



## Case Study Facts

Course: Economics for Public Relations and Corporate Communication, Arts and Tourism, three year Degree programmes

**Instructor:** Prof. Angela Besana



**Digital Product in Use:**Connect with SmartBook

**Number of Students:** more than 600

The mission of the IULM University is to train professionals able to face the challenges and seize the opportunities that emerge from the international markets and scenarios, but it is also to shape students who are aware both of themselves and of their own value.

### Challenge & Background

Angela's decision to use McGraw Hill's Connect, a web-based assignment and assessment platform, was borne out of her students' desire for efficiency in their studying. Angela explained that, "My students are often telling me they don't have enough time." She said that often they will approach her looking for guidance on which topics will reap them the most rewards in terms of their studying. "They're looking for the instruments, tools and exercises so they can fit the most in," she said.

With this in mind, Angela was looking for a hub where her students could spend their time answering multiple choice questions, testing themselves with quizzes and see their progress. "This was something they have a lot of appetite for," Angela commented.

Angela was also looking for something that would help her learners build the correct skills needed for academic learning. With time and attention as scarce resources for her students, Angela explained that it isn't enough to simply memorise the content she is teaching and highlighted how crucial it was for her students to be summarising and schematising. "Students need to learn how to build the skills needed to do this," she said, adding, "It takes a certain confidence to be able to summarise and schematise."

Before utilising Connect, Angela was using an online community learning environment built by her university. This was a spot where resources could be shared and where Angela had previously hosted the quizzes she built herself. Building these questions took Angela a long time, but, despite this, Angela was keen to do it. "Exercises were crucial to my students' learning as they recognised that the more times they did something, the better they would become."

McGraw Hill staff showed Angela the Connect platform and the functionality, from SmartBook to quizzes and assignments. Angela could see that Connect could help counter the challenges she was facing: from spending a lot of time creating questions for quizzes through to supporting her learners in building not just their knowledge but the skills needed to move to higher levels of thinking.

In 2018, she introduced Connect to her courses. She shared how she has experienced a number of benefits since she started using it.

The first benefit she highlighted was the insight the reporting functionality within Connect has given her. "With Connect, I am able to monitor the progress of my students with regular frequency." She talked about the assignment reports she is able to see. This was something she could check with the system she had in place before Connect, "but with Connect, the reporting goes much deeper." The assignment report shows the number of questions, the number of attempts, and at the end you have the total attempts too. "You can see different outcomes from their performances, for different and increasing difficulties of topics and questions. I'm able to see how the whole group is doing." Angela also noted that, before Connect, "Our focus was on the final grade, but now I can monitor how students are getting on throughout the whole course."

Another benefit was the creation of questions in the databank. With the old platform, Angela had to write questions herself. With Connect, there are hundreds of topic-specific questions that come pre-built with the platform. Instructors can use them as they are or edit them with ease. Angela said her students would often be asking for more questions and so Connect has been instrumental in saving her time and delivering what her students are asking for.

Looking at the online functionality of Connect,
Angela mentioned that students are very keen,
at the start of the course, to "appreciate the new
medium." But she said that the enthusiasm will
sometimes decrease over time. Angela commented
that, with Connect, her learners have been able to
dip into it as and when they need to. "Students can
return to it at any time, so when it comes to their
exams, they can easily pick it back up and use it
again."

On the topic of bolstering students' ability to learn not just the content, but also be developing their capacity to think autonomously, Angela commented that Connect has been of huge value. She nodded to the way the chapters can be viewed in SmartBook and believes that view actually helps students see the interrelation between topics which is of benefit.

In addition to the design of the platform, Angela also shared that the flexibility with creating assignments has also been valuable. "Topics in Economics are joined," she said. "Taking elasticity of demand, for example, it's a topic that returns throughout the whole course, the part of microeconomics. The benefit of Connect is that you can create assignments per chapter but you can also create high level assignments that straddle all the chapters. This really helps enhance the understanding of those core concepts and allows learners to join their understanding across chapters and this is so important."

On a last note, Angela shared that she believes Connect has afforded her the ability to have meaningful discussions with her students around why some answers were wrong. The interaction the platform has afforded her has been of benefit.

#### Connect and COVID-19

when it came to COVID, Angela believes she was in a good position because of already having much of her course online with Connect. Angela commented that Connect had become "even more important" with the challenges of teaching in the midst of a pandemic. "Connect can help engage your community despite the screens and despite the pandemic. Learners know their professors are available and that is just so important," she said. She sees Connect as a tool for "relationship and mental support."

