Stevens Institute of Technology

School of Business

**AACSB
ASSURANCE OF LEARNING**

**Master of Science in Technology Management**

**LEARNING GOAL # 4

Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

August 16, 2018

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**1. INTRODUCTION: LEARNING GOAL #4**

**Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

This learning goal assessment takes place in course EMT 752: Corporate Entrepreneuring. Other courses are also involved in this assessment exercise: EMT 741 Innovation Management Process, EMT 642: Marketing Management in Technical Organizations, and the final capstone course EMT 798: Integration & Application of Technology.

In EMT 751, students are challenged to propose a corporate entrepreneurship project in their company. They are assessed on the content of their proposals rather than on whether they succeed in having their proposals actually implemented (see rubrics in section 3 below.) However, a high percentage of these proposals (71% in 2007-08) are actually funded. Some examples are provided below.

**Examples of Funded Projects**

Due to the confidential nature of many of the projects the companies prefer not to give the actual funding amount. However, it typically ranges from $50,000 to $300,000. A sampling of the projects funded in one of my classes, whose brief descriptions are not confidential, are indicated below:

1. Johnson and Johnson’s Digital Patient Information Initiative provides a digital alternative to compliment the current prescription drug insert

2. The scope of “Access Anywhere Project” is to install a secure 802.11n wireless network in each of Paterson Public Schools 61 schools and administrative buildings. The wireless network will be an adjunct component to the district’s existing privately-owned gigabit fiber-optic Metropolitan Area Network (MAN). The wireless network will provide users access to the district’s data, video and voice (convergence with district phone network) systems.

3. The sales force alignment engine system project will be able to satisfy the unmet customer needs of Roche Canada Sales and Marketing team and Regional Business Managers. The alignment process enables users to view and maintain the alignment of customers (hospitals, pharmacies, federal agencies and professionals) with various postal codes based on geographical locations for the entire product-based sales forces.

4. The Roche Business Process Outsourcing Project will be focused on creating a new business service by delivering in a one-to-many format using hosted software that is paid for on a pay-per-use basis.

**2. LEARNING OBJECTIVES AND TRAITS**

|  |  |
| --- | --- |
|   | EMTM Learning Goal, Objectives and Traits |
| **Learning Goal:** | *(Learning Goals are broad and not necessarily directly measurable.)*  |
| **EMTM - 4** | **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses. [Koen]** |
|   |  |
| **Learning Objectives** |  |
| **Objective 1:** | *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital.* |
| **Traits** |   |
| Trait 1: | Be able to understand and gain support of the organization for a new product or service |
| Trait 2: | Be able to write a compelling business plan with a clear understanding how the product or service will bring a competitive advantage and win in the market place. |
| **Objective 2:** | *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.* |
| **Traits** |   |
| Trait 1: | Understand the key practices in the front end |
| Trait 2: | Understand the key practices in the front end associated with developing a breakthrough product |
| Trait 3: | Understand the current practices for determining the unarticulated customer needs |

**3. RUBRICS**

|  |  |
| --- | --- |
| **Objective 1** | *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **5** | **10** |  |
| Trait 1: | Be able to understand and gain support of the organization for a new product or service | Be unable to gain political support for the project or service in a company | Be able to gain support from an executive champion | Be able to gain support of an executive champion and from key decision executives in the company  |   |
| Trait 2: | Be able to write a compelling business plan with a clear understanding how the product or service will bring a competitive advantage and win in the market place. | Be unable to write a business plan that is coherent. | Be able to write and present a business plan which identifies the unmet customer needs, how competitive advantage is achieved and the winning proposition for the company. | Be able to write and present a business plan in a clear and concise fashion which identifies the unmet customer needs, how competitive advantage is achieved and the winning proposition for the company. |   |
| **Criterion:** | **Does not meet expectations: 0 – 15; Meets: 15-20 ; Exceeds: 20-30** |  |

|  |  |  |
| --- | --- | --- |
| **Objective 2** | *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.* |   |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **5** | **10** |  |
| Trait 1: | Understand the key practices in the front end | Be unable to articulate key practices in the front end | Be able to discuss the relative importance of senior management, the differences between opportunity, idea and concepts.  | Be able to discuss the relative importance of senior management, the differences between opportunity, idea and concept. In addition, be able to discuss the different practices used in exploitative and exploratory projects.  |   |
| Trait 2: | Understand the key practices in the front end associated with developing a breakthrough product | Be unable to articulate the differences between exploratory and exploitative projects. | Be able to discuss the differences between the preferred organizational structures and processes associated with exploitative and exploratory projects | Be able to discuss the different theories for exploitative projects as set forth by Christensen, Tushman and VG Govindarajan |   |
| Trait 3: | Understand the current practices for determining the unarticulated customer needs | Be unable to articulate how exploratory and exploitative projects are discovered. | Understand the relative roles of focus groups, ethnography and lead users. | Be able to discuss the relative roles of focus groups, ethnography and lead users with considerable expertise |   |
| **Criterion:** | **Does not meet expectations: 0 – 15; Meets: 15-20 ; Exceeds: 20-30** |  |  |

**4. ASSESSMENT PROCESS**

**EMTM Goal #4: Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

|  |  |
| --- | --- |
| **Where & When Measured?**  | **How Measured?** |
| Embedded in design assignment in required courses **EMT 752: Corporate Entrepreneuring**, EMT 741 Innovation Management Process, EMT 642: Marketing Management in Technical Organizations, and in final capstone course EMT 798: Integration & Application of Technology. | Sampling: All EMTM Students Description: Instructor's grade of individual and team-based assignments administered during the course. Performance on final Capstone project determined by a panel of EMTM and Howe School instructors.  |

**Assessment Process for Mgt 752:**

The first rubric (i.e. Being able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital) has two traits. The first trait is being able to understand and gain support of the organization for a new product or service. Projects which received funding where given a 10 and those unfunded where given a 5. The second trait was being able to develop a compelling business plan. Business plans with a grade of 90 and above where given a 10, between 85 and 90 a 5 and lower than 85 were given a 0. The actual grade of the business plan was determined in equal parts by the student’s executive champion in their company, by an executive review committee which evaluated the project in the last class and the instructor.

