Rethinking Pedagogy for Teaching ERP Systems in an Accounting Course: A Study to Determine the Most Effective Method of Transferring IT Skills in an Accounting Curriculum

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ERP (Enterprise Resource Planning) systems have dramatically changed the accounting profession. They are becoming increasingly commonplace in many mid-sized organizations, as well as in large global companies. As the profession continues to evolve, accounting curriculum in universities needs to stay current and relevant to prepare future accountants with fundamental skills and knowledge of ERP systems. Prior research has focused on the need to integrate technology in accounting curriculum (Albrecht and Sack, 2000, David, et.al, 2003). There is a gap in the literature in addressing the issue of adding content to an already full accounting introductory courses or investigation of delivering this content with different pedagogy. This paper explores several different teaching methods of incorporating business process integration and hands on experience with SAP® ERP financial systems. Different teaching methods were used in several sections of an undergraduate accounting course at a large private university.

Specifically, the paper presents an empirical investigation of several pedagogical approaches including live class, video training and script instruction, for teaching SAP® in an introductory accounting course. The Sap University Alliances program provided the platform for the ERP system. Results suggest that significant improvement in IT technical skills improve by using a video training pedagogy. Knowledge of accounting theory, as measured by exam scores, improves in in-class lectures and using a script. Students with high GPA's benefit more from in class lectures than either video or script training, for both IT technical and accounting theory knowledge, as measured by exam scores.

INTRODUCTION

The importance of teaching hands-on ERP system skills in an undergraduate curriculum has been identified as a critical aspect of introducing students to business process integration (Ayyagari, R., 2011, Watson and Stewart, 2004, Winkelmann and Leyh, 2010). By introducing the SAP ERP system into an introductory accounting course at the Welch College of Business, students are able to link theoretical topics they learn in class to the practical nature of an ERP system. The challenges of teaching and modifying curriculum to include ERP systems, however, has also been well documented (Swanson, Z., & Heppner, M., 2011, Joseph & George, 2002). Undergraduate accounting courses are very challenging to teach due to the amount of information covered in these courses and a high rate of students do not pass the course (Shoulders and Hicks, 2008). This paper reports on a study investigating the influence of several pedagogical approaches on learning effectiveness and skills development. The study examines the effectives of in class, videos and script training, the latter two, which can be introduced outside of the classroom with self-directed student learning.

The learning curve for introducing this type of software training in a business curriculum is steep, and unlike computer software skills, not many business faculty have been exposed to formal training or use of ERP computer software. Organizations have identified training and mastery of ERP systems as critical to the success of implementing and operating these complex systems (Amoako-Gyampah, 2004; Esteves and Pastor, 2001; Umble et al., 2003). The program was initially designed, therefore, by both an Accounting Professor with experience in implementing SAP software and an IT Professor with knowledge of ERP systems and platforms. These two professors championed the program, with the support of the department chair and Dean of the college of business, and attended additional SAP training to further develop their ERP skills.

The paper is organized in to six sections. The first section describes establishing the project pilot and rollout of the SAP project at the college of business. The second section describes the methodology and the three different pedagogical approaches and the skill and competencies required to develop a successful program. The third section describes the methodology used in the study to analyze results. The fourth section presents an analysis and empirical results comparing the effectiveness of the different approaches. The fifth section describes the discussion and implications of the learning outcomes and student response to the different approaches. The final section discusses the conclusions of the study and defines further areas of study for future research.

BACKGROUND AND CONTEXT

The ERP integration project developed curricula in both Accounting and Information Systems courses in the Welch College of Business. The program began as a pilot in the introductory Information Technology course (IS 272) in the fall, 2011 semester. In spring, 2011 the program was piloted in one section of the introductory financial accounting course (AC 221), a required course for all business students. In fall, 2011 the SAP curricula was included in all sections of both the introductory IT and introductory accounting course. Both Professors Laosethakul and Tarasovich supervised the roll out of SAP in all sections and trained each professors. A consistent set of materials and assignments was developed and shard with all professors. This new course content brings ERP concepts and SAP software into the classroom. This program gives students in all business disciplines hands-on exposure into how enterprise-wide information systems support planning and management of business processes. The SAP University Alliances program provides university faculty members with tools and resources to teach students how to apply the latest technology in a business context, integrate business strategy and processes, and put information technology (IT) theory into practice. As a result of their participation in the program, students will have significant relevance to their careers and chosen field. The ERP project includes a full suite of software to simulate real-world business functions including: financial and managerial accounting, customer relationship management, production planning, logistics, performance analysis tools, and human resource management.

