a strong industry focus, meeting the professional accreditation requirements by the Certified Practising Accountant (CPA) and Chartered Accountants (CA). However, by 2025, it may still be expected that the percentage of 25-35 year olds in Australia having obtained a university degree will increase from the current level of 29% to 40% (Commonwealth of Australia, 2009; Department of Education, Employment and Workplace Relations, 2008). Now the universities are deregulated and can choose their fees based on demand. This increased participation target will have a significant impact on the quality of university education because of lower admission standard. This clearly impacts the ongoing quality of university accounting programs and its ability to meet professional recognition requirements for the accounting industry. A key factor that will also impact on this increased university participation

strategy is evidence of declining mathematics ability amongst Australian students. This has seen reduced mathematics ability in recent years, both at an Australian level and benchmarked internationally, with Australia currently ranked only 15th globally compared to 12th in 2006 (OECD, 2010; IAEEA, 2008). This is further supported by the observation that students tend to select the easier mathematics options in HSC. This has seen a 25% decline in students selecting mathematics (mathematics with calculus) options in HSC during the period 1995-2007, and a 30% increase in students selecting general mathematics (elementary mathematics-without calculus) option (Group of Eight, 2009). Similarly, students under taking mathematics in the HSC has declined from 99.7% in 2001 to 80% in 2013 (New South Wales (NSW) Board of Education, 2010). This raises both quality and quantity issues regarding the mathematics background of students as they undertake accounting degrees in Australian universities. In NSW state of Australia four different levels of mathematics (general mathematics, mathematics, mathematics extension 1 and mathematics extension 2) are offered. General mathematics is relatively easy compared to mathematics, mathematics extension 1 and mathematics extension 2. Mathematics extension 2 is the toughest among

the four mathematics subjects offered in HSC. Students who undertake general mathematics in HSC are not allowed to undertake mathematics or any higher level of mathematics. A similar trend can be observed in English subjects. Like mathematics four different levels of English (standard English, advanced English, English extension 1 and English extension 2) subjects are offered in NSW HSC syllabus and student must undertake at least one English subject in HSC. A large percentage of student undertaking standard English in HSC. Students' undertaking standard English are not allowed to undertake any higher level of English. However, students are allowed to undertake advanced English, English extension 1 and English extension 2 simultaneously.

In general, a student's university performance depends on personal characteristics (e.g. gender, age, country of origin and language spoken at home) and prior achievements [e.g. Australian Tertiary Admission Rank (ATAR), percentile scores of subjects completed in HSC]. Most of the previous researchⁱ has considered some of these variables to explain the performance of students in different units and also the overall performance in the university. This study analyzed the student's performance in a first year compulsory subject- AIMⁱⁱ, as opposed to dealing with an economic and finance subject as others have done in the literature. Teaching accounting subjects has become more challenging in Australian universities across the sector, regardless of the entry qualification requirements of students. For UWS Business degrees, students are admitted solely on the basis of their ATAR scores, and there are no prerequisites needed to enroll in any of accounting degree program. In consequence, the current accounting degree has a mixed intake of students, a large number of them lack proficiency in mathematics and English. Therefore, the primary purpose of this research is to establish the importance of mathematics and English in AIM in the university. To do this, we have formulated the following hypothesis:

Hypothesis

Association between the HSC mathematics and HSC English on overall performance in AIM is significant.

LITERATURE REVIEW

There is a huge literature to justify the above hypothesis. For example, Butler et al. (1994), Lagerlof and Seltzer (2007), Eskew and Faley

(1988), and Song et al (2008) have found that mathematics is an important determinant of success in economics subjects in the USA. Birch and Miller (2006), Mallik and Basu (2009), Mallik and Varua (2008) and Mallik and Lodewijks (2010) Newell and Mallik (2011) have found similar results for different subjects in economics and property degrees in Australian universities.

A number of studies have shown that there is a strong positive link between mathematical background and performance in economics and finance units, and hence overall performance in the degree (Reid, 1983; Anderson, Benjamin and Fuss, 1994; Durden and Ellis, 1995; Lopus, 1997). Lagerlof and Seltzer (2007) concluded that the level of, and performance in, secondary school mathematics has strong predictive power on a student's performance at university level economics. Butler et al. (1994) studied the effect of calculus on learning intermediate microeconomics and macroeconomics, and found a positive and significant association between intermediate microeconomics, but did not find any relationship with macroeconomics.

