That we should support academic tracking in primary and secondary education

Bifurcations (PRO)

To begin this debate I would like to define what tracking is and describe how I envision the system working if the policy were to be enacted. I will then analyse why I believe this system to be a more effective one for all the pupils in comparison to mixed ability classrooms.

1. Definitions and the Model

The definition for tracking I have taken from wikipedia:

*Tracking is separating pupils by academic ability into groups for all subjects or certain classes and curriculum within a school. It may be referred to as streaming, setting, or phasing in certain schools.*

*In a tracking system, the entire school population is assigned to classes according to whether the students' overall achievement is above average, normal, or below average.*

For this model all pupils from age 5/6 to age 18 will be assessed twice a year for each subject to determine how well they coping with the material. These assessments would be competency tests on core learning skills such are reading, writing and maths in primary school and would progress to standardised class tests in high school for each subject the pupil is doing. The results of these assessments would place the pupils in one of three categories that I have broadly described as A-B Students, C-D Students and Students on track to fail. These are loose titles for pupils with high levels of understanding and ability, pupils who are doing well but struggling to understand parts of the course and pupils who are severely struggling and need additional support in class. The three groups would have teaching plans and support tailored to their needs.

2. Benefits to Pupils

I imagine one problem my opponent will have with my model is the age range and the ability to
I imagine one problem my opponent will have with my model is the age range and the ability to stream pupils at 5 or 6 so I would like to defend that here. At this age we simply need to understand how well they are beginning to understand words and numbers and it is crucial that we give them as much early support as they can get because in the UK we do see a problem with adult literacy and that is something we need to address as early in the child as possible to give them the confidence the need in these core skills. The model I have described puts emphasis on the pupil being assessed twice a year so it is highly unlikely that a pupil at age six who is struggling will still be struggling after additional support throughout their school career. So it is not likely that the child will "remain in the bottom set forever".

a) A-B Grade Students

It is well documented (see almost any news article on tracking) that streaming pupils who are doing well academically allows them to progress even more. This is due to the classes ability to move through material quicker and the teacher pushing them with more complex examples. It is harder for teachers to do this in mixed ability class because statistically there are less students working at above average rates so teachers have to try and move the class along at a speed the average pupil can cope well with. This means high achieving students do not always get challenged like they can be in mixed ability classes so when they are streamed by ability and it is easier for teachers to challenge them and they therefore achieve more. It is always important to make sure the highest achieving pupils are challenged in the supportive environment of school as these are the pupils likely to go on the high achievements in higher education. Many pupils who achieve good grades but well not challenged during school can struggle to make that adjustment if they go into university. It is important for an economy to have confident and well educated individuals as we get benefits from having more scientists, engineers, business people innovating to stimulate the economy. This is a goal most people accept as good but it should never come at the expense of other pupils and many critics of streaming say that when streaming occurs pupils can be left behind. I will now go on to show why this is not inherent to the act of streaming and why my model would also allow lower achieving students to do well.

b) C-D Grade Students

This group of students are well on their way to passing their final exams but they are struggling. This is most likely a student who lacks understanding of a few modules within the class or needs extra support with studying. With streaming the teacher of this class understands that they are all
likely to pass and they should be working to try and increase their understanding within the class. For example a pupil in this class for Maths is likely to understand the skills they will need to use in the problem and should be able to complete straightforward questions with few mistakes but may struggle when questions require more difficult problem solving skills. Teachers are likely to teach this class in a way that gives each pupil a greater understanding of the modules and confidence in using this understand when doing problem solving questions. The pupils are likely to get support for modules that they are struggling with and they are more likely to ask for support when they are struggling because they understand that they are in a class where everyone is of a similar ability. In mixed ability classes they are less likely to put their hand up to ask and answer questions because most pupils would believe that "everyone else is better" or "it is just me that is struggling" when in reality that is not the case. In a class where everyone understands that there is a part of the class they are all struggling with they feel more confident to ask questions without looking like the "stupid one" and they are more likely to support each other. By focusing on refining pupils understanding and growing their confidence in the subject you allow pupils to progress past the point of being stuck. In a mixed ability class it is much easier for pupils to believe they are no good at a subject because they are struggling a bit so they continue to struggle and disengage with the class. Teachers and schools will always want as many pupils as possible to pass no matter what the system but with streaming it is easier for schools to target resources in classrooms so that pupils get the best possible grade they can. There is the incentive to do this as the more pupils pass with higher grades the higher the school is in the league tables etc which in turn attracts families and teachers to the school.

