"Diversity is being at the party. Inclusiveness is being invited to dance."

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Business Faculty, Department of International Business and Economics

Advance HE Annual Teaching and Learning Conference 2019

"Teaching in the spotlight: Innovation for teaching excellence"
Social Sciences Strand
1. Introduction: addressing the issue (mind the GAPS)

2. Key facts about GAPS

3. Develop diversity into inclusiveness: an introduction to Team Based Learning (TBL)

4. Case Study (TBL approach to teaching Economics). Inclusiveness facts and results

5. Hands-on demonstration
1. Introduction: addressing the issue. Mind the gaps
Introduction: addressing the issue (4 gaps)

4 crucial Office for Students (OfS) targets for the sector and itself:

1) To eliminate the **gap in entry rates** at higher-tariff providers between the most and least represented groups (Participation of Local Areas (POLAR)2 quintiles 5 and 1 respectively) by 2038-39.

2) To eliminate the **unexplained gap in non-continuation** between most and least represented groups by 2024-25, and to eliminate the absolute gap (the gap caused by both structural and unexplained factors) by 2030-31.

3) To eliminate the **unexplained gap in degree outcomes** (1sts or 2:1s) between white students and black students by 2024-25, and to eliminate the absolute gap (the gap caused by both structural and unexplained factors) by 2030-31. (Attainment GAP)

4) To eliminate the gap in degree outcomes (1sts or 2:1s) between **disabled** students and non-disabled students by 2024-25.
2. Key Facts about GAPS
Full-time first degree entrants by ethnicity

- **White**
- **BME**

**Number of students**

- **250,000**
- **200,000**
- **150,000**
- **100,000**
- **50,000**
- **0**

**Academic year**

- **2003-04**
- **2005-06**
- **2007-08**
- **2009-10**
- **2011-12**
- **2013-14**
- **2015-16**

Source: HESA Student Record.
Note: UK-domiciled students at HEFCE-funded HEIs only. Students of unknown ethnicity not shown.
Non-continuation rates by ethnicity

Source: HESA Student Record.
Note: Full-time, UK-domiciled first degree students at HEFCE-funded HEIs only.
Degree Outcomes


last accessed 24.01.19

<table>
<thead>
<tr>
<th>Entry qualifications</th>
<th>First or Upper Second Class Degree</th>
<th>Reference (White)</th>
<th>Observed Difference</th>
<th>Unexplained difference</th>
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<tbody>
<tr>
<td>White</td>
<td>82.2%</td>
<td>82.2%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Black</td>
<td>60.4%</td>
<td>82.2%</td>
<td>-21.8pp</td>
<td>-17.3pp</td>
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<tr>
<td>Asian</td>
<td>71.7%</td>
<td>82.2%</td>
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<td>-9.5pp</td>
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<tr>
<td>Mixed</td>
<td>75.4%</td>
<td>82.2%</td>
<td>-6.8pp</td>
<td>-6.2pp</td>
</tr>
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</table>

AdvanceHE  2019 Newcastle July 2019: TEAM-BASED LEARNING (TBL) approach to teaching Economics - (G. Cagliesi & M. Ghanei)
Home/EU BME students are **15%** less likely to receive a 1st or a 2:1 compared to Home/EU White peers (ECU, 2017).

Students from the least advantaged backgrounds are **14%** less likely to receive a 1st or a 2:1 compared to students from more advantaged backgrounds.

Black students are **50%** more likely to withdraw from university in England than their White and Asian peers (UPP, 2017).

**8.8%** of students from low socio-economic backgrounds withdraw from university compared with less than 5% withdrawal rates among students from the most advantaged backgrounds (OFFA, 2017).

It seems DIVERSITY has never evolved into INCLUSIVENESS ... still a long way before the dance......
Focus on BAME attainment gap

What is the BAME attainment gap? Key facts

• The difference in the proportion of **UK domiciled** BAME and white students who attain a 1st and 2:1 degree.

• Persistent over time and virtually universal across the HE sector.

University and Faculty average attainment gap can hide substantial variation and outliers at the school/programme/module level.
Deficit model does not explain the gap: type of entry qualification may not explain the persistent attainment gaps.

Clear government’s focus and urgent attention on gaps; closing them will identify the successful HE institutions.

Closing the inclusivity gap means more than offering equality of access or indeed, more than enabling identified individuals in an exclusive way.

It means working to remove any barriers that exist or may be perceived to exist.
3. Develop diversity into inclusiveness: an introduction to Team Based Learning (TBL)
TBL follows the principles of constructivist learning theory.

- TBL role of the learner: active participant (active problem solving, through dialog and interaction with others, and active reflecting on the learning process).

