University of Reading

Race, ethnicity and diversity: The challenges and opportunities for lecturers in STEM

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Introduction

The Student Experiences in STEM degree (SESTEM) project aims to better understand how undergraduate students in Science, Technology, Engineering and Mathematics (STEM) degrees feel about their experiences at university. The focus is on student experiences and attainment, particularly those from Black, Asian and Minority Ethnic (BAME) backgrounds. In UK universities, there is a differential degree outcome between BAME and white students, with the former statistically less likely to achieve a 'good' degree, even when prior attainment is considered (UUK/NSS, 2019).

The role of staff, especially lecturers, is imperative to the experiences of university students. This report is based on the Undergraduate Research Opportunities Programme (UROP) research that was carried out by Layan Kawas, with the focus on the qualitative research that was conducted to explore the views and experiences of University of Reading lecturers in STEM disciplines.

Diversity and teaching in STEM degrees

In this section, we present a short review of relevant literature on issues of diversity and teaching in STEM disciplines in higher education.

To begin with, Killpack and Melon (2016) argued that in order for changes of diversity to occur in a higher education institute, one must go beyond improving the appearance of diversity. That is, recruiting a more diverse student body is an adequate approach, but one must go beyond 'compositional diversity' and take steps to improving the institutional culture and providing an environment where all students can succeed both socially and academically. Killpack and Melon argued that inclusive pedagogies in STEM classrooms tend to have a greater impact on performance and confidence of students than a student's background. For instance, staff should reflect on questions including, *what does your teaching approach communicate about who is capable of succeeding in your courses?*

Similarly, Haynes and Patton (2019) highlighted the need for greater racial consciousness amongst staff in higher education. When referring to racial consciousness, this is in regard to the extent of which an individual has an understanding of the complexity and nature of racism in modern society, especially the privileges, biases and assumptions that shape one's perspective of the world. To increase racial consciousness, one must first recognise the inevitable white nature of a predominantly white institute (Le & Matias, 2018). Failure to recognise that there is inequality, beyond explicit racism disregards and dehumanises BAME students. In order to tackle issues of racism (including implicit and subtle forms of racism), it is imperative that there are open and meaningful discussions regarding race, which goes beyond simply having the conversation but also the available the support and infrastructure for differences and changes to be made and enacted.

Additionally, Haynes and Patton argued that one must 'interrogate whiteness' by critically reflecting on current views which requires honesty, self-awareness and self-reflection. They suggested that in order to increase racial consciousness, one must set aside time to educate oneself on race and the seemingly invisible whiteness that comes along with education

(DiAngelo, 2011). Once a deeper racial consciousness is gained, individuals can begin to apply what they have learnt to changes in the curriculum and teaching methods used. However, there is recognition that some STEM educators are concerned or do not believe that their discipline can lend itself to issues of diversity and inclusion (Le & Matias, 2018). Understandably, science is often projected as factual and in order to see where diversity and inclusion is relevant, we must also examine the history of the subject and its origins. Le and Matias (2018) argued that science is heavily affected by Western European civilisations, and some have even argued that science is taught with a heavy European stance (Harding, 1994). Harding furthered her argument by pointing out that modern science has evolved to where it is today with contributions from Asian, Islamic and African civilisations, and the root of the problem is the failure to acknowledge such contributions has significant and profound impacts on current science. This almost disregards contributions from non-European-American communities and gives the appearance of 'real science' being that of Western European and American descent.

To this end, Haynes and Patton (2019) raised concerns that most STEM educators are not very well trained to approach their teaching with aspects of culture and diversity. Lucietto, Russell and Schott (2018) pointed out that whilst STEM lecturers are often brilliant researchers who are very extremely well-informed their respective disciplines, they often lack the training and knowledge to successfully teach undergraduate students. The authors reported that the level of training STEM lecturers received varied from as little as eight hours to regular trainings that spans over two decades. A handful of lecturers received no formal training before teaching undergraduate students. It was also brought to light that when on the journey to becoming a STEM professor or tenured lecturer, there is a larger emphasis of one's achievements in research as opposed to pedagogical knowledge and training (Baiduc, Linsenmeister & Ruggeri, 2016).