But there are very little research has undertaken to explain the importance of mathematics in accounting subjects. For example, Koh and Koh (1999), Eskew and Faley (1988), Gul and Fong (1993) and Ward et al (1993) reported that mathematics background is a significant factor in explaining the performance in accounting degree programmes. Eskew and Faley (1988) developed a model to explain student performance in an introductory college-level financial accounting course. Yunker et al (2009) also have found that mathematics has positive and significant effect on Principles of Accounting subject.

Most researchers explained the importance of mathematics in university education, but few researchers explore the importance of English in higher education. This study also attempts to study the importance of English in AIM. Mallik and Lode wijks (2010) found that students who undertook higher level of English in HSC in Australia performed significantly better in Introductory Economics unit than those who didn't.

Extant literature has shown that gender plays an important role in student performance (King and McInerney, 2014). Gender difference may be especially important in examining English and Maths given that English and maths are closely associated with prevailing gender stereotypes

(Nosek and Symth, 2011). English is normally perceived to be a female domain and mathematics is mostly considered a male domain (King and McInerney (2014). However, Collins et al (2000) have found that on average girls outperform the boys in greater number of subjects and that there are more girls among the higher achieving students. Cheng (2012) found that even in the traditionally male-dominated field of mathematics, the male advantage is declining.

Lumsden and Scott (1987) concluded that female students tend to perform well in essay related assessments while males were performing better in quantitative related tasks. This was supported by the findings of Anderson et al (1994). Men perform better in calculus and functions, whereas women do better in English. In their study we intend to ascertain whether indeed there are difference between men and women when it comes to mathematical economics.

Several studies conducted in Australia such as the one recently completed by Nolan and Ahmad-Esfahani (2007) indicated that ATAR is a good predictor of the student's performance in undergraduate agricultural economics at the University of Sydney.

No one can deny the importance of English language and literacy in higher education. Without effective writing, reading and

The equations are to be estimated using OLS, and are given below:

$$\begin{aligned}
 AIMmark_i &= \alpha + \beta_1 Gender_i + \beta_2 Age_i + \beta_3 Baus_i + \beta_4 LSAH_i + \beta_5 ATAR_i + \beta_6 Dgm_i \\
 &+ \beta_7 Dmath_i + \beta_8 Dmath1_i + \beta_9 Dmath2_i + \beta_{10} Decon_i + \beta_{11} Dbusstd_i + \beta_{12} Dlegstd_i + \varepsilon_i \text{ --- (i)} \\
 AIMmark_i &= \alpha + \beta_1 Gender_i + \beta_2 Age_i + \beta_3 Baus_i + \beta_4 LSAH_i + \beta_5 ATAR_i + \beta_6 Dengstd_i \\
 &+ \beta_7 Dengadv_i + \beta_8 Deng1_i + \beta_9 Deng2_i + \beta_{10} Decon_i + \beta_{11} Dbusstd_i + \beta_{12} Dlegstd_i + \varepsilon_i \text{ ---- (ii)}
 \end{aligned}$$

In HSC more than 95% of the students are undertaking general mathematics and standard English at the same time and more than 90% of the students are undertaking mathematics and advanced English together. Therefore, it is inappropriate to consider English and mathematics subjects in the same equation as this could potentially lead to multi collinerity problems while performing OLS estimation. The descriptions and expected signs of the variables are given in table 1.

RESULTS AND DISCUSSION

Table 1 shows the descriptions and summary statistics of all the variables under study. It can

communication skill one cannot do better in university education. There are very few studies looking into the link between English language skill and overall performance in the university. Some researchers established the importance of English writing and communication skills in higher education. For example, Bacha (2003) and Jackson (2005) outlined the importance of the writing skill for more successful students in the university. Furthermore, according to Campbell (2002), writing skill is important for developing a career in economics and accounting discipline.

DATA AND METHODOLOGY

The data set for this study were obtained from the computerized student records of the UWS database for 2009 and 2010.