We attribute the successful implementation of the SAP program at the Welch College of Business to support from the College Dean, Accounting, Associate Dean and the Accounting department chair, as well as the majority of the business school faculty. In addition, assigning two professors from different disciplines, accounting and information systems, to champion the project contributed to the program's success. Integration of SAP ERP in IS272 was a major achievement in preparing students with basic knowledge and skills before they learn SAP ERP in different classes from all disciplines.

We learned that several competitor schools that are members of the SAP university alliance were unsuccessful in rolling out SAP in the classroom. They were unable to obtain overall college buy-in and were unable to convince other business disciplines to adopt SAP. Resistance to change from faculty and politics seem to be the main obstacles. There were other schools that are aggressive in adopting ERP and developing business curriculum including SAP. The decision to introduce SAP ERP in the Accounting major differentiates our college from the competitors. We will use this curriculum change to our advantage in developing local internship programs and working with local companies using SAP. The project team has professional relationships with local industry, including Unilever, one of the world's

largest consumer products companies one of the first companies to implement an SAP ERP system in the United States. A group of students were taken to Unilever, prior to the program roll-out, to make sure the program was relevant and to give students exposure to a real business environment where SAP is used in the accounting department.

METHODOLOGY   AND   APPROACH

Approach   and   Objectives

Three different pedagogical approaches were used to deliver the same SAP exercises for students in the multiple sections of the introductory Financial Accounting Course. In the exercise, students processed several accounting transactions for a fictitious Fitter Snacker company—a manufacturer of snack bars. The exercise has several components including two PowerPoint presentations - an overview of the SAP Organization and History and an outline of ERP systems. The next component of the exercise includes several financial transactions including drilling in to the FI (Financial Accounting) and CO (Controlling) modules of SAP to explore the various elements of the system, recording the purchase of supplies, and entering invoices beyond their limits in order to experience security and tolerances limits within   SAP.

Three   Different   Pedagogical   Approaches

Three different methods were selected to deliver the SAP module. The first delivery method, Instructor Led- are delivered in class by a professor guiding the students through the exercise. Students download the SAP GUI to their laptops prior to class and are given a lecture about SAP with the PowerPoints and then they are guided through the exercise by the instructor projecting their laptop on a large screen in front of the class ensuring that all students are following along with each step of the exercise. The second delivery approach, Video Tutorials- includes Videos prepared by the accounting instructor which included screen captures and narrations to guide the students though the exercise. The third delivery methods, Scripts, includes printed word documents describing the exercise step by step with screen shots printed throughout the document. All background information and PowerPoints for the Video and Script approaches are posted to the students class blackboard account.

In each of the three scenarios a "train the trainer" approach was used to educate the Accounting Professors delivering the SAP materials. Each semester both adjunct and full time accounting professors are trained in using SAP and given materials with SAP access codes for each class along with passwords and sign on ids for each student. A typical undergraduate accounting class has 30 students and is taught over a fourteen week semester. Each student has access to the SAP System in real time twenty four hours a day, seven days a week though the SAP Competency center located at the University of Wisconsin at Milwaukee. The accounting exercise and fictitious company used, Fitter Snacker, were developed my Dr. Brett Wagner and can readily be used by all members of the University Alliance.

Survey   and   Test   Method

To test the students' SAP/ERP knowledge, exam questions were included on the common final exam given for all sections of the accounting course. The questions included both accounting theory and technical ERP SAP questions. The students were also asked to complete a several page survey which included questions about student demographics, familiarity with technology, and learning assessment. This items in the questionnaire were based on the objectives of the exercise, learning outcomes, subject content, and information technology information. The questionnaire was administered to all students enrolled in the course.