Sunal et al. (2001) investigated what faculty believe are the key barriers for change in higher education and the most prominent challenge is the lack of resources, including staff time. Individuals sometimes viewed department or institutional changes and priorities as beyond their own controls and responsibilities. Unsurprisingly, lecturers believed that in order for change to be successful, it requires support from administration, cooperation between faculty members across all departments at the university, an end-goal that all are interested in achieving and for all faculty to research actions for change for the greater good of the university. As such, sustainable changes, such as the commitment to racial and ethnic diversity and inclusion, will require 'buy in' from all segments of the university, from senior leadership to head of departments to individual tutors and professional staff. If any one of these groups does not buy in, or is perceived not to do so, then it would be easy for other groups will cite this as reason to not engage as strongly as otherwise.

To better understand the potential role of these different stakeholders, our case-study focuses on the views and experiences of lecturers in STEM, particularly in the context of diversity, inclusion, race and ethnicity.

The study

This case-study is part of the SESTEM project, investigated through a UROP project in summer 2019. Given the focus of the main study is on students, the focus here on lecturers offers an alternative yet important insights into the challenges and opportunities for staff in STEM to promote diversity and inclusion in their roles as lecturers. A total of 20 staff from STEM disciplines took part in our case-study. In order to maintain anonymity, interviewees are addressed by number (i.e. Staff 1 to Staff 20), with limited reference to their specific STEM discipline, unless the context of the discussion merits a mention.

Participants were purposefully recruited as STEM lecturers in the University. Details were gathered from department websites. Thirteen of the 20 participants were male and seven were female. For ethnicity, 14 self-identified as White British, European or a mixed White background, with six participants considered themselves as from a BAME background. Participants were

lecturers or professors in a range of STEM disciplines including biology, chemistry, computer science, construction, mathematics, meteorology, and pharmacy. Participants taught undergraduate, masters, and PHD students, some also held additional roles such as head of departments, school directors, or departmental or school level responsibilities for diversity and inclusion. Participants came from a wide range of academic backgrounds. Some participants had been at the University for ten or more years. Others had completed their postgraduate studies. About a quarter of participants completed their studies in Europe (outside the UK). All participants interviewed had been teaching for at least three years, including those who began teaching during their doctoral or masters studies.

The semi-structured interviews took place in a quiet area of the participants' choice, which was either their office, a common room, or a café. On average, each interview lasted 30 minutes, and the interview questions were designed to promote discussions about their experiences and views around diversity and inclusion, such as teaching pedagogy, curriculum design and the differential degree outcome between white and BAME students (see Appendix 1). All interviews were audio recorded and transcribed, with sensitive details removed and anonymised. Data were organised and coded using NVivo 12, which was thematically analysed by prominent ideas as well as the key questions used in the interview.

Challenges of teaching in higher education

Participants were asked what challenges they believe staff who teach their STEM discipline at university face. A reoccurring challenge that was brought up, particularly with those teaching Computer Science, was **the wide range of abilities students hold before coming into university and tending to the different levels of ability**. Additionally, a challenge to some was catering to the different interests and degrees that students come from. That is, a biochemistry educator is expected to teach those studying microbiology, zoology, and ecology, all of which have varying degrees of interest in biochemistry and are obliged to learn the topic through their degree. A similar case can be argued for those teaching pharmacology to pharmacy students. Furthermore, some educators mentioned that some students, specifically those that are not studying mathematics almost live in fear of statistics and statistical analysis, an aspect of research that is quintessential. The issue becomes convincing students that it is not as tedious as it may first appear, and with practice it becomes easier.

> *We have students who come in knowing nothing about programming. We also have students coming in who've been in professional programming for some time. We've got a wide variety of levels of skills that we have to try and cater for; and levels of interests that we have to try and cater for as well because some students actually really have that interest in the subject (Staff 14)*

A common challenge brought up by many of the participants interviewed was student engagement. When referring to student engagement, this referred to how the student's themselves engage as well as how the educator motivated and furthered engagement. Staff 13 mentioned that **students who seemed to be the least engaged are somewhat even less engaged than they used to be**. All those that mentioned the issue of student engagement counterbalanced their argument with the fact that there will always be some students that are extremely engaged, and some on the complete opposite end of the spectrum and finding the balance for all the levels of student engagement is challenging.