- TBL role of the instructor: role is to facilitate and mediate between curriculum and student, creating the opportunity for engagement and learning. (Michaelsen et al. 2004)
Small groups learning

Active learning strategies (small groups learning). Groups are created by teachers and the team work is all done in class (not outside)

vs

AdvanceHE 2019 Newcastle July 2019: TEAM-BASED LEARNING (TBL) approach to teaching Economics - (G. Cagliesi & M. Ghanei)
Preparatory work to do before sessions: checked with Individual (I-Rat) and team (t-Rat)

<table>
<thead>
<tr>
<th>Getting Started</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td>1st Class</td>
<td>Readiness Assurance</td>
<td>Application of Course Concepts</td>
</tr>
<tr>
<td>1. Describe the TBL unit</td>
<td>1. Distribute RATS and collect answers in Group folders</td>
<td>Small Group Assignments</td>
</tr>
<tr>
<td>2. Form the Teams</td>
<td>A. IRAT</td>
<td>1. Distribute case</td>
</tr>
<tr>
<td>3. Set grading weights</td>
<td>B. GRAT</td>
<td>2. Time Teams</td>
</tr>
<tr>
<td>4. Develop positive group norms</td>
<td>C. Instructor Feedback</td>
<td>3. Facilitate team discussions</td>
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<tr>
<td></td>
<td></td>
<td>4. Collect answers</td>
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</table>

Impact on Learning = Individual Work × Small Group Discussion × Total Class Discussion

AdvanceHE 2019 Newcastle July 2019: TEAM-BASED LEARNING (TBL) approach to teaching Economics - (G. Cagliesi & M. Ghanei)
TBL – going deeper (the new learning): application exercises (collaborative learning within groups and competition across groups)
Interactive sections and feed-forward opportunities

- Group discussion (collaborative learning: all members tackle the same task)

- Class debriefing (after each task)

- Peer to peer evaluation (anonymously, twice a term)
4. Case Study: TBL approach to teaching Economics
TBL approach only for term 2 of core Module at level 6.

INTENDED IMPACT of INTERVENTION

• better student experience,
• improve employability
• reduce the attainment GAP of BAME students
Module level: BAME past experience at level 5

BAME Macroeconomics Level 5


-8% -6% -4% -2% 0% 2% 4% 6% 8%

<table>
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<tr>
<th>Year</th>
<th>Patchwork</th>
<th>Essay</th>
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<tbody>
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<td>2012.13</td>
<td>-4%</td>
<td>0%</td>
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<tr>
<td>2013.14</td>
<td>-7%</td>
<td>-6%</td>
</tr>
<tr>
<td>2014.15</td>
<td>-4%</td>
<td>-1%</td>
</tr>
<tr>
<td>2015.16</td>
<td>-1%</td>
<td>-3%</td>
</tr>
<tr>
<td>2016.17</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>2017.18</td>
<td>2%</td>
<td>5%</td>
</tr>
</tbody>
</table>

BAME Microeconomics Level 5


-8% -6% -4% -2% 0% 2% 4% 6% 8%

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Module level: BAME past experience at level 5

Attainments 2016

- Essay
- Patchwork

Attainments 2017.18

- Essay 2017
- Patchwork 2017

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Observation: from level 5 performances of different cohorts

BAME students perform better in essay type questions (term 1), and to decrease in performance in terms 2 (with noticeable lower average and with similar SD).

On the other hand, non BAME students do the opposite, they improve their performance in term 2.

Thus: the overall gap can hide something.... not all gaps are the same
Case Study Econ1141: level 6

Over the years:
• Have capitalized on the richness of the diversity of our students
• Have become aware of the risks of differential attainment
• Have designed activities to promote student group work (via co-operation).

Academic year 2017-18:
• piloted a new initiative for a compulsory level 6 course in Economics
• changed our teaching pedagogy and practice
• made diversity evolve into inclusiveness moving from “general” group work approach (i.e. self-selected, semi-structured, unobserved, delayed/outcome driven feedback) into a specific team-based learning (TBL) approach (via small group collaboration).
## Rethink of content and delivery

<table>
<thead>
<tr>
<th>TERM 1</th>
<th>TERM 2 (Team-Based Learning - TBL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topics</strong></td>
<td><strong>Topics</strong></td>
</tr>
<tr>
<td><strong>Macro THEORY</strong></td>
<td><strong>Macro /APPLICATIONS</strong></td>
</tr>
<tr>
<td>2. Augmented Solow</td>
<td>2. Competitiveness (GCI/IDI)</td>
</tr>
<tr>
<td>3. Alternative Growth model (pluralism)</td>
<td>3. Globalisation (KOF index), well being and inequality</td>
</tr>
<tr>
<td><strong>Micro / THEORY (Last 6 weeks)</strong></td>
<td><strong>Micro / APPLICATIONS (Last 6 weeks)</strong></td>
</tr>
<tr>
<td>1. Principal-Agent Theory</td>
<td>1. Intergenerational inequality</td>
</tr>
</tbody>
</table>
1. Teachers create groups capitalizing on cohort diversity (ethnicity, gender and GPA) to organize students into mixed teams (in term 1 for term 2); no possibility to change team.