The exam questions consisted of several accounting theory multiple choice questions which tested the students' knowledge of accounting theory based on the SAP class exercise assigned. The

technical questions included questions about information technology. The questionnaire consisted of some demographic details such as age, gender, year of school, mid-term grade, major, and rating of the students' computer skills. In the second section of the questionnaire the students were asked to rate their comfort level with SAP, the time spent completing the exercise, and how frequently they went back and forth between the scripts and videos and the computer. The answers were measured using a "Likert" scale of 1-5 (1= poor or not comfortable, 2 = fair/fairly comfortable, 3 = Good/Comfortable, 4 = Excellent, Very Comfortable, 5 = Not sure/Not applicable.) In addition, the scale was used to identify the time the students took to complete the exercise and also how easy it is to follow the pedagogical approach used in each class. Students were also asked to identify any additional problems, issues or perceptions of the system or exercise. A detailed list of the questions asked in the survey instrument are presented in the appendix.

Methodology

To investigate which teaching methods would work best for students, we developed a paper-based tutorial (script) and a video-based tutorial according to a lecture for the SAP exercise. We selected three different sections of a financial accounting class. Each section used a different teaching method for the SAP exercise. A lecture was conducted by an instructor for one section. The other two sections were given the script tutorial and the video tutorial. After the exercise was complete, a performance test was given to students. A performance test composed of the demographic and students' perception on SAP and a teaching method section and a quiz section. The demographic data included age, GPA, perception on basic computer skills, and an average time spent on the SAP exercise. The perception on basic computer skills was measured on a 4-point Likert scale ranging from "1" meaning "Poor," "2" meaning "fair", "3" meaning "good", and "4" meaning "excellent". The test also gathered students' perception on SAP software and how comfortable they used their tutorial to finish the exercise. The test also asked students to identify how comfortable they were using the SAP software and how comfortable they were when they were following the lecture/tutorial. These two questions were measured on a 4-point Likert scale ranging from "1" meaning "Not Comfortable" to "5" meaning "Very Comfortable". The quiz section included 5 questions related to the SAP exercise. Two questions were theoretical-related subjects. The other three questions were technical related subjects. The performance test was distributed to a financial accounting class in spring 2013 and spring 2014. A total of 155 responses were collected.

Analysis   and   Results

The following section reports on the analysis of the data collected from the students and discusses the findings and their implications for the design and delivery of SAP in course curriculum for the future.

Table 1 shows demographic data and students' perception on SAP and teaching methods. An average students' age was approximately 20 years old. An average students' GPA was approximately 3.13. Average students' perception on their computer skill was approximately 3.23. It means that they believed that their computer skill is good. An average time students finished the SAP exercise was approximately one hour and 40 minutes. A closer look on average times spent on the SAP exercise on different sections showed that the video sections spent approximately 2 hours and the lecture and script sections spent about one and half hours to finish the exercise. Students indicated that they seemed to feel "fairly comfortable" (2.46) to use the SAP software. A closer look on this subject showed that the lecture sections seemed to feel more comfortable (2.80) to the use the SAP software than the script (2.54) and the video (2.14) sections, while the video sections showed the least comfortable to use the SAP software. The lecture sections indicated that they felt comfortable (3.27) to follow instruction to do the SAP exercise, while the script (2.65) and the video (2.67) sections indicated that they felt fairly comfortable to follow the script and the video tutorial on their own. There was no significant between ages, GPAs, computer skills, average time spent on the SAP exercise, how comfortable students using the SAP

software, and how comfortable students following lecture/script/video tutorial between students in 2013 and 2104.

Table 1: Demographic Data

	All Samples	2013 Sample	2014 Sample	Significant Difference between 2013 and 2014
Average age				
Lecture	19	19	19	No
Script	20	21	19	No
Video	20	20	20	No
All sections	20	20	20	No
Average GPA				
Lecture	3.09	3.26	3.06	No
Script	3.19	3.06	3.27	No
Video	3.11	3.17	3.06	No
All sections	3.13	3.10	3.16	No
Computer skills				
Lecture	3.26	3.29	3.14	No
Script	3.14	3.08	3.17	No
Video	3.27	3.21	3.32	No
All sections	3.23	3.22	3.24	No
Average time spent on the SAP exercise				
Lecture	1.50	1.29	1.55	No
Script	1.54	1.54	1.54	No
Video	2.02	2.14	1.90	No
All sections	1.74	1.78	1.69	No
How comfortable is a student in using the SAP software				
Lecture	2.80	3.30	3.14	No
Script	2.54	2.62	2.50	No
Video	2.14	2.11	2.16	No
All sections	2.46	2.55	2.34	No
How comfortable is a student in following SAP lecture/script/video				
Lecture	3.27	2.85	2.57	No
Script	2.65	2.54	2.71	No
Video	2.67	2.69	2.65	No
All sections	2.84	2.95	2.73	No

Table 2 shows average scores of students' performance on the SAP test after the exercise. The table shows average total scores (out of 5 points), average scores on theoretical knowledge questions (out of 2 points), and average scores on technical knowledge questions (out of 3 points) from 2013 and 2014.