In this study, we used the Ordinary Least Square (OLS) method to measure the importance of student characteristics at entry level as well as two other important variables, HSC mathematics and HSC English in determining the performance in AIM. We hypothesized that the student's characteristics, ATAR in different levels of mathematics and English completed in high school and other HSC subjects (such as HSC economics, HSC business studies and HSC legal studies) would be significant variables in explaining overall performance in AIM subject in the university. The variables are presented in table I.

be seen from the table that the average marks, maximum, minimum and standard deviations for AIM are 58.43, 96, 3 and 14.78 respectively. Therefore the variation of mark is high. This may be due to the heterogeneous intake of students in the first year. The average, maximum, minimum and standard deviations for ATAR are 70.24, 98.95, 43 and 11.24 respectively. The variation of the ATAR data is consistent with the variation in the AIM marks data. The average age of the students is approximately equal to 20 years, 60% of the students speak English at home and 76% of the students in the sample were born in Australia.

Table I: Summary statistics

Name and descriptions of the variables	Mean	Max	Min	Stdev	Number	Expected
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					(%)	sign
Dependent variable						
$AIMmark_i$ = Marks obtained in the Accounting Information for Managers subject (out of 100)	58.43	96.00	3.00	14.78	3011 (100%)	N/A
Independent variables						
$Gender_i$ = dummy variable for gender, 1 for male and 0 for female	0.57	1.00	0.00	0.50	3011 (100%)	(+) or (-)
AGE_i =age of the student on 31 December, 2011	19.94	27.59	18.12	0.97	3011 (100%)	(+)
$Baus_i$ =Dummy variable, 1 for Australian born and 0 otherwise	0.76	1.00	0.00	0.43	2288 (76%)	(+) or (-)
$LSAH_i$ =Dummy variable, 1 for Asian Born and 0 otherwise	0.60	1.00	0.00	0.49	1801 (60%)	(+) & Sig
$ATAR_i$ = Australian Tertiary Admission Rank constructed using the weighted average of all HSC subjects undertaken by a student	70.24	98.95	43.00	11.24	3011 (100%)	(+) & Sig
Dgm_i = Dummy variable, 1 if the student has done general mathematics in HSC and 0 otherwise.	0.55	1.00	0.00	0.50	1648 (55%)	(+) or (-)
$Dmath_i$ = Dummy variable, 1 if the student has done mathematics in HSC and 0 otherwise.	0.37	1.00	0.00	0.48	1105 (37%)	(+) & Sig
$Dmath1_i$ = Dummy variable, 1 if the student has done mathematics extension 1 in HSC and 0 otherwise.	0.07	1.00	0.00	0.25	208 (7%)	(+) & Sig
$Dmath2_i$ = Dummy variable, 1 if the student has done mathematics extension 2 in HSC and 0 otherwise.	0.01	1.00	0.00	0.08	18 (0.59%)	(+) & Sig
$Dengstd_i$ = Dummy variable, 1 if the student has done standard English in HSC and 0 otherwise.	0.56	1.00	0.00	0.50	1687 (56%)	(+) or (-)
$Dadveng_i$ = Dummy variable, 1 if the student has done advanced English in HSC and 0 otherwise.	0.41	1.00	0.00	0.49	1221 (41%)	(+) & Sig
$Deng1_i$ = Dummy variable, 1 if the student has done English extension 1 in HSC and 0 otherwise.	0.04	1.00	0.00	0.19	110 (4%)	(+) & Sig
$Deng2_i$ = Dummy variable, 1 if the student has done English extension 2 in HSC and 0 otherwise.	0.01	1.00	0.00	0.09	22 (0.73%)	(+) & Sig
$Decon_i$ = Dummy variable, 1 if the student has done economics in HSC and 0 otherwise.	0.64	1.00	0.00	0.48	1933 (64%)	(+) & Sig
$Dbusstd_i$ = Dummy variable, 1 if the student has done business studies in HSC and 0 otherwise.	0.27	1.00	0.00	0.45	820 (27%)	(+) & Sig
$Dlegstd_i$ = Dummy variable, 1 if the student has done legal studies in HSC and 0 otherwise.	0.33	1.00	0.00	0.47	981 (33%)	(+) or (-)
e_i =random error term	N/A	N/A	N/A	N/A	N/A	N/A
<i>Note: Stdev=standard deviation; Min=Minimum value; Max=Maximum value; Sig=significance; number=number of observations</i>						