> *There are always students that is hard to interact with, there are always students who are less engaged, and you try very hard to pick up those students and try and engage them in what we do. But against that, if you spend all your time working with the unengaged students you can't give the attention to the engaged students who really want to take this forward. So it's always a balancing act and I always feel slightly guilty that I get it wrong, but it is what it is (Staff 2)*

Moreover, a reoccurring challenge for many educators across STEM disciplines was **convincing students, particularly those just beginning university, that there is a large element of independent studying and learning that one needs to initiate themselves** in order to succeed. Understandably, the university environment and the way things work in higher education are immensely different from their prior secondary education (e.g., at A-levels). This difference can be exacerbated for students coming directly from schools, which is the case for the majority of undergraduate students. Some staff added that a challenge for the students is transitioning into mainly lecture-based learning from standard classroom environments.

Additionally, STEM lecturers have also argued that the **student to staff ratio is poor,** bringing forward the difficultly of being able to help all students on the course. Conversely, those staff with a low volume of students are able to offer students a stronger sense of community. This makes it comparatively easier for staff to focus on students who are struggling, and it also provides the environment for students to come forward when they feel they are falling behind.

> *I think in [in my discipline] there are fewer students that when you teach them, you kind of get to know who they are. So my feeling is that while the students may, some of them might have things that go on, they're more of a cohort, they see each other more often. They share a common room with the staff, the staff know them, so they're more visible and they get more sort of personal support (Staff 8)*

Several educators mentioned that an ongoing struggle is to balance their research with their teaching. Staff 2 furthered this point by mentioning that it is not always easy to deliver content to students with the same enthusiasm they feel towards the topic. As researchers, they are passionate about their disciplines and know how those around them and themselves best learn science. The issue is delivering this research and content to their students in such a way that they understand why it is exciting, all the while attempting to teach them knowledge necessary on the curriculum.

> *We are scientists, we're trying to communicate the latest research. The difficulty then comes is that I know how I would learn and how my colleagues learn, but we're an abnormal group. We're all fascinated in science… So to translate what we do and to some extent how we communicate our research, but also the very nature of what we do and why it's exciting. (Staff 2)*

> *I think the big challenge for all the teaching staff here is balancing the teaching against the research work that they do (Staff 15)*

Finally, handling administration work given to staff by the university and cooperating with administration at university can also be a challenge. For example, in the computer science department, an educator mentioned that cooperation with the IT department has been a long process, which was concerning because the very core of computer science comes down to IT.

> *Our IT equipment here, or the way it works with us… it's a lot of things that make our life very difficult… it's just the way this centralisation of IT has kind of delayed everything and makes everything extensively time-consuming and slow. (staff 9)*

Moreover, although staff 4 mentioned he currently has a tolerable workload both in terms of administration and research, he fears that administrative roles may take over most of the time.

> *What I'm scared of by looking around me, you know, is that in time, the, not just the teaching load, but mostly the administrative roles take over. And I think that what interferes mostly with the intellectual activity of a scientist (Staff 4)*

Thoughts on the BAME differential degree outcome

STEM educators were asked for their thoughts on the BAME differential degree outcome, and more specifically, why they think it exists. The **most popular response was that of role models**. A couple of staff highlighted that the mathematics faculty, for instance, is predominantly occupied by white middle-aged men.

> *Well we certainly have BAME staff, but it is true that we are a predominantly white department. White and male as well, so the lack of visible role models within the staff body is unquestionably a challenge…It's very difficult to be what you can't see (Staff 1)*

In other STEM departments, there is a pronounced white student body and faculty, where may be only be one (or a few) BAME student or staff. This appears to be a **vicious cycle**. With a lack of BAME students within the student body, there comes a decrease in the number of BAME students who further their education which inevitably reduces the number of students who go on to become university lecturers and professors. Some staff reported a higher compositional diversity in the student body but **decreasing representation amongst faculty and academics.**

Some staff felt that the BAME differential degree outcome, or the 'attainment gap', is due to the way that universities in the UK run themselves. **A systematic barrier that has not yet been discovered, deeming it impossible to tackle**. They argued that there is something that universities are doing that is causing a barrier for BAME students. Interestingly, staff 20 believed that there were no differences in the degree outcome of BAME and White students, until the university imposed a centralised administration system. For example, prior to the introduction of the system, one of the schools had an attendance monitoring system which kept a close record on all students and provided them with support when the system advised them to. However, once this centralised system was introduced, the previously successful attendance monitoring was discontinued. Not only did overall progression of all students decrease but the notorious BAME differential degree outcome made an appearance. This supports the idea that perhaps the way universities are run can also introduce a barrier for BAME students.