c) Students on Course to Fail

Finally I want to show how this benefits the pupils who are struggling so much they are on track to failing their final exams. There are a number of reasons that pupils might be in this situation such as long periods of missed school, issues at home or simply severe lack of understanding of the class. In mixed ability classes these pupils often find it impossible to engage with the class and this can lead to difficult and disruptive behaviour. If the teacher has a group of pupils in a mixed ability class who are acting out because they find it so difficult to engage it can cause disruption to the learning of the rest of the pupils. The teacher is not teaching because they are dealing with pupils acting out, they can’t give as much time to other pupils during individual work if they are constantly having to refocus pupils who are struggling the most. Unfortunately this happens because we are using the same resources as we are for the more able pupils to help those that are struggling but in a streamed class it is much easier for teachers to focus their attention on the pupils that are struggling as all the pupils in the class are of a similar ability.
means that teachers, no matter how good their intentions are, will normally resort to sending the most disruptive children out of the class, label them as trouble makers or problem pupils. With streaming these classes are likely to be smaller in number which allows teachers more one-on-one time with each pupil. It also allows the teachers the flexibility to tailor classes to deal with issues such as pupils not wanting to come to class or disengaging if they do turn up. If the pupils are struggling because of problems outside of school it is easier to help that pupil when they are in a smaller class because there is more of an ability to build a relationship between pupil and teacher which leads to more trust in the pupil that school is somewhere that is safe. In mixed ability classes being labelled a trouble maker puts that pull off school even more meaning they find it harder to trust teachers to help them deal with problems out with school. With assessments taking place twice each year the pupils have opportunities to move into higher achieving groups after they have settled and begun to engage this means that this class is more likely going to be perceived as a safety net rather than "the class for the stupid kids" because their hard work can be rewarded quicker. In models of streaming without multiple assessments they can feel trapped and "stuck" believing that it wouldn't matter how hard they worked which can again disengage them. I feel that my model solves this problem and allows for these pupils to get much better support than they would do in mixed ability classes. Every school has the incentives to make sure that all it's pupils leave school with a qualification this system just gives schools a better structure to distribute resources like classroom assistants better and gives schools a way of giving pupils support quicker.

I believe I have shown how this model will help each child achieve their best in comparison to mixed ability schools and I look forward to my opponents responses and substantive arguments.

condeelmaster (CON)

The definition of the model has already been given by Pro, and since I agree with it, let's get to the actual argument.

The presumption of what intelligence is

In the tracking model pupils are divided by "abilities", in order to benefit the development of their
"intelligence" according to their "needs". Notice I used lots of quotations. The thing is that this system test and cares about the logical intelligence of children as if it was the only one. Pupils make a test that shows how good they are at logical thinking and then this model attempts to divide them for the sake of making them better at that aspect.

Let's review the concept of intelligence. Traditionally, if you were good at maths, you were intelligent. But nowadays, psychologists prefer a more detailed definition of intelligence. A synthesis of the different definitions of intelligence, as proposed by Legg and Hutter: “intelligence measures an agent’s ability to achieve goals in a wide range of environments”.

Howard Gardner, in his Theory of Multiple Intelligences, shows us that intelligence isn’t just mathematical thinking, but rather a complex mix of different capacities. He classified these capacities in nine "intelligence modalities":

- Musical–rhythmic and harmonic
- Visual–spatial
- Verbal–linguistic
- Logical–mathematical
- Bodily–kinesthetic
- Interpersonal
- Intrapersonal
- Naturalistic
- Existential

Academic tests only care about logical-mathematical and verbal–linguistic modalities.

