

# DEVELOPING EMPLOYABILITY SKILLS THROUGH INTERDISCIPLINARY GROUP WORK

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### WHAT'S THE AIM?

- Focus on Managerial Economics I. Large, multidisciplinary cohort.
  - BA in Economics and Social Science Studies (encompassing 13 different pathways), Politics, Philosophy, and Economics (PPE), Modern History and Economics, BSc Economics, and International Business, Finance, and Economics (IBFE).
- The module introduces scenario-based group assessments designed to reflect real-world challenges, with students randomly assigned to interdisciplinary teams comprising peers from a variety of degree programmes.
- Aim to evaluate how this design addresses key challenges unequal distribution of grades, while also supporting the development of analytical thinking, collaboration, and employability skills.

### ASSESSMENT BEFORE VS ASSESSMENT NOW

Managerial Economics I before 23-24

2 online tests (10% each)

Final Exam: MCQ (80%)

Managerial Economics I after 23-24

1 online test with Excel spreadsheet (20%)

Group Work: Report (20%)

Final Exam: MCQ (60

marks) + discussion question

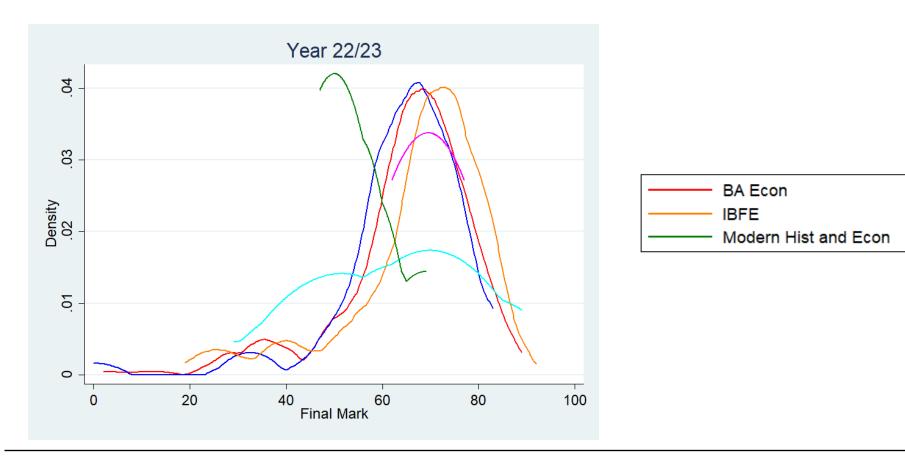
(40 marks) (60%)

# KERNEL DENSITY ESTIMATES OF FINAL MARKS BY UNDERGRADUATE PROGRAM: 2022/23

BSc Econ

Exchange

PPE



# INTEGRATION OF GROUP WORK IN HIGHER EDUCATION

- Group work in Higher education contributes to develop teamwork, collaboration, and employability skills in students (Alison and Mahon, 2022; Moriña, 2017; Watkins, 2005)
- In economics, research shows that group work is effective in bridging theoretical concepts with practical applications (Davies, 2009; Walstad, 2001), and that group dynamics significantly affect learning outcomes (Nicol, 2012).

# IMPLEMENTATION OF GROUP WORK AND DEVELOPMENT OF MULTIDISCIPLINARY SKILLS

- This diversity in academic and cultural backgrounds in this module provides an excellent opportunity for multidisciplinary work, encouraging students to engage with a variety of perspectives and approaches.
- The group work component of the module was introduced in the academic year 2023/2024 as an essential aspect of the pedagogical strategy, designed to simulate collaborative problem-solving in professional environments.
- Groups are randomly assigned within tutorial cohorts to avoid any intentional influence on the composition of disciplines, ensuring a natural mix of students from different pathways, genders, and nationalities.
- Each group is composed of up to five members and is tasked with analysing a dataset to produce a 1,000-word report.