#### Results

# Performances of a positive and efficient relationship in groups where Economics is taught to different targets.

Since 2018 Angela has been assigning exercises with Connect to all of her learners, both students of Public Relations and Arts & Tourism degree programmes. Assignments were created using questions from the databank of the book, and were assigned as soon as lectures were completed for each chapter, from microeconomics to macroeconomics. Assignments were available during the whole academic year and students were allowed to any number of attempts they would like.

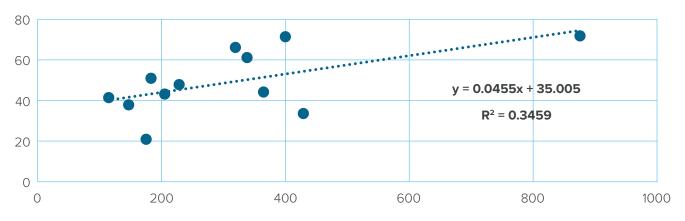
From 2018 until the end of 2019, Angela collected a range of data (performances) from number of attempts, to mean scores and maximum scores for each assignment. The assignments were aligned to every chapter: introduction to economics,

demand, supply, market equilibrium, elasticity, theory of the firm, cost theory, perfect competition, monopoly, imperfect competition, introduction to macroeconomics, the Keynesian model, the Keynesian model with the role of Government and imports/exports, the role of money and monetary policy.

Assignments had different maximum scores and Angela was impressed with her students as their mean scores were always more than 60% percent of maximum scores. Maximum scores could be 30 for very small assignments (with few questions) and 110 for big assignments (with lots of questions).

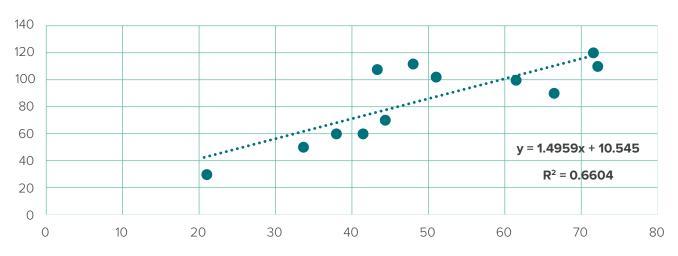
After having collected performances, Angela estimated linear regression for number of attempts (x) and mean scores (y) for assignments from 2018 till the end of 2019.

Figure 1 shows the positive correlation between number of attempts, X and mean scores, Y (with Pearson coefficient +0.58)



Source for Figure 1: elaboration of data with Excel

Figure 2 shows the positive correlation for mean and max scores (with Pearson coefficient +0.81).



Source for Figure 2: elaboration of data with Excel

At the same time, Angela tested the same dataset for multiple regression with the mean score as dependent variable, predicted max scores and number of attempts as independent variables. Here follows the equation as result of the linear and multiple regression with main components of R coefficients and ANOVA Table.

Table 1. R coefficients and ANOVA of multiple and linear regression:

Mean score = +0.027NumberOFattempts + 0.376MAXscore

R	R-square	R-square adjusted	
,878	,770	,719	

Source for Table 1: elaboration with SPSS Software

Table 2. ANOVA

	Sum of Square	df	Mean Square	F	Sign.
Regression	2128,532	2	1064,266	15,066	,001
Residual	635,761	9	70,640		
Total	2764,293	11			

Source for Table 2: elaboration with SPSS Software

As regression analysis shows, increasing number of attempts led to mean scores, which were above 60% of maximum scores. All coefficients of regression and multiple regression were positive and significant.

Commenting on the data she had and the analysis she had performed, Angela commented that, "This confirms that the timing of delivery of assignments (soon after the end of lecturing of every chapter) and frequency of attempts, with the availability of assignments during the whole academic years, positively affects students' performances."

Summarising her review, Angela said, "This shows empirically that Connect is a flexible medium which is efficiently matching with contemporary lecturing."

#### Conclusion

For Angela, Connect has enabled her to be more present with her learners. She believes the tools she has available as part of Connect have enabled her passion to come through, as well as providing valuable mental support. "The students know I am there for them," she commented. "Connect can help to engage your community despite the screens and despite the pandemic. Students know their professors are available and that is so important."

For more information on Connect and SmartBook, please visit mheducation.it

We are a learning science company that is driven by a vision to help unlock the full potential of each learner.

At McGraw Hill, we believe our contribution to creating a brighter future lies with our deep understanding of how learning happens and how the mind develops. Based on this, we develop methods to make the learning process more effective, and we apply all of this to creating digital and print solutions that empower educators and propel learners on a path toward success.