The second rubric (i.e. Being able to understand the issues, processes and constraints associated with developing a breakthrough product or service.) has three separate traits. Each of the traits was matched against different project and case assignments. The assessment grade was then assigned based on the student grade. A grade greater than 90 was assigned a 10, between 85 and 90 got a 5 and lower than 85 received a 0.

The assessment was done using all of the students in the class.

**5. RESULTS OF LEARNING GOAL ASSESSMENT - INTRODUCTION**

The results of the initial learning goal assessments carried out to date are included below.

**Explanation**

Each learning goal has a number of learning objectives and performance on each objective is measured using a rubric that in turn contains a number of desired “traits”. Students are scored individually on each trait.

The grading sheets for each student are used to develop a Summary Results Sheet for each learning goal objective. A selection of these Summaries is included below.

The first table in the Summary Results Sheet for a learning objective and trait gives the counts of students falling in each of the three categories:

- Does not meet expectations
- Meets expectations
- Exceeds expectations

The right-hand column in the table is used to record the average score of the students on each trait. This table provides an indication of the relative performance of students on each trait.

The second table on each sheet provides the counts of students who fall in each of the above three categories for the overall learning objective.

The person doing the assessment provides explanatory comments and recommendations on the bottom of the Results Summary Sheet. The recommendations improve content or pedagogy changes for the next time the course is given.

# 6. RESULTS OF ASSESSMENT: SPRING 2008

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: July 2008 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 38 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 13 | 25 | 8.28 |
| 2:  | 9 | 0 | 29 | 7.63 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 7.95 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 7 | 8 | 23 |
| **Students meeting or exceeding expectations:** | **82%** |

**COMMENTS:** The results reflected a lack of detailed understanding of what is required to develop a business plan and acquire social capital within the organization.

**REMEDIAL ACTIONS:** Spend additional time focusing on the social aspects of developing and getting a business plan funded within the company

LEARNING GOAL #4; **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

 ASSESSMENT DATE: ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 38 (EMT(MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 14 | 0 | 24 | 6.31 |
| 2:  | 4 | 0 | 34 | 8.94 |
| 3: |  18  |  0 |  20 |  5.26 |
| **Average Grade (Maximum 10)** | 6.83 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 9 | 15 | 14 |
| **Students meeting or exceeding expectations:** | **76%** |

**COMMENTS:** The results indicated weakness in the understanding in the area of breakthrough innovation.

**REMEDIAL ACTIONS:** Enhance the module on breakthrough innovation and introduce an additional case to provide more learning experiences on breakthroughs.

#  7. SPECIFIC STEPS TAKEN IN SPRING 2008

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2008**

**Increased the amount of time spent in the course discussing the social aspects of gaining acceptance of new projects within the company.**

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2008**

The module on breakthrough innovation was further enhanced and an additional case (i.e. Mercury Rising: Knight Rider’s Digital Venture) which focused on difficulty of incumbent firms to achieve success in new areas.

# 8. RESULTS OF ASSESSMENT: SPRING 2009

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: October 2009 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 32 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 7 | 25 | 8.91 |
| 2:  | 0 | 0 | 32 | 10.00 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 9.45 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* |   | 6 | 26 |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS:** The results reflect a good understanding of the business planning process.

**REMEDIAL ACTIONS:** None recommended

LEARNING GOAL #4; **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

 ASSESSMENT DATE: ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 32 (EMT(MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 9 | 0 | 23 | 7.19 |
| 2:  | 7 | 0 | 25 | 7.81 |
| 3: | 11 | 0 | 21 | 6.56 |
| **Average Grade (Maximum 10)** | 7.19 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 7 | 15 | 10 |
| **Students meeting or exceeding expectations:** | **78%** |

**COMMENTS:** The results indicate a primary weakness in a few students as well as using a new case methodology in the class. The students are graded based upon how well prepared they are the case discussions and the extent of insights they make in class. Trait 3 is graded on the 1st case. And as such the students are not as prepared for this different way of teaching.

**REMEDIAL ACTIONS:** Spend more time in the beginning of the class will be spent so that the students better understand case-based teaching.

# 9. SPECIFIC STEPS TAKEN IN SPRING 2010

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2010**

None. Results were at an acceptable range

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2010**

Spend more time in the beginning of the class will be spent so that the students better understand case-based teaching.

# 10. RESULTS OF ASSESSMENT: SPRING 2010

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: August 2011 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 32 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 14 | 23 | 8.11 |
| 2:  | 6 | 2 | 29 | 8.11 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 9.45 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 8 | 6 | 23 |
| **Students meeting or exceeding expectations:** | **78%** |

**COMMENTS:** These results are hard to explain as the teaching methodology has not changed from 2009. The results possibly can be attributed to weakness in the students – i.e. is the students are less qualified. Would take a wait and see perspective on this learning objective and determine the outcome for 2011.

**REMEDIAL ACTIONS:** None recommended at this time.

LEARNING GOAL #4; **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

 ASSESSMENT DATE: August 2011 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 32 (EMT(MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 15 | 6 | 16 | 5.14 |
| 2:  | 9 | 10 | 18 | 6.21 |
| 3: | 9 | 12 | 16 | 5.95 |
| **Average Grade (Maximum 10)** | 5.77 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 11 | 9 | 17 |
| **Students meeting or exceeding expectations:** | **70%** |

**COMMENTS:** The results are lower than 2009 – despite the fact that more time was spent on giving the students a better understanding of case-based teaching. Again, I would attribute the results to weaker students. As such I would take a wait and see attitude.