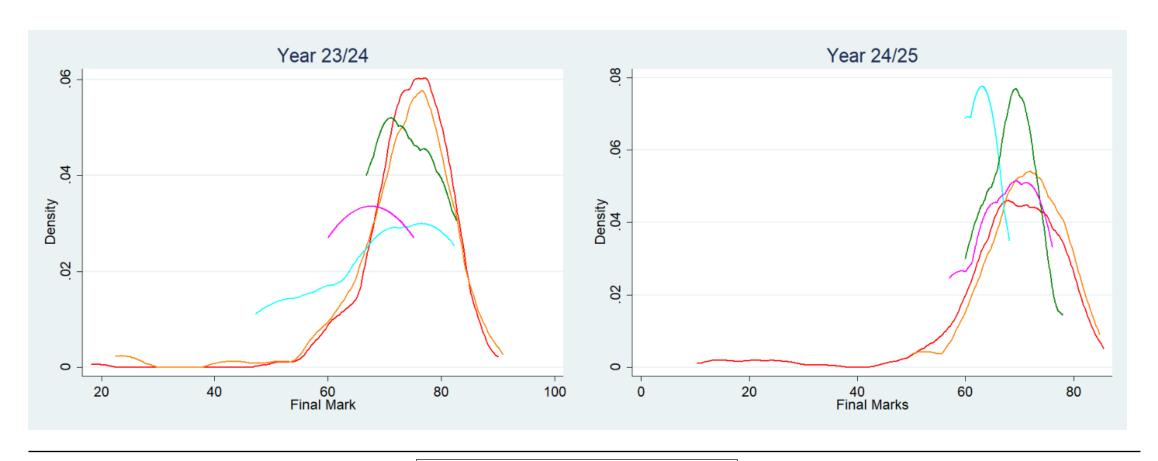
### DEVELOPING MULTIDISCIPLINARY EMPLOYABILITY SKILLS THROUGH GROUP WORK

- The revised assessment structure introduced a group project contributing 20% to the final grade, replacing one of the midterm online tests. The aim was to develop students' applied analytical abilities while explicitly improving transferable employability skills. This approach reflects the increasing emphasis within the social sciences on embedding real-world problem-solving, collaboration, and communication within the curriculum (British Academy, 2020; 2021).
- The group work design was inherently multidisciplinary, intentionally structured to replicate the collaborative, cross-functional tasks that graduates increasingly encounter in contemporary professional environments.

Marking Criterion	Description	Employability Skill Developed	Relevant Framework / Literature	
Understanding of Topic Issues and Exposition	Demonstrates grasp of economic context, problem definition, and multidisciplinary awareness	Analytical thinking, problem formulation, interdisciplinary reasoning	SHAPE Framework (2023); Carter et al. (2020); British Academy (2020)	
Data Analysis	Applies appropriate methods, interprets results, uses evidence to support findings	Quantitative literacy, data handling, digital fluency, evidence- based decision-making	British Academy (2023); QAA Economics Benchmark (2023)	
Comprehensive Discussion and Recommendations	Integrates insights, provides feasible and relevant policy or business recommendations	Critical thinking, synthesis, applied judgement, commercial and societal awareness	British Academy (2020); SHAPE (2023); HEA Employability in Economics (Carter, 2011)	
Clarity of Arguments and Structure	Logical flow, accessibility of language, professional communication tailored to nontechnical audiences	Written communication, audience awareness, stakeholder engagement, teamwork through shared drafting	Carter et al., 2020; SHAPE (2023); AHSS Career Pathways (2020)	
Group Collaboration	Coordinated teamwork, division of tasks, mutual feedback (incl. peer review), shared responsibility	Teamwork, communication, project coordination, conflict resolution, interpersonal skills	British Academy (2020); NACE Competency Framework (2023); QAA Subject Benchmark (2023)	