2. Plan a team bonding experience (Escape room) before actual team learning activities; ask for feedback on group’s outing.

3. Use a collaborative instead of co-operative teaching/learning approaches to improve performance while reducing BAME GAPS; continuous feedback interaction.

4. Create an inclusive environment at 3 levels: across teams; within the team; between tutor and individual student.
Econ 1141 TBL: competition across teams collaboration within team
Followed by: Application Exercises (Phase 3 - 2 hours)

First – iRAT & tRAT Exercises (Phase two - 1 hours)

4S Framework
- Significant Problem
- Same Problem
- Specific Choice
- Simultaneous Report
Students’ Feedback: collaborative versus co-operative team work

Escape room

G1: I enjoyed the Escape Room very much. The exercise allowed us to get to know each other better, have fun and learn from it. We definitely worked as a team. We solved the tasks together and helped each other. It was a real team effort.

G2: The Escape Room has been a great experience, worth it. It has been fun, it has involved our skills, and it has brought us together. The advantages were to be on a game that was challenging our mind, and outside the university area or time. It created nice memories.
✓ **STOP DOING/ START DOING:**

Do the prior readings as it would greatly benefit the group to have all members on the same page in terms of content and would allow members to contribute more whilst having greater knowledge on the subject area.

Turn up to the session that take place before the workshops, so that you can take part in the *tRAT* quiz with the team. / Be more proactive in the tutorial with the rest of the team

Let the team know if you cannot attend/ Be more responsive in replying to the group.

✓ **DO MORE...:**

Be more confident in your answers and justifications as they're usually correct; this would benefit the team as there might be room for more discussions.

you are a quiet member of the team but when you present your ideas they are usually very good and accepted by the rest of the group, I'd suggest to be more vocal about your ideas.
Students’ Feedback: Peer to peer feedback anonymously given

✓ THANK YOU, KEEP DOING:

- The enthusiasm you put on the team helped a lot to keep the team working.

- Keep up with the amazing work as you are already a very active member in our group.

- You provide intelligent and well thought out input to the group discussions.

- You are always ready to listen, help and collaborate with the team members.

- You always try to help other team players and always make sure that everyone agrees with answers or decisions.
“Learning under the TBL pedagogy really helped improve my team working skills and communications and whilst elements of the course were very challenging, with collaborative efforts we succeeded. “

“The Team Based Learning programme has been a wonderful experience to learn, work in a team, interact with the class and teachers, present your work etc.”

“This is the most progressive class. It was made very interesting, interactive, useful and relative. The change in the delivery of the subject has made a big difference. An opportunity to work in a group long term **has changes my perspective on group work.** The class is so interesting that the time flies.”
It was such an amazing experience as we all developed skills and shared abilities to make the group work effectively while learning from each other. **I extremely recommend it** for future final years as it is very productive not just for class but also **for our future careers**.

I wish we could have done something similar from the first year. **This experience helped me to collaborate productively with my colleagues**, colleagues with whom I would not have tied otherwise. It helped me improve my team working skills such as communication, **the ability to build rapport and share ideas**. It is also very useful and efficient as a teaching method, all the activities done in class allow you to learn everything by osmosis.

The TBL has been very interesting, as it is unlike any other experience I have had so far at the university. It offers more than just theoretical education, **and helps us to transition to work life**, where more team work will be required. I would recommend it for other final year courses as **it offers a more comprehensive complete form of education**, which students deserve.

The TBL learning has been a great experience which has undoubtedly improved both my communication and team working skills, and for that I am extremely grateful, as I am very sure that it will benefit me in my future workplace. The team-based learning activities are more engaging. I would definitely recommend it for final year courses.
Students’ Feeling Heard…

Regular Mentimeter short anonymous survey in term 1 and in term 2 (3 questions)

Theoretical framework of reference: Control-Value theory
Control-Value Theory:

Emotions in learning. Which emoji represents you best at the end of today's session?