**REMEDIAL ACTIONS**: None recommended at this time. .

# 11. SPECIFIC STEPS TAKEN IN SPRING 2011

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2011**

None. Results attributed to weaker students.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2011**

None. Results attributed to weaker students. .

# 12. RESULTS OF ASSESSMENT: SPRING 2011

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: August 2011 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 30 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 15 | 15 | 7.50 |
| 2:  | 0 | 09 | 21 | 8.50 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 8.0 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* |   | 9 | 21 |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS:** The results reflect a good understanding of the business planning process.

**REMEDIAL ACTIONS:** None recommended

LEARNING GOAL #4; **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

 ASSESSMENT DATE: August 2011 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 30 (EMT(MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 4 | 4 | 22 | 8.00 |
| 2:  | 3 | 15 | 12 | 6.50 |
| 3: | 11 | 3 | 16 | 5.83 |
| **Average Grade (Maximum 10)** | 6.78 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 5 | 6 | 19 |
| **Students meeting or exceeding expectations:** | **83%** |

**COMMENTS:** The coursedifficulty level was increased by adding additional cases. As a result, a small part of the class did not meet expectations. Though the % not meeting expectations is lowest of all the 4 years as indicted in the Table below.

|  |  |
| --- | --- |
| **Year** | **% Not meeting Expectations** |
| 2008 | 18% |
| 2009 | 21% |
| 2010 | 34% |
| 2011 | 15% |

REMEDIAL ACTIONS: Continue to spend time in the very beginning of the class to review case-based teaching..

# 13. SPECIFIC STEPS TAKEN IN SPRING 2012

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2012**

None. Results were at an acceptable range

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2012**

Further increase the time in the beginning of the class so that students better understand case-based teaching.

# 14. RESULTS OF ASSESSMENT: SPRING 2012

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: June 2012 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 20 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 11 | 9 | 7.3 |
| 2:  | 5 | 0 | 15 | 7.5 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 7.4 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 5 | 0 | 15 |
| **Students meeting or exceeding expectations:** | **75%** |

**COMMENTS:** The results indicate weaknesses in preparing the business plan. These results indicate both a lack of awareness of what a good business plan looks like and weak students. This year I added some new material and did not spent little time in reviewing the expectations for the final business plan deliverable.

**REMEDIAL ACTIONS:** Spend more time in the 2013 class reviewing the business plan expectations.

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

 ASSESSMENT DATE: June 2012 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 20 (EMT(MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 5 | 0 | 15 | 7.5 |
| 2:  | 7 | 0 | 13 | 6.5 |
| 3: | 12 | 0 | 8 | 4.0 |
| **Average Grade (Maximum 10)** | 6.0 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 6 | 0 | 14 |
| **Students meeting or exceeding expectations:** | **70%** |

**COMMENTS:** The percentage not meeting expectations increased again this year. I believe that this was due to main issues: 1. Weakness of the students and 2. The students were unprepared for the rigor of case-based teaching.

|  |  |
| --- | --- |
| **Year** | **% Not meeting Expectations** |
| 2008 | 18% |
| 2009 | 21% |
| 2010 | 34% |
| 2011 | 15% |
| 2012 | 30% |

REMEDIAL ACTIONS: Continue to spend time in the very beginning of the class to review case-based teaching..

# 15. SPECIFIC STEPS TAKEN IN SPRING 2013

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2013**

Spend more time in the 2013 class reviewing the business plan expectations.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2013**

Further increase the time in the beginning of the class so that students better understand the rigor of case-based teaching.

# 16. RESULTS OF ASSESSMENT: SPRING 2013

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: June 2013 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 20 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 0 | 25 | 10.0 |
| 2:  | 0 | 17 | 8 | 6.6 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 8.3 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 0 | 20 | 5 |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS:** The results this year were significantly improved over previous years with amazingly ALL of the projects funded. A goal which has never been achieved so far. I believe the results are three fold: 1) an improving economy so that the companies are more receptive to new initiatives, 2) a better class and) some luck.

**REMEDIAL ACTIONS:** none planned.

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.*

 ASSESSMENT DATE: June 2013 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 20 (EMT(MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 4 |  | 21 | 8.4 |
| 2:  | 3 |  | 22 | 8.8 |
| 3: | 4 |  | 21 | 8.4 |
| **Average Grade (Maximum 10)** | 8.5 |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category** *(Based on Average score across all traits)* | 1 | 18 | 16 |
| **Students meeting or exceeding expectations:** | **97%** |

**COMMENTS:** The percentage not meeting expectations significantly decreased this year. I believe that the main reason is the quality of the students.

**REMEDIAL ACTIONS**: None planned.

# 17. SPECIFIC STEPS TO BE TAKEN IN SPRING 2014

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2013**

None planned.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2013**

None planned.

**18. RESULTS OF ASSESSMENT: SPRING 2014**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: June 2014 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 29 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 8 | 21 | 8.6 |
| 2:  | 2 | 2 | 25 | 9.0 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 8.8 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **93%** |

**COMMENTS:** This year a total of 7 projects were funded out of 11. Which is a more typical of expectations. As opposed to the previous year’s two of the students did not meet expectations. This was largely due to the fact that they were not adequately prepared for the presentations that they gave on their final project.

