

*Maynooth Metrics: An Approach to Evaluating the  
Role of Critical Skills in Preparing Students for  
Academia and Beyond*

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**Maynooth  
University**  
National University  
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# CURRICULUM REFORM

## *National Strategy for Higher Education to 2030 (NSHE)*

- ▶ A comprehensive anonymous student feedback system.
- ▶ Flexible entry and progression routes.
- ▶ Acknowledge work placement and service learning.
- ▶ Expand the provision of induction and preparation programmes.
- ▶ More broad-based courses.
- ▶ Increase interdisciplinary learning opportunities.
- ▶ Reform undergraduate programmes to include scope for the development of the generic skills necessary for effective engagement in society and in the workplace.

# CURRICULUM REFORM: THE 'MAYNOOTH EDUCATION'

- ▶ Greater flexibility and choice.
  - ▶ Take Major and Minor options within most Degree programmes.
  - ▶ Combine subjects across the Arts and Sciences (where possible).
- ▶ Second Year Elective Streams.
- ▶ Extensive Experiential Learning opportunities.
- ▶ Pursue a Modern Language as a component of any Degree.
- ▶ E-portfolios to capture students' cumulative achievements over the course of their Degree.
- ▶ First Year Critical Skills programme.
- ▶ Combine large class lectures with small group learning to support students' transition to university.

# MAYNOOTH UNIVERSITY GRADUATE ATTRIBUTES

- ▶ Deep understanding of the fundamentals of their chosen discipline.
- ▶ Essential Critical Skills for life, work and citizenship.
- ▶ Be intellectually responsible, open-minded, adaptable, curious and creative.
- ▶ Be numerate, literate and articulate.
- ▶ Be capable of gathering and critiquing information from a variety of sources.
- ▶ Be self-motivated, able to work independently, and contribute effectively to team projects.
- ▶ Behave with integrity, honesty, a sense of justice, and respect for human rights.
- ▶ Appreciate cultural diversity.
- ▶ Uphold high ethical and professional standards.
- ▶ Have a love of learning and a rich intellectual life.

# CURRICULUM REFORM AT MAYNOOTH UNIVERSITY

‘Evaluation of Curriculum Reform at Maynooth University’

*Journal of the European Higher Education Area: Policy,  
Practice and Institutional Engagement*, No. II (2017)

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# THE NEW CURRICULUM: 'MAYNOOTH EDUCATION' (YEAR 1)

- ▶ Reduced CAO entry routes from 50 to approximately 35.
- ▶ Flexible Degree structure [Double Major; Major with Minor; Single Major].
- ▶ New Marks and Standards to enable more flexible progression.
- ▶ Combine different subjects in a variety of ways.
- ▶ Pursue a modern language alongside any Degree programme.
- ▶ 25 Elective Streams were offered to Second-Year undergraduates [17% uptake].
- ▶ 7 Critical Skills options were offered to First-year undergraduates [25% uptake].

# TOP 5 MOST POPULAR ELECTIVE STREAMS (2016-2017)

- ▶ FILM & SCREEN STUDIES
- ▶ ENTREPRENEURSHIP, CREATIVITY & PROBLEM SOLVING
- ▶ SCIENCE IN SOCIETY
- ▶ MAKING SENSE OF WAR & CONFLICT
- ▶ GENDER AND SEXUALITY IN SOCIETY AND CULTURE

# CRITICAL SKILLS IN THE WORKPLACE

- ▶ “To succeed in business in the 21st century, you need to become a critical thinker.”  
—John Baldoni (leadership consultant ), ‘How Leaders Should Think Critically’  
*Harvard Business Review* (2010)
- ▶ “Critical thinkers are constantly learning from a variety of sources about a variety of topics....Employees and managers who actively study are more up-to-date with facts and have more sources of information to bring to bear on a task that moves the organization forward.”  
—Stephen A. Quinn & Gary A. Williamson, ‘Eight Habits of Effective Critical Thinkers’  
*American Management Association* (2011)
- ▶ “Critical thinkers can offer original ideas that spur discussion and strengthen teamwork.”  
—Christian Fisher, ‘How is Critical Thinking Related to Workplace Success?’  
*Careertrend.com* (2017)
- ▶ “We no longer live in a world where technical skills are the most important factor for success in most jobs....Instead, soft skills...are at the forefront.”  
—Kate Hayes, ‘The Soft Skills that Matter Most for Millennials in the Workplace’  
*Forbes.com* (2017)