To this end, another argument put forward by a STEM staff is that for some students, including from BAME backgrounds, are better exposed to interact with people from a range of different cultures if they grew up in diverse communities. However, for students (especially those from white British backgrounds) whose surrounding environment are more homogenous, the university environment might be the first time interacting with fellow students from different ethnic backgrounds. Some students may be unsure or uncertain on how to communicate. From this perspective, there may be situations of social awkwardness that required adaptation on all groups to reduce the awkwardness and increase mutual understanding, rather than being a deliberate or conscious attempt to segregate by perceived cultural and social similarities and differences. In the early weeks of university, a wave of culture shock can create opportunities for disengagement. Once students disengage within the first few weeks, it may be very difficult to reverse this downward spiral, which may lead to a differential degree outcome at the end.

Furthermore, once students begin to fall behind and stop attending lectures, it is usually difficult for students to 'get back into the swing of things'. That is, BAME students tend to stand out due to the natural differences in skin colour or general appearance (especially visible minorities), so that students who fall behind may feel overwhelmed by the attention they may bring to themselves by returning to lectures.

> *I feel that say like once you have an issue and you stop coming to lectures, it's difficult to go again because you feel like people are looking at and if you feel like you stick out anyway and then you have anxiety issues and other things you're less likely to come (Staff 8)*

On the contrary, some argued that perhaps the differential degree outcome is due to **reasons external to the university**. For example, some argued that the reason this gap exists is due to the socioeconomic backgrounds of the students. Staff 4 firmly believed that a **student's socioeconomic background was the most important factor influencing attainment**. That is, those that come from a higher socioeconomic background are more likely to succeed and given BAME students are less likely, in general, to come from a high social class background, the difference in degree outcome is to be expected.

Moreover, some pointed out that **perhaps a higher proportion of BAME students need to commute into university. This was not supported by statistics but was suggested by as a possible cause**. Commuting into university can be tiring and may be cause for students to begin skipping one-hour sessions or a lecture 'here and there' which will eventually decrease attainment as there is a strong correlation between attendance and attainment as stated by a pharmacology educator. Prior education was also brought up by few staff. Finally, a handful of educators believed that **perhaps expectations played a role in student's attainment**. By expectations, this refers to the expectations one has for themselves and the expectations those around them have.

With the BAME differential degree outcome being a very intricate subject matter and a very sensitive topic for many, it is only expected that some educators did not know where to pinpoint the reasons for the differential degree outcome. Some faculty were unaware of such a gap and noted that they did not notice a difference in the way BAME students learnt and responded in comparison to their white counterparts. Some argued that they cannot see anything the university does as an impediment for BAME students. Nevertheless, those that responded to the question with uncertainty or no knowledge of the gap were very open to hear possible reasons and future improvements to tackle the gap. Overall, it was agreed by all that the reason for the BAME differential degree outcome is more than likely multifactorial, with many possibilities to why it exists.

The STEM Curriculum

Educators were asked if they believe their STEM curriculum was 'too white'. This is a difficult question to ponder and may seem intimidating to respond to especially when asked with no preparation for the answer. One mathematics staff said that **although the content may not directly be too white, the presentation of it certainly is.** He furthered his argument by pointing out that the majority of faculty at the university was educated in Europe and probably by white, middle-aged male educators. This inevitably may lead to themselves educating their students in a similar manner which may favour white students. Additionally, he argued that in mathematics, educators rarely talk about the history of it and the different cultural contributions from around the world.

Another mathematics educator argued that if the mathematics curriculum is too white, it may appear in implicit and discrete ways that perhaps, as a white student one may not recognise. Other staff in mathematics, however, argued that it is **very difficult to say that mathematics is too white due to the numerical nature**. To some, mathematics is 'just numbers' and assigning a race or ethnicity to numbers seems challenging.

> *I mean, math is a subject where it's just numbers and stuff, you know? It's not like some subjects which have a social, political aspect to them (Staff 13)*

Similarly, a construction educator stated that **although the curriculum itself may not be too white, it is very much focused on the UK**. An educator in meteorology made similar claims, especially when it comes down to practical work. It was highlighted that as a science, it may not

appear to be to white but once you delve into the history of meteorology, it may present itself with **a heavy European-centric and American point of view**.