**REMEDIAL ACTIONS:**  Spend more time on coaching the students prior to their final presentation.

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.*

 ASSESSMENT DATE: June 2014 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 28 (EMT(MGT) 752)

(Could not count all of the students as some were absent when the case was discussed)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 14 |  | 14 | 5.0 |
| 2:  | 14 |  | 14 | 5.8 |
| **Average Grade (Maximum 10)** | 5.4 |

Note that Trait 3 – understanding current practices for determining unarticulated customer needs was not measured. The course was modified to have the students visit 25 customers during the course and create customer narratives during each visit. However, a rubric for measuring the quality of these customer narratives was not developed which would allow this trait to be quantitatively measured. A methodology for doing this will be developed for 2015.

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **50%** |

**COMMENTS:** There was an increase in the number of students which did not meet expectations. This was due to the much tougher methodology for determining case knowledge and participation in class. The case discussions were videotaped and evaluated by the instructor after the class. As a result, it became apparent that many of the students did not understand the material. Which is the reason for large number of students not meeting expectations.

**REMEDIAL ACTIONS**: The low number of students meeting expectations was a direct result of two issues. The first is that one measure was removed from the metric – trait 3 – understanding current practices for determining unarticulated customer needs which caused traits 1 and 2 to count more. A new rubric will be created for trait 3 so it can be measured. Traits 1 and 2 were low as a result of a much more rigorous methodology for assessing case studies which resulted in tougher grading. The tougher grading surprised many of the students. So the remedial action is twofold. To introduce the new grading process earlier in the course and make sure the students are aware of it. Which will result in students being better prepared for class combined with an increase in the expectation level.

**19. SPECIFIC STEPS TO BE TAKEN IN FALL 2014**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2015**

Develop additional teaching methodology to provide feedback to the students on their final project. Especially the weaker ones.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN FALL 2014**

Discuss the new more rigorous methodology for grading cases in the 1st class. Also develop a rubric for determining the extent to which the students understand unarticulated customer needs based on the teams 25 customer visits.

**OVERVIEW: EMTM LEARNING GOAL # 4**

**After Seventh Round Review Spring 2014**

Overall the course was still able to achieve a 64% funding rate – which is higher than most years. Expect last year where it was 100%. Overall this year additional rigor was added to the course – with more in-depth evaluation of student’s case knowledge and participation combined with an increase and rigor around the customer visits. This increased rigor resulted in less students meeting expectations. Hopefully this can be corrected by better identifying expectations at the beginning of the semester.

#

**20. RESULTS OF ASSESSMENT: FALL 2014**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: Jan 2015 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 22 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 4 | 18 | 9.1 |
| 2:  | 7 | 15 | 0 | 3.4 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 6.3 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **86%** |

**COMMENTS:** This year a total of 5 projects funded out of 7. Which is a typical of expectations. The overall percentage of students meeting expectations dropped from previous years. This was a result of students not meeting expectations for trait 2. This was due to two factors. The final presentation style was changed to a Tedx story type of presentation and a new rating rubric was developed by the executives doing the grading.

**REMEDIAL ACTIONS:**  Spend more time on coaching the students in how to make a TedX type presentation

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.*

 ASSESSMENT DATE: Jan 2015 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 18 (EMT(MGT) 752)

(Could not count all of the students as some were absent when the cases were discussed)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 7 | 3 | 7 | 4.7 |
| 2:  | 1 | 3 | 13 | 8.1 |
| 3: | 2 | 5 | 10 | 6.9 |
| **Average Grade (Maximum 10)** | 6.6 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **83%** |

**COMMENTS**: The number that met expectations this year increased from 50% to 83% as the students were made aware earlier of the new more rigorous grading process for the cases. As a result, the students came much better prepared for the case/

**REMEDIAL ACTIONS**: Continue to spend time with the students in the beginning of the class and discuss how to study for a case and discuss how the case grading will be done. .

**21. SPECIFIC STEPS TO BE TAKEN IN FALL 2015**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN FALL 2015**

Spend more time with the students in preparing them for the final presentation which is in now in a Tedx story telling modality.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN FALL 2015**

Spend more time on with the students in understanding how to prepare for case and that the rigor of how the cases will be graded.

**OVERVIEW: EMTM LEARNING GOAL # 4**

**After Eighth Round Review Fall 2014**

Overall the course was still able to achieve a 71% funding rate – which is higher than most years. Once again additional rigor was added to the grading by changing the rubric which was given to the external executives who judged the final business plan. As a result, students meeting expectations dropped to 86% which is lower than that in the previous 2 years. This was also a result of a new final story presentation modality in the course. Trait 2 meeting expectations increased from 50% to 83% as a result of the increased guidance given to the students with regard to how the cases where to be graded. Overall this course continues to add new teaching attributes – Tedx story telling presentations combined with increasing grade rigor – a new grading rubric for the executives who grade the final projects.

**22. RESULTS OF ASSESSMENT: SPRING 2016**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: July 2016 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 20 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 0 | 20 | 10 |
| 2:  | 5 | 14 | 1 | 4.0 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 7.0 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **100%** |

**COMMENTS:** In previous semesters self-selected teams were charged with developing a corporate entrepreneuring project, not in the company’s pipeline, an attempt to get funding for the project. Typically, 50% of the teams were able to get funded – except in 2013 where all teams were able to get funded. The course was changed this year where every person in the class was required to an individual project in their company. This was done in order to increase the learning as the project member in the team, from last year’s course, often need to do more work than the other team members. However, the course now required an extra burden where the team member had to do a considerable amount of work on their own. Amazingly all of the students got funded – as evidenced by a letter from the company stating such with the amount of the funding. So, it is not surprising that 100% of the students meet or exceeded this expectation. The only area needing some was in trait 2 where the students did a TedX presentation and were evaluated by a group of invited executives.