I accept that tracking helps students to have better logical thinking. However, what they gain on logic, they loose it in the other intelligences.

Sociability with different people

Dividing pupils into categories would make it harder for them to get in touch with different people. That would damage their development.
When we socialize with others, we get to know and understand different realities, different approaches to the same problems, different ways of thinking. In doing so, we develop three different capacities: understanding others, understanding ourselves, and understanding existence itself. This develops three modalities of intelligence: interpersonal, intrapersonal, and existential.

If we don’t let children do this, we are damaging their development. Maybe we make better mathematicians, but we will for sure make less fulfilled and less empathic people.

**Economics**

We already talked about the damage this model would cause to the intelligence of our pupils. However, the cons don’t stop there. This system would cost a lot more than the actual.

Tracking would separate what would be one class into three classes. This means that instead of needing one classroom, we would need three. Instead of one teacher per subject, we would need three. Basically, we would be spending three more times. This could end in two different situations: 1) we make money out of nowhere to pay this more expensive method 2) we give education just for a third of the population. Provided that we cannot make money out of nowhere, this model wouldn’t let us give education to everyone.

**Teachers**

Let’s face the truth, not all teachers are good at teaching. More experienced and more prepared teachers are better at their job than less experienced less prepared teachers.

Obviously, better teachers have the priority when it comes to choose which class they are going to work with. They tend to choose the higher level classes, because they are more cooperative and interesting to teach to. This creates an unfair situation: higher level students will have better teachers, while lower level students will have worse teachers.
I know the logic would say the solution to this problem is letting the principals assign teachers. However, as showed by "A pilot study to assess equality in selected curricular offerings across three diverse schools in a large urban school district: A search for methodology" (Davis, 1986), most-experienced teachers are often assigned to teach high-track classes, whereas less-experienced teachers are usually assigned to low-track classes.

Another study, "Tracking in Secondary Schools: A Contextual Perspective" (Oakes, 1987), observed that teachers of the high-track courses were found to be more enthusiastic in teaching, better at providing explanations, and more organized than teachers of low-track courses.

**Conclusion**

I showed how the tracking system goes against the development of the children. Also, it would be practically impossible, economically speaking. Besides that, it would produce a teaching quality gap, because higher track students would have a way better education. Summarizing, the tracking model shouldn't be supported.

**Cross-Examination**

**Bifurcations**: I don't understand the format of cross examination on this site yet so I will follow you're lead with this one.

**Bifurcations**: i'll attempt a question. What do you believe the best education system is?

**condeelmaster**: I'm almost in the same situation as you with cross examination, so just let's see what happens hahah

**condeelmaster**: Besides that, I don't think your answer really provides something to this debate. This is not a "model vs model" debate but a "proving or disproving the resolution".

**condeelmaster**: I mean, we are here to determine if the tracking model should be supported, not to see which model should we support.
condeelmaster: Where would you get the necessary money to pay this model? Because it would be like three times the cost of the traditional system.

Bifurcations: To prove a resolution you have to give comparative analysis which includes comparing one model to another you already concede this when you use your economics argument.

Bifurcations: I have written a response to your economics argument in my next post. Your maths unfortunately doesn't work for that point.

Bifurcations: yes we are here to determine whether tracking should be supported but the reason particular models are important is because it gives us something concrete to defend or attack. The problem with trying to defend tracking in general is that there are many different ways of implementing it. Therefore many of our arguments would mis-clash if we did not choose a particular model. Also this doesn't have to be any more detailed a comparison than this model of tracking vs mixed ability classrooms. This is an important comparison to make as this is the current system used in many schools.

Bifurcations: we do not need to argue model v model we just need to give comparative analysis as to why this model is better or worse than the typical current system. Also if this is an answer to the question I asked here you have misunderstood the question. I am simply asking if you prefer mixed ability classes or another kind of system.

condeelmaster: Well, in my opinion, mixed ability classes is the most practical system yet.

Bifurcations (PRO)

I thank my opponent for their response. I find the arguments they have proved to be non-comparative to the analysis I presented in my first round and because of this will use this round to explicitly rebut the arguments they have made and show how none of those arguments actually disprove and of my arguments.