Table 2 and 3 shows the estimated co-efficient and corresponding p-values from equation (i) and (ii) using ordinary Least Square method under various specifications. Our hypothesis was to find out the main association between the performances of AIM in the university with different levels of HSC mathematics and English separately. It can be seen from table 2 that the estimated coefficients of Dgm, Dmath, Dmath1 and Dmath2 are -3.013, 5.009, 5.382 and 5.872 respectively and significant at least at 1% level. Thus, these coefficient estimates

imply that students undertaking general mathematics are the most disadvantaged and the student's that undertook mathematics extension two exhibit the best performance in AIM. Similar results can be seen from table 3 for different levels of English. The only exception is that the coefficients of Deng1 and Deng2 are not significant. This suggests that it may be the case that higher knowledge in English may not be required to study accounting in the university.

Table II: Estimated co-efficient of AIM marks in the University using Ordinary Least Square methods (estimating equation (i))

	(1)	(2)	(3)	(4)
Constant	45.897***(0.000)	39.519*(0.000)	43.511**(0.000)	44.839***(0.000)
Gender	-1.097***(0.033)	-1.374***(0.007)	-1.094**(0.034)	-1.046**(0.043)
Age	-0.910***(0.001)	-0.736***(0.007)	-0.899***(0.001)	-0.963***(0.001)
Baus	-0.842*(0.199)	-0.814(0.208)	-0.900*(0.169)	-0.975(0.138)
LSAH	1.581***(0.001)	1.824***(0.001)	1.498***(0.001)	1.247**(0.029)
ATAR	0.434***(0.000)	0.417***(0.000)	0.436***(0.000)	0.445***(0.000)
Dgm	-3.013***(0.000)			
Dmath		5.009***(0.000)		
Dmath1			5.382***(0.000)	
Dmath2				5.872*(0.074)
Decon	1.933***(0.001)	1.497***(0.008)	2.239***(0.000)	2.335***(0.000)
Dbusstd	2.741***(0.000)	2.981***(0.000)	2.784***(0.000)	2.544***(0.000)
Dlegstd	-0.483(0.373)	-0.189 (0.727)	-0.502(.3553)	-0.630(0.247)
R ²	0.135	0.154	0.134	0.126
Adj-R ²	0.133	0.151	0.131	0.124
F-stat	52.392 (0.000)	54.700 (0.000)	51.711 (0.000)	48.489 (0.000)

Note: i) ***, ** and * indicates the level of significance at 1%, 5% and 10% level respectively,
ii) probability values are in brackets

Table III: Estimated co-efficient of AIM marks in the University using Ordinary Least Square methods (estimating equation (ii))

	(5)	(6)	(7)	(8)
Constant	46.651***(0.000)	43.324***(0.000)	44.905***(0.000)	44.962***(0.000)
Gender	-0.868*(0.093)	-0.920*(0.075)	-1.004*(0.053)	-1.015*(0.050)
Age	-0.932***(0.001)	-0.868***(0.002)	-0.967***(0.001)	-0.974***(0.000)
Baus	-0.792 (0.228)	-1.001(0.127)	-0.988(0.133)	-0.977(0.137)
LSAH	1.160**(0.042)	1.109*(0.053)	1.222**(0.033)	1.226**(0.032)
ATAR	0.428***(0.000)	0.430***(0.000)	0.446***(0.000)	0.447***(0.000)
Dengstd	-2.379***(0.000)			
Dengadv		2.041***(0.000)		
Deng1			0.831(0.545)	
Degn2				1.417(0.634)
Decon	2.120***(0.000)	2.140***(0.000)	2.308***(0.000)	2.327***(0.000)
Dbusstd	2.670*** (0.000)	2.610*** (0.000)	2.502*** (0.000)	2.485***(0.000)
Dlegstd	-0.808 (0.137)	-0.833 (0.127)	-0.665 (0.220)	-0.655(0.228)
R ²	0.132	0.130	0.126	0.126
Adj-R ²	0.129	0.127	0.123	0.123
F-Statistics	50.706 (0.000)	49.947 (0.000)	48.131 (0.000)	48.113 (0.000)