#### MAPPING ASSESSMENT CRITERIA TO EMPLOYABILITY SKILLS

## KERNEL DENSITY ESTIMATES OF FINAL MARKS BY UNDERGRADUATE PROGRAM: 2023/24-2024/25



BSc Econ PPE

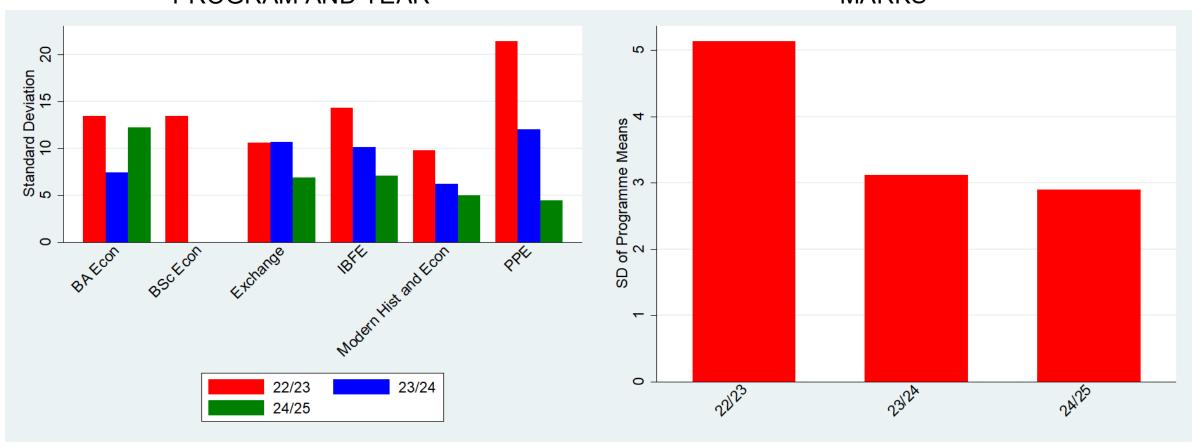
Exchange

**BA Econ** 

Modern Hist and Econ

### STANDARD DEVIATION OF FINAL MARKS BY PROGRAM AND YEAR

### BETWEEN PROGRAMME VARIABILITY IN FINAL MARKS



		Mean	Standard Deviation	Minimum	Maximum
	Understanding of Topic Issues and Exposition	15.85	1.81	10	19
	Data Analysis	14.55	2.56	6	18
	Comprehensive discussion and recommendations	14.28	2.13	9	20
23/24	Clarity of arguments and structure	13.33	2.34	7	18
	Something Special	10.21	4.22	0	17
	Total mark obtained in Groupwork	67.2	9.5	40	88
	Marks obtained in the Final Exam	70.88	10.7	0	93
	Total mark obtained in the Course	72.44	8.67	18.2	91.2
	Understanding of Topic Issues and Exposition	14.1	2.51	7	18
	Data Analysis	12.7	2.32	7	18
	Comprehensive discussion and recommendations	12.2	3.06	3	18
24/25	Clarity of arguments and structure	11.5	3.04	4	18
	Something Special	8.01	2.81	2	17
	Total mark obtained in Groupwork	58.5	10.19	31	88
	Marks obtained in the Final Exam	70.5	11.1	20	96
	Total mark obtained in the Course	68.8	10.8	10	86

#### AVERAGE MARK PER MARKING CRITERIA COMPONENT

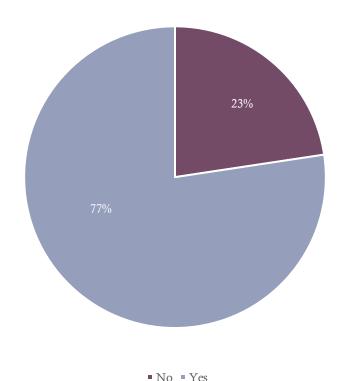
### DATA AND OUTCOMES

- To better capture the extent of disciplinary diversity within each group, we constructed a Multidisciplinary Index (MDI).  $MDI = \frac{Number\ of\ distinct\ disciplines\ represented\ in\ the\ group}{Total\ number\ of\ members\ in\ the\ group}$
- To examine the potential impact of gender composition on group performance, we constructed a variable capturing gender mix within each group. This variable is calculated as the percentage of female students in each group, calculated by dividing the number of women by the total number of group members.

		MDI	Gender Mix
22/24	Final Mark Coursework	0.0304	-0.1227
	Marking criteria 1	-0.0609	-0.0172
	Marking criteria 2	0.0297	-0.1097
23/24	Marking criteria 3	-0.1178	-0.0932
	Marking criteria 4	0.0436	-0.1654
	Marking criteria 5	0.1073	-0.0445
Final Mark Coursework  Marking criteria 1  Marking criteria 2  Marking criteria 3  Marking criteria 4	Final Mark Coursework	0.1104	0.1419
	Marking criteria 1	0.1797	0.1199
	0.0754	0.0353	
	Marking criteria 3	0.1008	0.0976
	Marking criteria 4	0.0009	0.0618
	Marking criteria 5	0.0645	0.2034

### CORRELATION COEFFICIENTS MATRIX

# DO YOU THINK WORKING ON A MULTIDISCIPLINARY GROUP IMPROVED YOUR FINAL OUTCOME?





WORD CLOUD – WHY DO YOU THINK IT IMPROVED YOUR OUTCOME?

knowledge sharing understanding division of feedback insights innovation different perspectives

diverse disciplines divison flabour backgrounds problem solving expertise complementary abilities complementary abilities complementary critical unique advantage thinking technical expertise interdisciplinations.

### SO...WHAT'S HAPPENING?

Students consistently value working in interdisciplinary groups.

This aligns with research (showing that interdisciplinary collaboration cultivates key employability skills)

Our statistical analysis did not find strong associations between multidisciplinary composition and performance; this may reflect that students are not yet fully utilising the benefits of disciplinary diversity.

This suggests that interdisciplinarity alone is not enough – we must teach students how to collaborate effectively across disciplinary boundaries. BUT HOW?