1. "The presumption of what intelligence is"

To deal with the headline first none of my analysis presumes a definition of intelligence, instead I show you that by assessing children and using their results as a measure of how they are coping with the taught material makes it much easier to mobilise a bureaucratic system to direct resources and support to the children that need it the most.

Now to deal with the analysis provided in the argument. Yes there are different types of
intelligence but you have assumed incorrectly that every class subject will be tested in the same way. A maths test will focus on Logical–mathematical intelligence because that is the skill that a maths class aims to improve. An english/language test will focus on Verbal–linguistic intelligence because that is the skill that a language class aims to improve. There are also music classes, art classes, physical education (P.E.) classes and many more which aim to improve other types of "intelligence". Each of these classes would have their own unique test. This means that a child may be in the A-B group for Art, the C-D group for Maths and be on track to fail at P.E.

You then assume that if a single test focusses on one type of intelligence there is no way for a child to develop any other type of intelligence or to have "non-traditional" intelligence celebrated. This is simply untrue. Firstly a classroom is not the only place a child develops and neither should it be. For example a child is part of a knitting club out with school. This club develops their interpersonal and intra personal skills as well as developing their creativity. They win a local compassion for best knitting and are put in the local newspaper. They are still developing and that development is celebrated however a school system does not have a duty to run a class on every possible hobby. They do however have a duty to encourage children to explore their own path and to give them the best opportunities to do so. This can be done and should be done no matter what the testing system of the school is. This is therefore not relevant to this particular debate as it ignores the model that I set up.

2. "Sociability with different people"

So yes I agree that total segregation damages a child’s development but that is in no way an accurate characterisation of what this model is. As I explain above children excel in some subjects and struggle in others so it is reasonable to assume that they will still interact with different people in different classes. This actually happens less in mixed ability classes because we naturally form cliques and social circles that exclude certain people. When you are in the A-B class in maths but the C-D class in art you are forced to engage with more people who would not normally be part of your social clique. This also shows children that they have more in common with each other than they tend to initially think. Secondly this assumes again that a classroom is the only place where we get this social development.

Just because there is a class of pupils that have a similar ability in a subject does to mean that they have a homogenous response to problems. In a science class there may be many ways to conduct an experiment to show the relation ship between voltage and current but given free reign different children of the same ability would choose different approaches. In art some use pastels
others use pencils.

3. "Teachers"

First of all bad teachers exist and yes they are a large problem in our education system however the tracking system is not mutually exclusive to a more rigorous selection process for teachers so this is not an inherent reason to oppose tracking. I will concede that no matter what system of teacher selection we have not all teachers will be perfect. I will however take issue with your definition of being a better teacher "more experienced and more prepared". This is likely to lead to god teaching however there are many teachers with decades of experience who spend all night preparing a lesson who can then not effectively engage their class or explain the material in an efficient way when asked to. Good teachers are normally characterised by school inspectors as those who engage their class in creative ways such that the children have a genuine understanding of the material. Good experience and effective preparation certainly help with this but they are not the main factors in what determine a good teacher.

The assertion is then made that bad teachers get given (or choose) lower level classes while good teachers are given (or choose) higher level classes because the pupils are "more cooperative and interesting to teach to". This is an unfortunate simplification of teachers and pupils which makes this analysis non comparative to the analysis I gave in the first round. Let me illustrate a more realistic picture of how classes are distributed and taught. A maths department, for example, has ten teachers and the head of the department is making up the rota for the next year. The department head understands that some of his teachers are stronger than others. There are six years worth of pupils (first year are youngest and sixth year are oldest) and each year has different ability classes. The department head will work to try and get the best teachers to teach the most challenging classes. Note, this does not mean the highest level classes. This often means classes which contain the most pupils that struggle (or do not want) to engage with the teacher and the work. You can find those pupils in each class but there tend to be most pupils with those issues in the lower sets. The head teacher attempts to distribute as many of those classes as they can to the strongest teachers because the department and the school is celebrated on the number of children that pass their final exams. Now you are correct to think that there is some input from teachers on what the final rota looks like. This is never usually "i want the higher classes because they are more cooperative and interesting to teach to" no many good teachers really enjoy teaching "difficult" children because to see them pass is the most rewarding. There is a problem particularly in Scottish schools that teachers are less willing to teach higher classes because "the material is too advanced". This is the type of bad teaching that we need to remove from our school systems through rigorous hiring practices and more
inspections. The rota will normally end up with every teacher having a mixed range of classes to teach. The may have a higher level first year class and a lower level sixth year class.