# CRITICAL SKILLS

## 2016 List of Critical Skills Subjects at Maynooth University

- ▶ Culture and Representation [Thematic]
- ▶ Great Ideas that Changed the Western World [Thematic]
- ▶ Globalisation: Integrating Worlds [Thematic]
- ▶ Social Analysis of Everyday Life [Thematic]
- ▶ Critical Skills for Social Science [Thematic]
- ▶ Exploring the power of Language, Literature, and Culture [Thematic]
- ▶ Universal Critical Skills: University Learning and Beyond [Universal]

# CRITICAL SKILLS AT MAYNOOTH UNIVERSITY

- ▶ Academic Writing
- ▶ Analysis and use of Data
- ▶ Analytical Thinking
- ▶ Communication
- ▶ Critical Thinking
- ▶ Developing Learning Skills
- ▶ Evaluating Evidence
- ▶ Information Processing
- ▶ Interpersonal Skills
- ▶ Making Balanced Judgments
- ▶ Public Speaking
- ▶ Teamwork

# CRITICAL SKILLS

## 2017-2018 New Critical Skills Subjects at Maynooth University

- ▶ BOOKS, READING AND WRITING IN MEDIEVAL IRELAND
- ▶ CREATIVE THINKING AND PROBLEM SOLVING
- ▶ CRITICAL SKILLS FOR SCIENCE

Details of all Critical Skills modules can be found at:  
<https://www.maynoothuniversity.ie/critical-skills/page>

# MAYNOOTH METRICS

| METRIC FOCUS      | METRIC TITLE   | DESCRIPTION  | DATA TOOL/METHOD  |
|-------------------|--|--|---|
| <b>Monitoring</b> | Prospective Critical Skills Student Recruitment Metric | Monitor the way in which the Critical Skills programme is packaged to future students during Open Days, Press Releases, Social Media Bulletins, & Admissions Literature. | Observation.  |
| <b>Monitoring</b> | Critical Skills Communication Metric                   | Monitor the information relayed to incoming First Years at Orientation & Registration.   | Observation.<br>Incoming Student Surveys.   |
| <b>Monitoring</b> | Critical Skills Student Profile Metric                 | Monitor enrolment numbers & patterns to establish profile of the Critical Skills Cohort (Degree Programme, Subject Choices, Entry Route, etc... ).                       | Student Records Data.   |
| <b>Monitoring</b> | Critical Skills Curriculum Mapping Metric              | Monitor development of Critical Skills Programme   | Observation via Module Design, Moodle Conversations, Course Content, Feedback Levels, & Assessment Procedures.<br>Pilot Report. |

# MAYNOOTH METRICS

| METRIC FOCUS      | METRIC TITLE                               | DESCRIPTION   | DATA TOOL/METHOD  |
|-------------------|--|---|---|
| <b>Evaluation</b> | Preparation for University Learning Metric | Identifying Critical Skills Programme Outcomes via Exam Results, Subject Choices, Degree Choices, Progression Rates, & Completion Rates. Comparing results of Critical Skills students with that of non-Critical Skills students. | Student Records Data.<br>External Examiner Reports.<br>Observations within large  |
| <b>Evaluation</b> | Attitudes Metric                           | Identifying attitudes towards the Critical Skills Programme from Year 1 of Implementation to Year 3.  | Staff Surveys/Focus Groups.<br>Student Surveys/Focus Groups.<br>ISSE (Irish Survey of Student Engagement).  |
| <b>Evaluation</b> | University Impact Metric                   | Identifying the impact of the Critical Skills Programme on Enrolment Numbers, Teaching and Learning, HR, University Systems, & Student Services.  | Student Records Data.<br>Staff Interviews.<br>SELE (Student Evaluation of Learning Experience) Report.  |
| <b>Evaluation</b> | Preparation for Workplace Metric           | Measuring the effectiveness of the Critical Skills programme in preparing students for the workplace & in cultivating Maynooth University's Graduate Attributes.  | E-portfolios & LinkedIn.<br>Interviews with Employers of Maynooth Graduates.<br>Experiential Learning Office Data.<br>Alumni Office Post-Graduation Surveys.<br>ISSE. |