**REMEDIAL ACTIONS:**  Spend more time on coaching the students in how to make a TedX story type presentation

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.*

 ASSESSMENT DATE: July 2016 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 20 (EMT(MGT) 752)

(Could not count all of the students as some were absent when the cases were discussed)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 1 | 17 | 9.7 |
| 2:  | 9 | 0 | 10 | 5.6 |
| 3: | 6 | 1 | 11 | 6.4 |
| **Average Grade (Maximum 10)** | 7.2 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **78%** |

**COMMENTS**: The number of students who met expectations was 78% - a little lower than last year (86%) – but remains much higher than in the Fall of 2014 (50%) when a new more rigorous case grading methodology was introduced.

**REMEDIAL ACTIONS**: Continue to spend time with the students in the beginning of the class and discuss how to study for a case and discuss how the case grading will be done.

**23. SPECIFIC STEPS TO BE TAKEN IN SPRING 2017**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2017**

Spend more time with the students in preparing them for the final presentation which is in now in a Tedx story telling modality.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN FALL 2015**

Spend more time on with the students in understanding how to prepare for case and that the rigor of how the cases will be graded.

**24. RESULTS OF ASSESSMENT: SPRING 2017**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: June 2017 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 18 ( EMT (MGT) 752)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 5 | 13 | 10 |
| 2:  | 8 | 5 | 2 | 2.5 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 6.3 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **89%** |

**COMMENTS:** Beginning in 2016 the course was changed where every student in the class was required to do an individual project in their company. This was done in order to increase the learning as previous projects were done in four student teams from multiple companies. Typically, 50% of the teams were able to get funded. Though last year surprisingly 100% of the students were able to get funding for their individual project. This year 70% of the projects got funded. Which is more reasonable given the challenge and expectations from previous years. The students meeting expectations last year was 100%. Not unexpected since all projects were funded. This year 89% of the students meets expectations. The lower number was due to several weaker students and tougher grading by the executives who evaluated the final project. Presumably spending more time with the weaker students could help improve the outcomes for this goal.

**REMEDIAL ACTIONS:**  Spend more time on coaching weaker students.

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.*

 ASSESSMENT DATE: June 2017 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 12 (EMT(MGT) 752)

(Could not count all of the students as some were absent when the cases were discussed)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 0 | 12 | 10 |
| 2:  | 2 | 0 | 10 | 9.2 |
| 3: | 0 | 5 | 7 | 7.9 |
| **Average Grade (Maximum 10)** | 8.7 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **100%** |

**COMMENTS**: The number of students who met expectations was 100% - which is higher than in previous years. This is probably an artifact due to the fact that several of the weaker students missed the case studies due to sickness or weather-related absences. The students are still responsible for the case – but are given an alternate assignment which is not used in calculating the outcome. Would continue to spend time with the students so that might be able to be better prepared for the case discussions.

**REMEDIAL ACTIONS**: Continue to spend time with the students in the beginning of the class and discuss how to study for a case and discuss how the case grading will be done.

**25. SPECIFIC STEPS TO BE TAKEN IN SPRING 2018**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2018**

Spend more time on coaching weaker students.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2018**

Continue to spend time with the students in the beginning of the class and discuss how to study for a case and discuss how the case grading will be done.

**26. RESULTS OF ASSESSMENT: SPRING 2018**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

LEARNING OBJECTIVE # 1; *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

ASSESSMENT DATE: Aug 2018 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 13 ( EMT (MGT) 752)

Five of the eighteen students in the class could not attend the final project reviews (Goal 2 below)– which were done by external executives.

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 4 | 9 | 8.5 |
| 2:  | 1 | 5 | 7 | 6.9 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | 7.7 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **100%** |

**COMMENTS:** Beginning in 2016 the course was changed where every student in the class was required to do an individual project in their company. This was done in order to increase the learning as previous projects were done in four student teams from multiple companies. In 2016 100% of the students were able to get funding for their individual project. In 2017 and 2018 70% and 71% of the projects got funded respectively. Which are more reasonable given the challenge and expectations from 2016. Students meeting expectations was 100%. This was mainly the result of having more students prepared for the executive review. Last year 8 students failed to meet the goal 2. This year only 1 failed to meet goal 2.

**REMEDIAL ACTIONS:**  Continue to spend time in coaching weaker students.

LEARNING OBJECTIVE # 2; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service.*

 ASSESSMENT DATE: August 2018 ASSESSOR: Peter Koen

NO. OF STUDENTS TESTED: 15 (EMT(MGT) 752)

(Could not count all of the students as some were absent when the cases were discussed)

|  |  |  |
| --- | --- | --- |
|  | Number of Students |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| 1:  | 0 | 1 | 14 | 9.6 |
| 2:  | 7 | 0 | 8 | 5.3 |
| 3: | 1 | 5 | 9 | 7.7 |
| **Average Grade (Maximum 10)** | 7.5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Students by Category**(Based on Average score across all traits) | Not meet expectations | Meet Expectations | Exceed Expectations |
| **Students meeting or exceeding expectations** | **100%** |

**COMMENTS**: The number of students who met expectations was 100% - which is the same as last year. Though the number of students who failed to meet expectations for goal 2 – understanding breakthroughs – increased from 16% to 46% indicating that I need to spend more time reviewing the organizational issues with regard to breakthrough innovations.

**REMEDIAL ACTIONS**: Spend more time with the students on the strategy and organizational issues with respect to breakthrough innovations.

**27. SPECIFIC STEPS TO BE TAKEN IN SPRING 2019**

**LEARNING GOAL #4:** **Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.**

**Responsibility: Peter Koen**

**LEARNING OBJECTIVE # 1;** *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*

**SPECIFIC STEPS TAKEN IN SPRING 2019**

Continue to spend more time on coaching weaker students.