To tie this directly to my model, it is actually easier with my proposed system to compensate for any bad teaching that does exits. Why is that? Well, each year a pupil will be assessed twice and this means that there is the possibility for them to more up or down a level twice each year. That means that the teachers necessarily have to invest in each child in that given year. For example, currently a teacher has their class for the whole year and that is unlikely to change unless there is a special circumstance, in my model there may be three teachers who are responsible for teaching the classes of first year; these teachers are more likely to discuss the work of each child and help each other create effective teaching plans for pupils. Why is this? Well, if teachers know it is likely that they will receive new children in their class they will want to make the transition as easy as possible if only for selfish reasons. This happens less with mixed ability classes because teachers are focused on "their own pupils".

Unfortunately your studies from the 1980's are out of date and don't represent current teaching practices. The conclusions of the second study is misrepresentative. First of all it is generally less stressful teaching a higher level class so it is easier to be more enthusiastic and more organised. The idea that they are better at providing explanations to pupils in higher level classes is simply because it is easier to explain a topic to a class that generally understand the subject better. This study also does not take into account the fact that teaching standards have improved because we recognised that teachers well ill equipped in those days to dealing with more challenging classrooms. This argument is non-responsive to the model I have presented and is therefore irrelevant to this debate.

4. Economics

So unfortunately this argument just doesn’t make sense mathematically. Think of it this way there are 90 pupils in first year that need to be divided into maths classes. One way of doing this is splitting them randomly into three classes of thirty pupils with mixed ability. The worst case scenario for dividing these classes with tracking is this; an A-B class with twenty pupils, two C-D classes with thirty pupils each and a lower set class with ten pupils. In this case you have to remember that these classes are not taught simultaneously so there is no need for any more teachers. Small lower ability classes tend to be taught in library rooms which gives the teachers and classroom assistants the flexibility of teaching and proximity to resources that their class needs so no other classrooms would be required either.
The "harms" presented by opposition are not related to tracking as I have shown and the benefits I outlined in round 1 have still to be proven untrue. For these reasons the policy must be proposed. I look forward to the next round.

The presumption of what intelligence is

Pro contended that pupils will be divided differently according to the subject, allowing children to mix (a child can be in one track in maths but in other for language). He also stated that "a classroom is not the only place a child develops"

Firstly, pro assumes here that the pupils that do good at maths won't do good at language and art. However studies show that being good at mathematical intelligence is correlated to high grades on language related subjects (1). So basically, the same kids will be on the same tracks for every subject.

Also, Pro talks about art classes as if every school had them. But that's not true. Besides that, arts contain a lot of subject, but according to the theory of multiple intelligences, only music would directly help to develop some model of intelligence.

Secondly, I accept that a classroom is not the only place where children develop. However, the same could apply in reverse: schools are not the only place children can learn maths. Then, should we stop teaching maths at school because children can learn them in other places? Obviously no. We should make everything to give the children a better and more holistic education.

This is just a matter of comparing pros and cons. With tracking we would improve logical, linguistic and a bit of kinesthetic intelligence but not teach the other six intelligences. In contrast, with the traditional we would teach all intelligences.

Sociability with different people
Pro contended that as some kids do good at some subjects and bad at other, his model would allow interaction with different kids and would brake social stigmatization.

Again, studies show that there will be the same group of kids in the high track of every subject\(^1\).