Table 2: Performance of the SAP test

	2013	2014	2013 & 2014
Total (5)			
Lecture	1.54	1.08	1.35
Script	3.38	0.79	1.61
Video	3.55	1.32	2.40
Theory (2)			
Lecture	0.74	0.62	0.69
Script	1.08	0.32	0.56
Video	1.31	0.68	0.98
Technique (3)			
Lecture	0.81	0.46	0.65
Script	2.31	0.46	1.05
Video	2.24	0.65	1.42

Table 3 shows performance comparisons between methods from 2013, 2014, and both years combined.

Table 3: Statistical Analysis

	2013	2014	Combined
	Significant Difference between methods	Significant Difference between methods	Significant Difference between methods
Total			
Lecture VS Script	*Yes**	No	No
Lecture VS Video	*Yes**	No	*Yes**
Script VS Video	No	No	*Yes**
Theory			
Lecture VS Script	No	No	No
Lecture VS Video	*Yes**	No	*Yes**
Script VS Video	No	*Yes**	*Yes**
Technique			
Lecture VS Script	*Yes**	No	No
Lecture VS Video	*Yes**	No	*Yes**
Script VS Video	No	No	No

*Significant at the .05 level

In 2013 (Table 2 and 3), students using the video showed significant higher overall learning performance than students attending a lecture. Students using the script showed significantly higher overall learning performance than students attending a lecture. A closer look at these results showed that students using the video showed significantly higher performance on both theoretical and technical areas than students attending a lecture. However, students using the script showed significantly higher performance on only technical areas than students attending a lecture. This could be caused by the SAP test being done at the end of the semester. Students using the script and the video were able to review before the exam with the full material instead of only their notes from the class.

In 2014 (Table 2 and 3), no significant difference on overall learning performance was found between three teaching methods. However, a closer look at these results showed that students using the video showed significantly higher performance in theoretical areas than students using the script.

When the overall data from 2013 and 2014 were combined (Table 2 and 3), the results showed that students using the video performed significantly better than students using the script and students attending lecture. A closer look at the overall data from 2013 and 2014, the results showed that students using the video performed significantly better in both theoretical and technical areas than students attending lecture. In addition, the results showed that students using the video performed significant better in theoretical areas than students using the script.

DISCUSSION AND IMPLICATION

This section summarizes our findings for each of our research questions and presents implications for accounting educators, researchers and for future studies. Based on 2013 results, the video seems to be a more effective tool for both theoretical areas and technical areas than a lecture, and the script is more effective tool in technical areas than the lecture. While statistical results from 2014 did not show the same results found in 2013, students using the video still showed higher learning performance average scores than the other two groups. As such, the combined 2013 and 2014 data showed that the video is still more effective tool for both theoretical areas and technical areas than the lecture. Based on our observation students using the script tended to skim through theoretical sections or even skipped them. They focused on technical sections rather than theoretical sections because they tried to finish the exercise quickly. On the other hand, it was more difficult for students using the video to do so. Students using the video had to listen through both theoretical sections and technical sections. That explains why students using the script spent less time to finish the exercise than students using the video (Table 1).