- Very happy: 20% Term 2 TBL, 12% Term 1
- Happy: 70% Term 2 TBL, 58% Term 1
- Neutral: 7.50% Term 2 TBL, 24% Term 1
- Bored: 2.50% Term 2 TBL, 2% Term 1
- Worried: 0% Term 2 TBL, 4% Term 1
Today's activities have been:

- Enjoyable/Exciting: 45% Term 2, 32% Term 1
- Relaxing/Calm: 35% Term 2, 39% Term 1
- Stressful/Frustrating: 20% Term 2, 25% Term 1
- Boring/Disappointing: 0% Term 2, 4% Term 1

Control-Value Theory
Your performance and achievements today make you feel:

- Proud/optimistic: 42.50% (Term 2 TBL), 32% (Term 1)
- Relieved/contented: 55% (Term 2 TBL), 39% (Term 1)
- Anxious/annoyed: 0% (Term 2 TBL), 25% (Term 1)
- Hopeless/discouraged: 2.5% (Term 2 TBL), 4.0% (Term 1)
**TBL: Results of INTERVENTION**

**TBL—term 2 effects:**

1) **Higher means** for BAME and WHITE in term 2 (better performance)
2) **Same means** in terms 2 for BAME and WHITE (closed gap)
3) **Standard deviation:** dramatic reduction of SD for BAME and WHITE in term 2; reduced gaps **between** and **within** BAME and **within** WHITE groups
# TBL & BAME: Results

## Testing Hypotheses

### GLM estimates of OVERALL PERFORMANCE:
1. Improved performance at level 6
2. No statistically significant BAME effect at level 6 (only a level 5)

### GLM estimate of GAP across term 2 versus term 1 assessments:
- Statistically significant increase of BAME performance in term 2 relative to term 1 (and relative to level 5)

### Generalized Least Square Regression

<table>
<thead>
<tr>
<th></th>
<th>Wald chi2(4) = 189.39</th>
<th>Prob &gt; chi2 = 0.000</th>
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<tbody>
<tr>
<td>Panels (Unbalanced): Heteroskedastic N. Obs 152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAP between assessments (Term 2 - Term 1)</td>
<td>Coeff</td>
<td>Std. Err.</td>
</tr>
<tr>
<td>CONSTANT (Female, White, Level 6)</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>MALE</td>
<td>-0.18</td>
<td>0.01</td>
</tr>
<tr>
<td>BAME and progression level:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAME level 6</td>
<td>-0.03</td>
<td>0.02</td>
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<tr>
<td>BAME level 5</td>
<td>-0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>non BAME level 5</td>
<td>-0.01</td>
<td>0.02</td>
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### Generalized Least Square Regression

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<tr>
<td>Panels (Unbalanced): Heteroskedastic N. Observation 157</td>
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<tr>
<td>Overall performance (average of Term 1 and Term 2)</td>
<td>Coeff</td>
<td>Std. Err.</td>
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<tr>
<td>CONSTANT (Female, White, Level 6)</td>
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<tr>
<td>MALE</td>
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<tr>
<td>BAME and progression level:</td>
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<td></td>
</tr>
<tr>
<td>BAME level 6</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>BAME level 5</td>
<td>-0.03</td>
<td>0.01</td>
</tr>
<tr>
<td>non BAME level 5</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>
5. Your turn: Hands-on demonstration
Individual quiz: i-rat (individual readiness quiz); online searching or other material **not allowed**

What to do: (3 minutes)

- use your phone (or any e-devise)
- Go on line and type: **Socrative**
- Click on **Student Login**
- Choose room number: **CAGLIESI**
- Please answer all 5 questions (and keep track of your answers)
Application: TBL workshop

Group quiz: t-rat (team readiness quiz); online searching or other material not allowed.

What to do (6 minutes):

• Form groups (we will give you instructions)
• Use your phone (or any e-devise)
• Go on line and type: Socrative
• Click on Student Login
• Choose room number: CAGLIESI
• Please answer the same 5 questions after having discussed the answers with your team.

DEBRIEF 2 minutes
Application : TBL workshop

Application exercises (any searching and material is now allowed) GENDER PAY GAP (20 minutes)

RULES

• Please read instructions
• Use the material distributed (or any other online search) to solve the tasks.
• All groups will show simultaneously their answers when the time is up.

DEBRIEF (5 minutes)
APPLICATION : TBL WORKSHOP

• “Best group” announcement: and the winner is....... 

• Rewards

• Your feedback
Lessons learnt:

Rethinking of inclusiveness: well organized team work can actually help well being and performance

Rethinking of assessments: formative and summative and feedforward can be effective in reducing BAME
Be inspired
Thank you