Alternatively, in computer science an educator pointed out that the curriculum itself may not be too white however they accepted that aspects of it may look as though it favours white people. **For example, when developing software for facial recognition in America the software ends up being better at recognising white faces**. This may be due to the fact than when testing and developing the software, White American faces were used.

Moreover, in chemistry an educator believed that **the subject does not lend itself to issues of diversity**. The other chemistry educator pointed out that **when talking about reaction names, most of them are European and American names** which may add an aspect of whiteness to the curriculum. They highlighted that the names used for reactions are simply to help chemists remember each reaction as there are hundreds to remember.

Diverse teaching

In this section, staff and faculty were asked if they incorporate diversity into their teaching and if so, in what ways. The general trend appeared to be that **in subjects such as pharmacy, it seemed that incorporating ethnic diversity was substantially easier than incorporating it into subjects such as mathematics and chemistry**. The pharmacy and pharmacology educators stated that they integrated diversity by mentioning diseases that ethnic minorities tend to be more susceptible to.

Additionally, a quantity surveying educator incorporated diversity by teaching his students about international examples and **gives examples from buildings and problem solving in different countries in an attempt to steer away from the British-centred curriculum**. One of the meteorology lecturers integrated diversity in a similar manner, by introducing research carried out by Indian scientists.

For the 'trickier' subjects, such as chemistry and mathematics, some questioned how it was even possible to incorporate diversity. For example, in mathematics, more specifically mathematics such as differential equations, examples with names are rarely, if ever, used. The history of differential equations is rarely, if ever discussed. The educator's goal is to give students the knowledge they require to be able to solve differential equations. It appears to be impossible to incorporate issues of diversity into such a course, especially with only several months to teach students what they need to know. In regard to chemistry, both educators believed it was difficult to incorporate aspects of diversity into teaching. One stated that similar to mathematics, it comes with this complexity due to the scientific nature of chemistry.

> *How would I specifically do that with differential equations? It's not even as if I have examples with people doing things… So, yeah, differential equations, water waves and complex numbers. I genuinely don't know how I could bring diversity or inclusion into those examples. I will be all ears if someone could tell me (Staff 13)*

> *If you're talking about incorporating ethnic diversity in the syllabus, that's very difficult because chemistry is, it's not like history where you could study slavery as a whole, that it's, it is just they are molecules (Staff 17)*

Moreover, one staff teaches their students about unconscious biases and incorporates how to work in a group effectively into their teaching. Finally, some members of staff incorporated diversity by treating all students equally, **using different forms of assessment and some said when it comes to group work, they attempt to create diverse groups** to promote greater interactions between students.

Diversifying the Curriculum and Improving Diversity

Here, faculty were asked how one could diversify the curriculum and improve diversity further. A handful of the educators interviewed mentioned that they'd like to show students that scientists are not just "men in white coats who are white". To this end, a few educators believed that providing students with role models is a sufficient path. As highlighted by some, role models do not just have to be BAME historical figures within the STEM discipline. Although showing students that contributions have been made by BAME scientists is important, **showing students that current BAME scientists exist and make significant contributions in modern day is equally as important**.

With this in mind, staff 2 believes that **bringing in alumni who have graduated and become scientists may have an impact on BAME attainment and progression**. Showing students that someone who was once in their position has now become a successful PhD student or works in a pharmaceutical company gives current students hope that they can similarly be successful scientists one day. Additionally, he argued that although research is discussed in classroom settings, where the research came from is rarely discussed. He highlighted that a team of researchers are more than likely an ethnically diverse group of people and actually discussing this and telling students that these researchers were not just White European or American faces shows students that it is possible to become a scientist. A similar approach was suggested by a staff 3 however he suggested that we could improve diversity through a research module.

> *I think we should meet and we could make it very clear and possible that the studies that are preformed…are done by a team of individuals and those teams are nearly always ethnically diverse (Staff 2)*

Likewise, staff 11 suggested drawing attention to achievements by people who are not white. Staff 19 asserted that having a broad range of individuals who actually teach students gives students inspiration.