Even though the same script and video developed in 2013 were used in 2014, the findings in 2014 were different from findings in 2013. Thus, we took a closer look for any differences factors of the same teaching methods between 2013 and 2014. Students using the video and students using the script showed significantly lower learning performances in both areas in 2014 than those in 2013 (Table 2). However, there was no significant difference of learning performance of students attending a lecture between 2013 and 2014. These findings indicate that other factors that did not existed in 2013 affected students' learning performance in the script and the video section in 2014. We found no significant differences of age, GPA, perceived computer skill, time spent the exercise, and how comfortable students using the SAP software, and how comfortable students using the script/video between 2013 and 2014 (Table 1). The researchers investigated further and found that instructors from sections that used the script and a section that used the video in 2013 were instructed to emphasize roles of an ERP in today business and how important for students to have an exposure to an ERP system, such as SAP, before they graduate.
However, different instructors were assigned to teach sections that used the script and the video. They were not instructed to do the same process, and thus they did not emphasize the same information in their sections before they started the SAP exercise. The researchers believe that the lack of understanding of a benefit students would get from being exposed to the SAP software impacted a degree to which students paid attention to the exercise, and in turn, caused them to do poorly in the test.

CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Incorporating the SAP software in an undergraduate business curriculum is challenging. This paper describes several approaches to incorporating the training in to an already full accounting course for all undergraduate business students in a college of business. Findings suggest that accounting theory pedagogy may be better delivered by video technology than lecturing. In addition, information technology subjects are better delivered in scripts than videos or lectures. Also, delivering the learning with video or lectures as an assignment frees up more lecture time for in classroom discussions. The study also found significant difference of students' comfort using the SAP software when guided by a professor in a classroom setting.

Given the diversity of students in the class, past technology experience, majors, years in college, it will be necessary to continue to reevaluate the effectiveness of the technology training in the classroom.

It is critical to keep students up to date with the changing technology in the business world. The exercise offered will continue to be expanded to include more learning modules and exposure to the latest version of the SAP ERP software.

This study set out to investigate which teaching methods between the traditional classroom lecture, the paper-based tutorial, and the video-based tutorial would be best for delivering SAP exercises in an accounting class. The researchers found that students performed best using the video-based tutorial. The video-based tutorial allowed students to complete the SAP exercise on their own pace. They could repeat the video wherever they were not clear about an instruction. However, the researchers suggest that it may be best to introduce the SAP software and deliver the first SAP exercise using a lecture-based instruction. The SAP software is not user-friendly software. Based on the findings, students seemed to feel more comfortable using the software and the instruction to do the exercise when the instructors lead them in the classroom. We believe that this is a critical step before students start using the video-based tutorial to do next SAP exercises on their own. Students need to feel comfortable with the software and gain confidence that they could operate it on their own later. In addition, before the first SAP exercise, instructors need to emphasize the roles of ERP in today business and benefit from getting their hands on the SAP software before they graduate. Students would have a stronger motivation and a clear picture of the purpose of doing the SAP exercise. This role of instructors at the beginning might make difference in term of the quality of students' SAP skills. The researchers suggest that an instructor role in informing the roles of ERP in today business and SAP skills to students should be further investigated to confirm its impact on students' SAP learning performance.

The findings of this study have some implication limitations. First, it was conducted with the financial accounting class using an accounting-related SAP exercise. The nature of the exercise is a concept-based exercise rather than a skilled-based exercise. The video-based tutorial showed the best result for this study, but it is possible that a finding could be different when a skill-based exercise is used. A further study is required to use SAP in different classes that are more technical oriented such as a management information system class. Second, one exercise was used to test three different teaching methods, and each class section used one type of teaching methods. This limited the same students to one type of teaching methods. While this study shows that the video-based tutorial works best, it may be a one-size fit all solution. Different students have different levels of computer self-efficacy, computer anxiety, computer attitude, and other computing-related psychological factors. We can conclude, therefore, that some students may do better with one type of teaching method vs. another. This limitation of this research implication and our understanding could lead to a future research opportunity. A future study could investigate whether all teaching methods/tools implemented with each students on more than several exercises may results in a different finding. After students have opportunities to experience different teaching methods with different exercises, students' learning performance could be measured along with their computing-related psychological factors to understand what type of teaching methods would work best for what type of students. These findings might be different or the same as this study. If it is different, having several types of teaching methods/tools available to students so they could choose what is best for their learning will be the best solution for teaching SAP exercises.

REFERENCES

Albrecht, W. S., and R. J. Sack. (2000), "Accounting Education: Charting the Course through a Perilous Future." Accounting Education Series, Vol. 16. Sarasota, FL: American Accounting Association.

Amoako-Gyampha, Kwasi (2004), "ERP Implementation Factors: a Comparison of Managerial and End-User Perspectives." Business Process Management Journal, Vol. 10, No. 2, pp. 171-183.