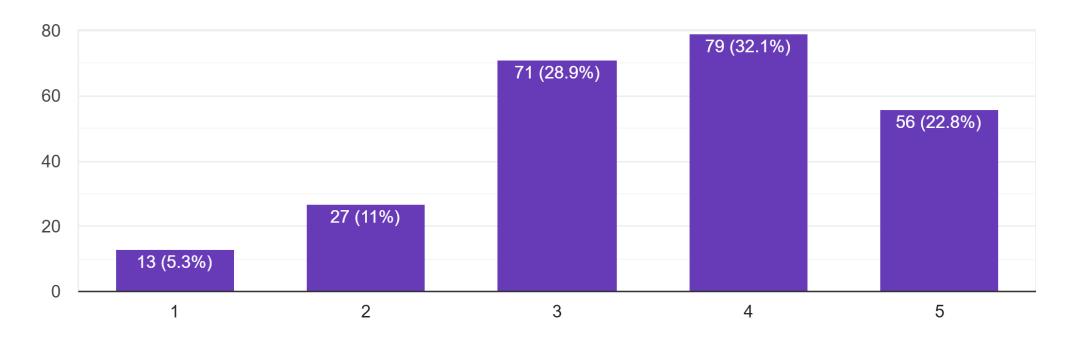
# DESIGNING INTERDISCIPLINARY GROUP WORK FOR DEEPER LEARNING

- **Problem**: Students divide tasks by discipline, limiting cross-learning and skill development for individual assessments.
- Solution: Structure group work to encourage co-creation and disciplinary integration.
  - ✓ Cross-Disciplinary Pairing: Mix students across disciplines to co-produce outputs—not just split them (Morgan et al., 2023).
    - Peer Explanation & Feedback: Use reciprocal teaching and peer review to deepen understanding (Slavin et al., 2003; Nicol, 2012).
    - Reflective Practice: Weekly journals or guided reflections to surface interdisciplinary learning (Morgan et al., 2023).
    - **Group Goals + Individual Accountability**: Reward group success only if all members show individual learning gains (Slavin, 1995).
    - Early Rapport Building: Icebreakers and role awareness to ease collaboration across personalities and cultures (Morgan et al., 2023).

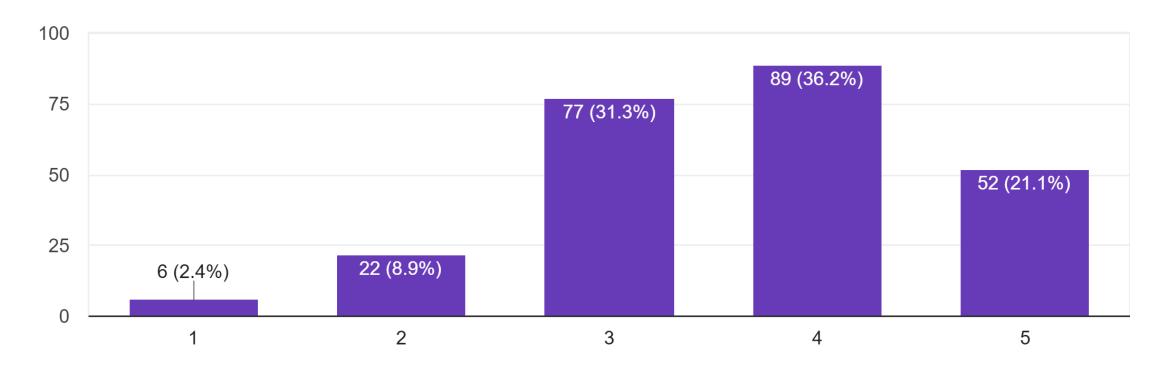
### STUDENT PEER REVIEW SETTING

- In the 2024/25 academic year, a peer-review process was introduced during **Tutorial 4 (Week 9)** as a formative element of the group work assignment. This addition allows students to receive and provide constructive feedback on their draft reports before submission, enhancing the quality of their final output.
- Peer review has appeared as a critical pedagogical tool, developing deeper learning and critical thinking skills (Guest et al., 2023; Podin et al., 2016; Topping, 1998).
- The dialogic nature of peer feedback complements the collaborative insights gained from group work (Nicol, 2012)

How helpful was the feedback you received from the other group in improving your report? (1) not at all helpful. (2) not helpful. (3) neutral. (4) helpful. (5) very helpful 246 responses



Overall, how satisfied are you with the peer review and feedback process? (1) very dissatisfied (2) dissatisfied (3) neutral. (4) satisfied (5) very satisfied 246 responses



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# THANK YOU! PLEASE GET IN CONTACT AND CONNECT!

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