Note: i) ***, ** and * indicates the level of significance at 1%, 5% and 10% level respectively,
ii) probability values are in brackets

It also can be seen from table 2 and 3 that the female students perform significantly better than their male counterpart. The significant and positive coefficients of ATAR indicate that overall performance in HSC is important for achieving higher marks in AIM. Similarly, the coefficients of age, LSAH, Decon and Dbusstd are also significant.

CONCLUSIONS AND RECOMMENDATIONS

The significance of HSC mathematics and English as a predictor of success in higher education for any field of studies has important policy implications. It is clear from this research that standard English and general mathematics does not prepare a student adequately for performing well in AIM. On the other hand, higher levels of mathematics at high school were found to be very important determinants of a student's success in AIM. Students also require some level of English (in our case advanced English) knowledge to study AIM. Therefore, to improve the standard of students and to get higher marks in AIM, it is recommended that the university should offer bridging courses, remedial tutorials, and other learning opportunities to improve students English language skills as well as mathematical knowledge. An alternative and perhaps harsher approach would be to only admit students who have completed high school mathematics and English at an acceptable level. This would send a strong signal to aspiring university students about the subjects they should study at high school, and thus guarantee higher chances of success in their university and future careers. Our study could have been better if we had access to some important variables such as student attendance, time spent on studying AIM etc. Therefore, as data on these variables become available, further research could shed some light on how much the magnitude and significance of the variable of interest in our study change once we incorporate these additional variables into the regression model.

REFERENCES

- [1] Anderson, G.D., Benjamin and Fuss, M. A. (1994), "The determinants of success in University Introductory Economics Courses", *Journal of Economics Education*, Vol. 25 No. 2, pp. 99-119.
- [2] Bacha, N. N. (2003), "English across academic and professional communities: A case study of EFL learners' needs at the Lebanese University". *The official Journal of the Association of American International Colleges and Universities*, Vol. 2, pp. 33-62.
- [3] Birch, E. and Miller, P. (2006), "Student outcomes at university in Australia: a quantile regression approach", *Australian Economic Papers*, Vol. 45, pp. 1-17.
- [4] Butler, J. S., Aldrich, T. and Siegfried, J. J. (1994) "Does more calculus improve student learning in Intermediate Micro and Macro Economic Theory?" *American Economic Review*, Vol. 84 No. 2, pp. 206-210.
- [5] Campbell, N. (2002), "Getting rid of the yawn factor: Using a portfolio assignment to motivate students in professional writing class (My Favourite Assignment)", *Business Communication Quarterly*, Vol. 65 No. 3, pp.42-54.
- [6] Cheng Y. I. (2012), "A study of fifth genders' mathematics self-efficacy and mathematical achievement. *The Asia Pacific Education Researchers*, Vol. 21, pp. 519-525.
- [7] Collins, C., Kenway, J., & Mcleoad, J. (2000), "Factors influencing the educational performance of males and females in school and their initial destinations after leaving school" *Commonwealth Department of education: Deakin University*.
- [8] Commonwealth of Australia. (2009), *Transforming Australia's Higher Education System*, CA.
- [9] Department of Education, Employment and Workplace Relations (DEEWR). (2008), *Review of Australian Higher Education*. Department of Education, Employment and Workplace Relations.
- [10] Durden, G. C., and Ellis, L. V. (1995), "The Effects of attendance on student learning in Principles of Economics", *American Economic Review (Papers and Proceedings)*, Vol. 85 No. 2, pp. 343-346.
- [11] Eskew, R. K. and Faley, R. H. (1988), "Some determinants of student performance in the First College-Level Financial Accounting Course", *The Accounting Review*, Vol. 63 No. 1, pp. 137-147.
- [12] Group of Eight. (2009), *Review of Education in Mathematics, Data Science and Quantitative Disciplines*. Group of Eight: Canberra.
- [13] Gul, F. A., and Fong, S. C. C. (1993), "Predicting success for Introductory Accounting students: Some further Hong Kong evidence", *Accounting Education*, Vol. 2 No. 1, pp. 33-42.