Ayyagari, R. (2011), "Hands-on ERP learning: Using Open ERP®, an alternative to SAP®." Journal of Information Systems Education, Vol. *22*, No. 2, pp. 123-133.

David, J., Mccracken, H., Reckers, P., (2003), "Integrating Technology and

Business Process Analysis into Introductory Accounting Courses." Issues in Accounting Education, Vol. 18, No. 4, pp.417-425.

Esteves, J., Pastor, J., and Casanova, J. (2002), "Monitoring Business Process Redesign in ERP Implementation Projects", Proceedings of the Seventh Americas Conference in Information Systems (AMCIS), Dallas, Texas

Joseph, G., & George, A. (2002), "ERP, learning communities, and curriculum integration." Journal of Information Systems Education, Vol.13, No 1, pp. 51–58.

Shoulders, C.D. and S. A. Hicks. (2008), "ADEPT learning cycles enhance intermediate accounting student learning success." Issues in Accounting Education, Vol. 23, No 2, pp. 161-182.

Swanson, Z., & Hepner, M. (2011), "Knowledge management ERP curriculum Design/Mapping (theory and development tools)." Decision Sciences Journal of Innovative Education, Vol. 9, No 2, pp. 209-226.

Umble, Elizabeth J., Ronald R. Haft, and M. Michael Umble, (2003), "Enterprise Resource Planning: Implementation Procedures and Critical Success Factors." European Journal of Operational Research, Vol. 146, pp. 241-257.

Watson, E. and Stewart, G. (2004), "Guest Editorial: Enterprise systems integration and management." Journal of Enterprise Information Management, Vol. 17, No. 1, pp. 5-7.

Winkelmann, A. and Leyh, C. (2010), "Teaching ERP systems: A multi-perspective view on the ERP system market." Journal of Information Systems Education, Vol. 21, No. 2, p. 233.

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SAP Survey

Professor: Circle one: Boyer   Tarasovich   Vassilowitch

1. Name _____
2. School Year (check one) Freshmen _____Sophomore _____Junior_____ Senior_____
3. Age _____
4. Gender: Male_____ Female_____
5. GPA – overall _____
6. Midterm Grade in this class _____
7. Major _____
8. Question Matrix table: ***Insert a check mark in the ranking of each item:***

	1 = Poor	2= Fair	3 = Good	4 = Excellent	5 = Not sure
How do you rate your computer skills?					
	1 = Not comfortable	2 = Fairly Comfortable	3 = Comfortable	4 = Very Comfortable	5 = Not sure
How comfortable are you following the SAP tutorial on your own? *(Only Professor. Boyer's class)*					
	1 = Not comfortable	2 = Fairly Comfortable	3 = Comfortable	4 = Very Comfortable	5 = Not sure
How comfortable are you following the SAP videos on your own? *(Only Professor. Vassilowitch's Class)*					

	1 = Not comfortable	2 = Fairly Comfortable	3 = Comfortable	4 = Very Comfortable	5 = Not sure
How comfortable are you following the SAP lecture in class? *(Only Professor. Tarasovich's Class)*					
	1 = Not comfortable	2 = Fairly Comfortable	3 = Comfortable	4 = Very Comfortable	5 = Not sure
How comfortable are you using the SAP software?					
	1 = Not comfortable	2 = Fairly Comfortable	3 = Comfortable	4 = Very Comfortable	5 = Not sure
When you encountered a problem that you did not understand on the tutorial, how comfortable are you to figure it out by yourselves?					
	Less than 1 Hour	Between 1 -2 hours	2-3 hours	4 or more hours	5 = Not sure
Please estimate the time you spent to finish the SAP exercise					
	1 = Not frequently	2 = Somewhat frequently	3 = Frequently	4 = Very Frequently	5 = Not sure
While you were doing SAP exercise, how frequently did you go back and forth between the tutorial and the exercise					
	1= It is hard to follow	2= Somewhat hard to follow	3 = It is not hard to follow, but hard to understand a concept behind the exercise	4 = It is not hard to follow and understand a concept behind the exercise.	5 = Not sure

After you finished the SAP exercise rate your experience					

Please list any other comments on the SAP exercise in your class:

_____
_____
_____
_____
_____
_____