# MAYNOOTH UNIVERSITY ANNUAL INCOMING STUDENT SURVEY 2016/17

Dr Laura McElwain: Institutional Research Officer

- 69% of students stated that the new *Maynooth Education* was a 'very important' or 'important' factor in influencing their decision to come to Maynooth.
- 87% of students had heard of the new Critical Skills Modules prior to the commencement of lectures.
- 30% stated that they intended to take a Critical Skills module.
- **Post-registration, 25% of the total First-Year Undergraduate cohort took up Critical Skills modules.**



# RESULTS OF CRITICAL SKILLS STUDENT SURVEY



- ❖ 85% Improved Research Skills
- ❖ 77% Improved Public Speaking Skills
- ❖ 75% Would Recommend Critical Skills to Others
- ❖ 75% Are More Confident in Presenting Ideas to Others
- ❖ 74% Improved Ability to Self-Assess and Reflect
- ❖ 73% Improved Writing Skills

# CRITICAL SKILLS: SCOPE FOR IMPROVEMENT

- ▶ **Orientation Presentations**
  - ▶ Did not accurately reflect the actuality of Critical Skills modules.
- ▶ **Timetabling**
  - ▶ Issues with timetabling at the start of Semester I resulted in confusion.
- ▶ **Workload**
  - ▶ Considered high when compared to other modules.
- ▶ **Course Content**
  - ▶ Need for greater development of numeracy skills within the Critical Skills curriculum.
  - ▶ Students welcome more 'work-preparation' skills.
  - ▶ Larger assignments should be set earlier in the Semester.
  - ▶ Need for greater consistency between the delivery of Thematic Skills anchor lectures and support tutorials.





# RESULTS OF CRITICAL SKILLS STAFF FOCUS GROUP



- ❖ Critical Skills modules ‘stabilise’ students.
- ❖ Helps students to transition into University life and learning.
- ❖ Students have the opportunity to mix with a variety of peers from varying disciplinary backgrounds.
- ❖ There is a great sense of sharing of ideas across the Arts/Social Science and Science disciplines within various Critical Skills groups.
- ❖ Small groups allow students to develop friendships.
- ❖ Critical Skills modules play a huge role in retaining students who might otherwise be in danger of leaving MU.

# SUMMER EXAMINATION RESULTS

- ❖ The rate of 'Progress' [overall end-of year Qualification grade/result] among Critical Skills students is 60%, while the rate of 'Progress' among Non-Critical Skills students is 49%.
- ❖ The rate of 'Not Progress' among Critical Skills students is 19%, while the rate of 'Not Progress' among Non-Critical Skills students is 31%.
- ❖ The rate of 'Progress' among Critical Skills Students taking an Arts Degree (MH101) is 59%, while the rate of 'Progress' among Non-Critical Skills MH101 students is 42%.
- ❖ The rate of 'Not Progress' among Critical Skills Students taking an Arts Degree (MH101) is 18%, while the rate of 'Not Progress' among Non-Critical Skills MH101 students is 31%.



# THE CURRICULUM EFFECT



- ❖ 4,037 students applied to Maynooth University this year (2017-2018), representing a 9% increase on first-preference applications from last year—the highest percentage increase of all Irish universities between 2016 and 2017.
- ❖ Over 3,150 First Year undergraduate students will now join Maynooth University this autumn.