- [14] International Association for the Evaluation of Educational Achievement. (2008), TIMSS 2007 International Mathematics Report, IEA: Boston.
- [15] Jackson, J. (2005), "An inter-University, cross-disciplinary analysis of business education: Perceptions of business faculty in Hong Kong." English for specific Purposes, Vol. 24 No. 3, pp. 293-306.
- [16] King, R. B., McInerney, D. M. (2014), "Mapping changes in student's English and math self-concepts: a latent growth model study" An International Journal of Experimental Educational psychology, Vol. 34 No. 5, pp. 581-597.
- [17] Koh, M. Y., and Koh, H. C. (1999), "The determinants of performance in an accounting degree program", Accounting Education, Vol. 8 No. 1, pp. 13-29.
- [18] Lagerlof, J. N. M. and Seltzer, A. J. (2007), "The effects of remedial Mathematics on the Learning of Economics: A Natural Experiment", Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1004458.
- [19] Lopus, J. S. (1997), "Effects of High School Economics Curriculum on the learning in the College Principles Class", Journal of Economic Education, Vol. 28 No. 2, pp. 143-153.
- [20] Mallik, G., and Basu, P. (2009), "Does high school mathematics improve student learning in economics in university?" The International Journal of Learning, Vol. 16, pp. 15-20.
- [21] Mallik, G., and Lodewijks, J. (2010), "Student performance in a large first year economics subject: which variables are significant?" Economics Papers Vol. 29, pp. 80-86.
- [22] Mallik, G., and Varua, M. (2008), "HSC mathematics results and tertiary success in quantitative units: an Australian experience", Australasian Journal of Economic Education Vol. 5, pp. 1-10.
- [23] Nolan, E. and Ahmadi-Esfahani, F. Z. (2007), "Predicting Performance in Undergraduate Agricultural Economics", The Australian Journal of Agricultural and Resource Economics, Vol. 51, pp. 1-15.
- [24] Newell, G., and Mallik, G. (2011), "The importance of mathematics background in student performance in a property degree", Pacific Rim Property Research Journal Vol. 17 No. 2, pp. 313-328.
- [25] Nosek, B. A., Smyth, F.L. (2011), "Implicit social cognition predict sex differences in math engagement and achievement". American Educational Research Journal, Vol. 48, pp. 1125-1156.
- [26] NSW Board of School Education. (2010), NSW HSC Participation Statistics (from NSWBSE website).
- [27] OECD Programme For International Student Assessment. (2010), PISA 2009 Results: What Students Know and Can Do. OECD: Paris.
- [28] Reid, R. (1983), "A note on the environment as a factor affecting student performance in Principles of Economics", Journal of Economic Education, Vol. 14 No. 4, pp. 18-22.
- [29] Song, M., P.F. Orazem, and Wohlgenuth, D. (2008), "The role of mathematical and verbal skills on the returns to graduate and professional education", Economics of Education Review, Vol. 27, pp. 664-675.
- [30] Yunker, P.J., Yunker, J.A and Krull, G. W. (2009), "The Influence of Mathematics Ability on Performance in Principles of Accounting", The Accounting Educators' Journal, Vol. XIX, pp. 1-20.
- [31] Ward, S., D. Ward, A, T. Wilson and Deck, A. (1993), "Further evidence on the relationship between ACT scores and accounting performance of black students", Issues in Accounting Education (Fall) pp. 239-247.

ⁱ See Birch and Miller (2006), Mallik and Basu (2009), Mallik and Varua (2008) and Mallik and Lodewijks (2010) for details

ⁱⁱ AIM provides a breadth of awareness and knowledge in relevant fields of accounting which is essential to decision making for managers. The subject offered in both semesters at UWS with about 1200-1900 students enrolling per semester for 13 weeks.

Citation: Dr.Ragini Rina Datt, Girijasankar Mallik., "Importance of Mathematics and English from Prior Education in a First Year Accounting Subject". (2018). *Journal of Banking and Finance Management*, 1(2), pp.20-26.

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