Moreover, this model wouldn’t do anything about social exclusion. Instead, it will make it worst. As studies have observed\(^1\), the more intelligent a child is, the more intelligent he is. Then, this tracking would create a deeper stigmatization about social positions and intelligence. This would lead to a deeper exclusion. As we know, exclusion just creates hate, violence, jealousy, more hate and sadness because of the impossibility of being in a certain group, and so on.

Any model that causes this must be promoted.

**Teachers**

Pro made several contentions here:

1) **That tracking is compatible with a more rigorous method of selecting teachers.**

Well, actually every education system is compatible with that. The problem here is that this rigorous selection is not an inherent part of the tracking system. This model does not include any kind of guidance on teachers selection. Then, if the rigorous selection of teachers is not part of the system, we shouldn't expect it would be applied if we apply the tracking system.

Propositions must be tested in an environment with constant variables. What I mean by this is that if you want to study the effectiveness of a system compared to another system, you must test both systems in the same conditions. Imagine you want to prove that water boils at a lower temperature if you clap during the process of heating it. You boil water in you kitchen and without clapping: the water boils at 100ºC. You boil water in the peak of the Everest while clapping: water boils at 70ºC. Is your clapping changing the boiling point of water? Or is the other condition? If
Boils at 70ºC. Is your clapping changing the boiling point of water? Or is the other condition? If you did the same experiment both times at your kitchen you will see water boiling at the same temperature both times. What I want to show is that changing the conditions is like cheating. You must test both systems under the same conditions. So this argument is invalid.

2) That I made a simplification of teachers by saying that better teachers choose and get given the higher tracks and that teachers performed better at high tracks

Pro contends that I’m making this up, that this is my personal assumption. Nevertheless, that’s not true. My claims are based on studies. If you read my argument carefully you will see I cited two scientific works supporting my claims. Anyway, I will cite them again to make my point clear. "A pilot study to assess equality in selected curricular offerings across three diverse schools in a large urban school district: A search for methodology" (Davis, 1986) and "Tracking in Secondary Schools: A Contextual Perspective" (Oakes, 1987). So no assumption here, but real scientific evidence. So another invalid objection.

3) That it’s easier to compensate this problems in the tracking system because pupils can move from on class to another.

I don’t see how this makes a compensation to the problem of having bad teachers. If lower tracks have worse teachers, the likelihood of those children moving to a better track is quite small. So the unfairness would continue.

4) That studies against tracking are bad and old

Firstly, Pro didn’t gave any direct evidence of the presented sources being non credible. Maybe they are a bit old, but not outdated. I mean, sociology and psychology are sciences based upon theories proposed longer ago that my studies. Tracking itself, is quite old.

Besides that, Pro attacks my sources but he doesn’t even cite any source at all.

Another invalid objection.

5) This argument is non-responsive to the model I have presented and is therefore irrelevant to this debate.
So Pro thinks that the unfairness of his system is not bad enough to refute his point. According to this, he thinks that giving the better education to the higher social class higher ability group and the worst education to the lower class lower ability group is all right.

Isn't it better to give the same quality of education to every child? Isn't it discrimination to give to the minority of high class high ability pupils the better education and give the majority the remains?

**Economics**

_Pro contended that the "worst scenario" on the tracking system would be "(if you have 90 pupils) A-B class with twenty pupils, two C-D classes with thirty pupils each and a lower set class with ten pupils. Also, he proposed that, as classes can be given in a not simultaneous fashion, we wouldn't need more teachers._

So Pro is conceding that there is an economical problem with his system. In the case where the traditional system would have three classes, the tracking system has four. I know that at first sight it sounds like a small difference. But seeing the bigger picture, it is not small at all. Having four classes instead of three would mean a cost increase of 25%. If we spent 100 dollars on education per year, paying that 25 dollars difference would be easy. The problem is that we spend way more than that. The American education budget, for example, is of 71 billion dollars. Then, the increment of cost caused by tracking would be of 18 billion dollars.