> *One of the ways I think you could potentially do it is by highlighting achievement of scientists who are not necessarily white men (Staff 11)*

Alternatively, some staff have set up or directed students to **websites which celebrates role models from underrepresented background who made significant contributions in their respective STEM discipline**. In the mathematics department, students actually have an assignment about looking up role model in mathematics as part of a professional skills module. Additionally, a mathematics lecturer believed that **involving the history of mathematics into the curriculum could be a method of introducing diversity**.

In the biological sciences department, staff mentioned that they have plans **to initiate a mentoring scheme targeted, but not exclusive to BAME students**. The idea is that each student has an alumni mentor who they can look up to and go to for advice. This, in a way provides students with a role model who has already gone through and tackled issues the student may currently be working through. This could also inspire students to persevere and work towards where their mentor currently is. The students can build a meaningful relationship with their mentor which can increase their sense of belonging at the university.

Alternately, staff 9 believed that lecturers and professors could perhaps change their pedagogies to further support student engagement particularly for those least engaged students. He also highlighted that **perhaps allowing students to have some freedom in what they choose to learn could increase student attainment**. He also added that they plan on **increasing the**

number of interactive group work sessions and tutorial style classes to further engagement.

Others have suggested the potential of **peer observations**, a University policy where staff audit and feedback of each other's teaching, to include a **focus on diversity and inclusion**. If changes to the existing teaching commitments of staff are not overly onerous, and just a minor tweak to existing practices, then it is more likely to be successful.

Finally, staff 10 brought to light a challenge in tackling the BAME differential degree outcome. **He fears that in paying additional attention to BAME students he may appear to be biased to white students**. He argues that if he provides supplementary sessions for BAME students, it concerns him that White British students will feel like they are not receiving the same level of support.

> *It's not clear how it is that we would deal with this problem without appearing to be discriminatory, whether positively or negatively to other students. Because you know, if I did something for the black students, then the white students would also wonder why am I doing that for them (Staff 10)*

Recommendations

As can be seen, there is a variety of challenges that comes with the role of a STEM educator in higher education, some of which were widely shared and others which were unique to a certain discipline. STEM staff interviewed were candid and honest about their thoughts on the BAME differential degree outcome and related issues which gives us optimism for progress. Although complex and challenging, below are some overarching recommendations based on our research:

- **Open discussions about race:** It is essential to have meaningful, open and realistic conversations about issues of race, ethnicity, diversity and inclusion at the university. These discussions ought to occur for *all* staff and students.
  - These discussions could be led centrally, with internal as well external speakers to share their own respective practices and concerns.
  - Is there potential for staff to incorporate discussions of race, ethnicity and diversity into existing teaching?
- **Examining own privileges, biases and assumptions:** It is important for staff to have time and space to reflect and acknowledge their own privileges and biases, which could lend active changes to the way one teaches and views issues of diversity and inclusion. For this to be successful, resources are required to support this aspiration.
- **Professional development for staff**: A number of staff are open, willing and proactive to better diversity and inclusion practices, but would want expert support, guidance and training, beyond the limited impact of short online tutorials.
- **Stronger cooperation and commitment across *all* departments *and* the centralised university**: For meaningful changes to occur, everyone needs to be onboard and share the vison. Responsibilities for action must be shared by every segment of the University.

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Appendix 1

Staff interview guide

Can you tell me a little bit about yourself? How long have you been at Reading?

How long have you been teaching [STEM discipline]?

What challenges do you think university staff in [STEM discipline] face in their teaching?

Nationally, there is a difference in degree outcomes between White British and BAME students, even when we considered their prior attainments. What are your thoughts on this? (What do you think are the challenges)

How do you promote diversity in your teaching? (techniques, practices, etc)

Do you feel the STEM curriculum is 'too white'? Why/Why not?

How do you think we can diversity the STEM curriculum?

How often do you discuss issues of race and ethnicity with other students and staff?

Appendix 2

Table 1: STEM lecturer participants by gender

Staff 1	Male	Staff 11	Female
Staff 2	Male	Staff 12	Female
Staff 3	Male	Staff 13	Male
Staff 4	Male	Staff 14	Male
Staff 5	Male	Staff 15	Male
Staff 6	Female	Staff 16	Male
Staff 7	Male	Staff 17	Female
Staff 8	Female	Staff 18	Female
Staff 9	Male	Staff 19	Female
Staff 10	Male	Staff 20	Male

End

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