**LEARNING OBJECTIVE # 2**; *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*

**SPECIFIC STEPS TAKEN IN SPRING 2019**

Spend more time with the students on the strategy and organizational issues with respect to breakthrough innovations.

**OVERVIEW: EMTM LEARNING GOAL # 4**

# 28. OUTCOMES: MSTM LEARNING GOAL # 4 AFTER ROUNDS OF ASSESSMENT

**After First Round Review Spring 2009**

The number of projects funded increased from 50% in 2007 to 71% in 2008. While it is difficult to directly attribute this success to just better understanding of social capital, since the success is caused by many factors, it is directionally very encouraging. In addition, I believe that the students have a better understanding of both sustaining and disruptive businesses with the addition of the extra case.

**After Second Round Review Spring 2010**

The number of projects funded this year decreased to 42% from 71% in 2009. Overall, I believe that the decrease in funding level and the higher number of students not meeting the minimum traits can be attributed to weaker students.

**After Third Round Review Spring 2011**

The number of projects funded remained approximately the same increasing slightly from 41% in 2010 to 45% in 2011. The results for learning objective 1 were found to be in an acceptable range and the number of students not meeting the 2nd trait was the lowest of the 4 years.

**After Fourth Round Review Spring 2012**

The number of projects funded remained approximately the same though decreasing slightly to 38%. In 2010 41% were funded and 45% in 2011. The results for learning objective 1 will require increase emphasis on business plan development during the course. The results for objective 2 will require a further increase in reviewing the case-based teaching methodology with the students so that they understand the rigor required.

**After Fifth Round Review Spring 2012**

The number of projects funded remained approximately the same though decreasing slightly to 38%. In 2010 41% were funded and 45% in 2011. The results for learning objective 1 will require increase emphasis on business plan development during the course. The results for objective 2 will require a further increase in reviewing the case-based teaching methodology with the students so that they understand the rigor required.

**After Sixth Round Review Spring 2013**

The number of projects funded this year was 100%!!. In 2010 41% were funded, 45% in 2011 and 38 % in 2013. In addition, the number of students not meeting expectations dramatically decreased. No changes in the course are planned for this year.

**After Seventh Round Review Spring 2014**

Overall the course was still able to achieve a 64% funding rate – which is higher than most years. Expect last year where it was 100%. Overall this year additional rigor was added to the course – with more in-depth evaluation of student’s case knowledge and participation combined with an increase and rigor around the customer visits. This increased rigor resulted in less students meeting expectations. Hopefully this can be corrected by better identifying expectations at the beginning of the semester.

**After the Eighth Round Review Fall 2014**

Overall the course was still able to achieve a 71% funding rate – which is higher than most years. Once again additional rigor was added to the grading by changing the rubric which was given to the external executives who judged the final business plan. As a result, students meeting expectations dropped to 86% which is lower than that in the previous 2 years. This was also a result of a new final story presentation modality in the course. Trait 2 meeting expectations increased from 50% to 83% as a result of the increased guidance given to the students with regard to how the cases where to be graded. Overall this course continues to add new teaching attributes – Tedx story telling presentations combined with increasing grade rigor – a new grading rubric for the executives who grade the final projects.

**After the Ninth Round Review Spring 2016**

Overall the course was still able to achieve an amazing 100% funding rate – which is higher than most years. In addition, the team assignment was changed from team too individual to assure that all of the students had to demonstrate competence in obtaining social capital and understand the process of corporate entrepreneuring in their company. Trait 2 meeting expectations dropped slightly from last year to 78%. The students still require increased guidance with regard to how the cases where to be graded.

**After Tenth Round Review Spring 2017**

Overall the change done in 2016 were students are given individual projects in their company seems to working with a 70% funding rate. Lower than last year, which was 100%. But suspect this could not be continuously achieved. Trait 1 decreased from 100% to 89%. Which I suspect is more realistic of the steady state. The drop can be attributed to weaker students and tougher grading by the executives. Trait 2 increased from 78% to 100%. This was more of a fluke since many of the weaker students missed the case grading used to determine the goal trait. However, the remedial action to spend more time with the students in how to prepare and discuss cases would remain unchanged from 2016.

**After Eleventh Round Review Spring 2018**

Overall, in terms of individual project funding level, which is a good metric for the learning has remained stable at about 70% (i.e. 70% in 2017 and 71% in 2018). The students met expectations (i.e. 100%) for both objective 1 and 2. The students met expectations for objective 1 this year, in contrast to last year where only 89% met expectations. Last year 8 students were below expectations in trait 1 while this year only 1 student was. This result was achieved by improving the coaching on the final project presentation to the executives. In contrast, the number of students failing to meet trait 2 increased from 2 students in 2017 to 7 students in 2018. This trait revolves around understanding organizational issues around breakthroughs. As a result, I will need to spend more time on reviewing the theory and tactics associated with this issue.

The following table shows the average scores on each goal objective for the last 11 years.

|  |  |  |
| --- | --- | --- |
|  | Objective 1Develop a business plan | Objective 2Understand knowledge related to product development |
| Spring 2008  | 8.0 | 6.8 |
| Spring 2009  | 9.5 | 7.2 |
| Spring 2010  | 9.5 | 5.8 |
| Spring 2011  | 8.0 | 6.8 |
| Spring 2012  | 7.4 | 6.0 |
| Spring 2013  | 8.3 | 8.5 |
| Spring 2014 | 8.8 | 5.4 |
| Fall 2014 | 6.3 | 6.6 |
| Spring 2016 | 7.0 | 7.2 |
| Spring 2017 | 6.3 | 8.7 |
| Spring 2018 | 7.7 | 7.7 |

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# 29. CLOSE LOOP PROCESS – CONTINUOUS IMPROVEMENT RECORD

**Assurance of Learning**

**Assessment/Outcome Analysis**

**Close Loop Process - Continuous Improvement Record**

**Program:** Executive Master of Technology Management

**Goal 4:** Identify, assess, launch, and lead organizational strategic initiatives in a technology-based environment for the creation of new businesses and sustaining existing businesses.