The "classes are not taught simultaneously so there is no need for any more teachers" is silly. If you have more classes you have more demand for teaching hours. To solve this demand you need to employ more teachers to cover those new hours, or make the teachers work more. The first option obviously causes more cost: more teachers more wages to pay. The second option also means more wage (because teachers would work more hours), but it has a limitation: you can't force teachers to work more than eight hours, so there would be a moment where you will have to employ new teachers. Anyway, both options increment costs.

If Pro can't show where to get those 18 billion dollars to pay for the system, then this system is meaningless.
meaningless.

**Conclusion**

The harms produced by tracking are way heavier than its benefit. I accept it would help kids to have a better logical intelligence. But what is the cost? We loose the development of the other 8 intelligences, we discriminate by smartness, we make kids’ social development harder, we give the better education to a minority and the worst to the rest, and we gain a debt of tens of billions of dollars. So, are the the harms worth the benefit? I showed they don’t. We shouldn’t support tracking.

(1) The general intelligence factor, by Linda S. Gottfredson

**Cross-Examination**

condeelmaster: How will you pay the tens of billions of dollars difference between your system and the actual one?

Bifurcations: If it is America cut the Military budget. It is pointless to argue numbers in this short a debate because we assume if the policy is being proposed then it is possible. If I prove that principally the motion should pass then I have proven that the policy is worth spending money on. If you prove the opposite then it isn’t. Every policy costs something and in each country it costs something different so for this type of debate it is pointless for us to try and argue numbers.

Bifurcations: Your argument about the lack of holistic education is independent of the debate on tracking v mixed ability classes. Under both systems there is a limited number of subjects being taught and that doesn’t change when we change the way we sort children into classes. Governments decide which subjects they can justify spending money on irrespective of whether the classes are treated or mixed ability.

condeelmaster: Firstly, it’s not pointless to argue about money here. If your system is not applicable, we shouldn’t support it. Taking money from other departments is not a solution. If we take money from the military we generate the potential risk of being vulnerable...
condeelmaster: If someone attacks us and we are vulnerable, lot’s of innocent people will die. Then it won’t matter to have a better education because our kids will be mostly dead.

condeelmaster: Secondly, it’s a matter of what we loose against what we gain. If one system has a more holistic approach than the other, the former system wins in that aspect.

condeelmaster: It’s not just a matter of subjects, of the direct curricula, but about the whole education. The traditional system does better at teaching interpersonal, intrapersonal and moral abilities.

condeelmaster: As Aristotle said: "Educating the mind without educating the heart is no education at all.”

Bifurcations: You have still to prove comparatively that a mixed ability class teaches interpersonal, intrapersonal and moral abilities any better than tracking does.

Bifurcations: As for your race to the bottom argument with military spending we can actually redistribute money from other areas of the budget that is how most policies are paid for again this would not be a debate if it was totally impossible to pay the cost of the policy.

Bifurcations: "Innocent people dying”. Really? "Kids are mostly dead". Really? This is exactly why it is pointless for us to argue over specific numbers.

Bifurcations: Every government would pay for a policy in the way that suits them best. This argument has nothing to do with the ability of tracking to improve our education system or not.

Bifurcations: We are wasting our time arguing over this. Again if we prove a policy principally good then it is worth spending whatever amount of money government can afford to spend on it. This is why arguing costs take us away from the debate we should be trying to win. This is why it is pointless and non persuasive.

condeelmaster: I’ve already explained how mixed ability classes are better at teaching those intelligence modalities, read my argument carefully next time please.

condeelmaster: And for the economic aspect I will say it again: if the system is not applicable, it doesn’t matter how good it is.

Bifurcations: I have read your argument very carefully but if you are still unconvinced by responses I will explain it as my first argument in my next post.

Bifurcations: "If the system is not applicable, it doesn’t matter how good it is” In debates like this we have to assume economic availability otherwise we end up with a debate like this one where we waste time arguing about the pros and cons of moving money from one budget to
another. We prove that the system is applicable or not by proving that it is a principally sound policy or not.

**Bifurcations**: Arguing over specific figures leads us to arguments like “Kids will die” which is really the pit of a slippery slope argument and nothing to do with tracking v mixed ability classes.