**Goal Owner:** Peter Koen

**Where Measured:** Embedded in design assignment in required courses **EMT 752:** Corporate Entrepreneuring, **EMT 741** Innovation Management Process, **EMT 642**: Marketing Management in Technical Organizations, and in final capstone course **EMT 798**: Integration & Application of Technology.

**How Measured:** Sampling: All EMTM Students

Description: Instructor's grade of individual and team-based assignments administered during the course. Performance on final Capstone project determined by a panel of EMTM and Howe School instructors.

**Closing the Loop: Actions taken on specific objectives**

|  |  |
| --- | --- |
| **Objectives** | 1. *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*
2. *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*
 |
| **When Assessed:** | *August 2018*  |
| **Remedial Action** | Continue to spend more time on coaching weaker students (Learning Objective 1). Spend more time with the students on the strategy and organizational issues with respect to breakthrough innovations. (Learning Objective 2). |
| **Outcome from previous assessment:** | Overall, in terms of individual project funding level, which is a good metric for the learning has remained stable at about 70% (i.e. 70% in 2017 and 71% in 2018). The students met expectations (i.e. 100%) for both objective 1 and 2. The students met expectations for objective 1 this year, in contrast to last year where only 89% met expectations. Last year 8 students were below expectations in trait 1 while this year only 1 student was. This result was achieved by improving the coaching on the final project presentation to the executives. In contrast, the number of students failing to meet trait 2 increased from 2 students in 2017 to 7 students in 2018. This trait revolves around understanding organizational issues around breakthroughs. As a result, I will need to spend more time on reviewing the theory and tactics associated with this issue.  |
| **Specific steps to be taken in 2019** | *Continue to coach weak students on how to effectively present their project and increase the amount of discussions related to organizational and process issues related to breakthrough innovations. .*  |

|  |  |
| --- | --- |
| **Objectives** | *1. Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital* *2.Be able understand the issues, processes and constraints associated with developing a breakthrough product or service* |
| **When Assessed:** | *June 2017*  |
| **Remedial Action** | Spend more time on coaching weaker students. (Learning Objective 1). Continue to spend time with the students in the beginning of the class and discuss how to study for a case and discuss how the case grading will be done. (Learning Objective 2). |
| **Outcome from previous assessment:** | ***After Tenth Round Review Spring 2017***Overall the change done in 2016 were students are given individual projects in their company seems to working with a 70% funding rate. Lower than last year, which was 100%. But suspect this could not be continuously achieved. Trait 1 decreased from 100% to 89%. Which I suspect is more realistic of the steady state. The drop can be attributed to weaker students and tougher grading by the executives. Trait 2 increased from 78% to 100%. This was more of a fluke since many of the weaker students missed the case grading used to determine the goal trait. However, the remedial action to spend more time with the students in how to prepare and discuss cases would remain unchanged from 2016 |
| **Specific steps to be taken in 2018** | *Increase in the amount of coaching for weak students more in-depth discussion of how to prepare and discuss cases.*  |

|  |  |
| --- | --- |
| **Objectives** | *1. Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital* *2.Be able understand the issues, processes and constraints associated with developing a breakthrough product or service* |
| **When Assessed:** | *July 2016*  |
| **Remedial Action** | Spend more time with the students in preparing them for the final presentation which is in now in a Tedx story telling modality (Objective 1.) Continue to spend time with the students in the beginning of the class and discuss how to study for a case and discuss how the case grading will be done.  |
| **Outcome from previous assessment:** | ***After Ninth Round Review Spring 2016***Overall the course was still able to achieve an amazing 100% funding rate – which is higher than most years. In addition, the team assignment was changed from team too individual to assure that all of the students had to demonstrate competence in obtaining social capital and understand the process of corporate entrepreneuring in their company. Trait 2 meeting expectations dropped slightly from last year to 78%. The students still require increased guidance with regard to how the cases where to be graded. |
| **Specific steps to be taken in 2017** | *Increase in the amount of coaching prior to the final presentations and more in-depth discussion of how the students’ performance will be evaluated during the case studies.*  |
| **Remedial Action** |  (Spend more time with the students in preparing them for the final presentation which is in now in a Tedx story telling modality. Objective 1). Spend more time on with the students in understanding how to prepare for case and that the rigor of how the cases will be graded. (Objective 2). |
| **Outcome from previous assessment:** | ***After Eight Round Review Fall 2014***Overall the course was still able to achieve a 64% funding rate – which is higher than most years. Expect last year where it was 100%. Overall this year additional rigor was added to the course – with more in-depth evaluation of student’s case knowledge and participation combined with an increase and rigor around the customer visits. This increased rigor resulted in less students meeting expectations. Hopefully this can be corrected by better identifying expectations at the beginning of the semester. |
| **Specific steps taken in 2015** | *Increase in the amount of coaching prior to the final presentations and more in-depth discussion of how the students’ performance will be evaluated during the case studies.*  |

|  |  |
| --- | --- |
| **Objectives** | 1. *Be able to develop a business plan for a new product or service and understand the associated political and organizational constraints which are associated with gaining social and financial capital*
2. *Be able understand the issues, processes and constraints associated with developing a breakthrough product or service*
 |
| **When Assessed:** | *Spring 2014*  |
| **Remedial Action** | Spend more time on coaching the students prior to their final presentation (Objective 1). The new more rigorous methodology for assessing case studies would be discussed in more depth with the students in the first class so that they could become better prepared. (Objective 2). |
| **Outcome from previous assessment:** | ***After Sixth Round Review Spring 2014***Overall the course was still able to achieve a 64% funding rate – which is higher than most years. Expect last year where it was 100%. Overall this year additional rigor was added to the course – with more in-depth evaluation of student’s case knowledge and participation combined with an increase and rigor around the customer visits. This increased rigor resulted in less students meeting expectations. Hopefully this can be corrected by better identifying expectations at the beginning of the semester. |
| **Specific steps taken in 2015** | *Increase in the amount of coaching prior to the final presentations and more in-depth discussion of how the students’ performance will be evaluated during the case studies.*  |
| **When Assessed:** | *Spring 2013* |
| **Remedial Action** | *None* |
| **Specific steps taken in spring 2014** | *None* |
| **Outcome from previous assessment:** | ***After Fifth Round Review Spring 2013****The number of projects funded this year was 100%!!. In 2010 41% were funded, 45% in 2011 and 38 % in 2013. In addition, the number of students not meeting expectations dramatically decreased. No changes in the course are planned for this year.* |
| **When Assessed:** | *Spring 2012* |
| **Remedial Action** | *For objective 1 to spend more time in the class reviewing the business plan expectations and for objective 2 to continue to spend time in the very beginning of the class to review case-based teaching* |
| **Specific steps taken in spring 2013** | *Further increase the time in the beginning of the class so that students better understand the rigor of case-based teaching.* |
| **Outcome from previous assessment:** | ***After Fourth Round Review Spring 2012*** *The number of projects funded remained approximately the same though decreasing slightly to 38%. In 2010 41% were funded and 45% in 2011. The results for learning objective 1 will require increase emphasis on business plan development during the course. The results for objective 2 will require a further increase in reviewing the case-based teaching methodology with the students so that they understand the rigor required.* |
| **When Assessed:** | *Spring 2011* |
| **Remedial Action** | *None for objective 1. For objective 2 to continue to spend time in the very beginning of the class to review case-based teaching* |
| **Specific steps taken in spring 2012** | *None for objective 1. For objective 2 to further increase the time in the beginning of the class so that students better understand case-based teaching.* |
| **Outcome from previous assessment:** | ***After Third Round Review Spring 2011****The number of projects funded remained approximately the same increasing slightly from 41% in 2010 to 45% in 2011. The results for learning objective 1 were found to be in an acceptable range and the number of students not meeting the 2nd objective was the lowest of the 4 years.* |
| **When Assessed:** | *Spring 2010* |
| **Remedial Action** | *None* |
| **Specific steps taken in spring 2011** | *None. Results attributed to weaker students.* |
| **Outcome from previous assessment:** | ***After the Second Round Review Spring 2010****The number of projects funded this year decreased to 42% from 71% in 2009. Overall, I believe that the decrease in funding level and the higher number of students not meeting the minimum traits can be attributed to weaker students.* |
| **When Assessed:** | *Spring 2009* |
| **Remedial Action** | *None* |
| **Specific steps taken in spring 2010** | *None for objective 1. For objective 2 to spend more time in the beginning of the class so that the students better understand case-based teaching.* |
| **Outcome from previous assessment:** | *A****fter the First Round Review Spring 2009****The number of projects funded increased from 50% in 2007 to 71% in 2008. While it is difficult to directly attribute this success to just better understanding of social capital, since the success is caused by many factors, it is directionally very encouraging. In addition, I believe that the students have a better understanding of both sustaining and disruptive businesses with the addition of the extra case.* |
| **When Assessed:** | *Spring 2008* |
| **Remedial Action** | *For objective 1 spend additional time focusing on the social aspects of developing and getting a business plan funded within the company and for objective 2 enhance the module on breakthrough innovation enhanced. An additional case to provide more learning experiences on breakthroughs was also introduced.* |
| **Specific steps taken in spring 2008** | *For objective 1 the amount of time spent in the course discussing the social aspects of gaining acceptance of new projects within the company was increased. For objective 2 the module on breakthrough innovation was further enhanced and an additional case (i.e. Mercury Rising: Knight Rider’s Digital Venture) which focused on difficulty of incumbent firms to achieve success in new areas.* |

**APPENDIX**

**Assessment Exercise**

**Final Project Assignment**

Objective: To develop an actual new project in your company

Case: To develop a new project for your company. The structure should follow the business plan outline as discussed in Module V.

Deliverable: 13-page business plan as indicated below.

|  |  |
| --- | --- |
| **Topic** | **Pages** |
| 1. Executive Summary | 1 |
| 2. Scope | 1 |
| 3. Market and Customer Definition | 2 |
| 4. Competitor Analysis | 1 |
| 5. Why you will win? | 1 |
| 6. Market Entry Strategy | 1/2 |
| 7. Technology Strategy | 2 |
| 8. Operational Strategy | 1/2 |
| 9. Project Plan | 1/2 |
| 10. Project Organization | 1/2 |
| 11. Financials | 1 |
| 12. Risk Assessment | 2 |
| **Total** | **13** |

The business plan should also include:

1. A letter from the executive champion. See below for the details of the letter depending if the project was funded or not.

2. Team member contribution form for each of person on the team. The affected students will be notified when this occurs.

Final Presentations (11-page multimedia):

|  |
| --- |
| **Topics** |
| 1. Introduction |
| 2. Recommendations |
| 3. Scope |
| 4. Market Justification – including video segment from the customer |
| 5. Competitive Assessment |
| 6. Why the new project will win? |
| 7. Market Entry Strategy |
| 8. Technology Strategy |
| 9. Project Plan |
| 10. Risk Assessment |