**Bifurcations**: Let’s get back on point for the final round. It will make for a better over all debate.

**condeelmaster**: No, we can’t assume economic availability. That would be changing the conditions. We must talk about real stuff, not utopias. If your system is good (which is still under debate) but not applicable, it is an utopia. We shouldn’t support utopias.

**Bifurcations**: For a short debate which is focused on improving a debaters general skills in debating it is generally better to avoid the argument "we can’t do this it costs too much" because it is ridiculously hard to improve your debating skills when the argument is about how much a particular policy will cost. It is not a utopia t suggest that if a country is debating the benefits or harms of changing from mixed ability classes to tracking they would have the costs to cover it.

**Bifurcations**: That is the last bit of analysis I will give on economics if people believe that that is a good enough reason for me to lose the debate that is ok with me and you would win. I really feel like we should bring the debate back to the central arguments for the last round.

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**Bifurcations (PRO)**

In this round I will attempt to summarise the debate and deal with any outstanding rebuttal.

1. "Intelligence"

I think I have finally figured out the problem with this. A school exam [1] is not an intelligence test [2]. A school exam is set to test your ability to recall, understand and use skills which have been taught in class. An intelligence test is a much broader test which tests your capabilities to use reason to understand and solve a problem that you have never encountered. They are similar but not the same. The paper you cite [3] is discussing IQ tests not school tests.

"Intelligence as measured by IQ tests is the single most effective predictor known of individual performance at school"

This means that measuring a pupils IQ will give you a reasonable way to predict how well they will
perform in school exams not that the two are interchangeable.

"mental tests are often designed to measure specific domains of cognition—verbal fluency, say, or mathematical skill, spatial visualization or memory—people who do well on one kind of test tend to do well on the others, and people who do poorly generally do so across the board."

This means when measuring IQs and focusing on different intelligences people who have a higher general intelligence will probably do fine in the test no matter which intelligence you are testing. All this shows is that good reasoning and problem solving skills you can apply those to every type of intelligence.

Just because you can reason with an unseen problem does not automatically put you in the top track of each subject at school. Each class teaches a specific range of information and your ability to pass a school exam is a combination of your ability to problem solve and your ability to study effectively. If you can keep up in class then studying is easier. In round one I explained why in mixed ability classes kids who are struggling often get left behind but in tracking you teach each module at their pace so they can keep up and therefore do better at studying and in their exams.

2. Holistic Education

**OPP:**

- *not all schools have art class*
- *we should have holistic education*
- "*with the traditional we would teach all intelligences*"

Given that you prove with "traditional teaching" not all schools have art classes you have proven that mixed ability classes to not lead to more holistic education. Even though you assert that it does you give no analysis to justify this. The reason schools are limited in what they teach is because they have to justify that school is the best place for pupils to learn this skill and it is necessary for you to function in modern day society. This justification is independent of mixed ability or streamed classes. Your social development part is next.

2. Social Development

**OPP:**

- *Different realities, problem solving and ways of thinking are important*
- *worse social stigma tied to "being in the bottom class"*

In round two I argued that not every pupil of the same ability will approach a problem in the same way or have the same lived experiences. This is why two equally capable politicians will have
same way or have the same lived experiences. This is why two equally capable politicians will have different backgrounds and will solve issues in different ways. For example one may have a right wing solution another may have a left wing solution.

Interestingly one study [4] found that for some cases where schools had at least some setting the self-concept of those in the streamed class was higher than that of the mixed ability class and that this was mediated by teaching ability (see argument 4). In the case of low-ability children they will perhaps always feel some level of pressure which can be harmful. At least with tracking they are not singled out in class as “the silly one” either by themselves or others. In round one I showed how that leads to less class engagement which is detrimental to learning. The comparative is does tracking or mixed ability classes allow them to improve. In the next argument I will show evidence of improvement from tracking and show that it is easier to allocate support in tracking which helps pupils improve.

3."Scientific" Papers

30 years is enough to make these papers outdated due to the changes in politics and teacher training [5]. This makes it harder to use the conclusions of your papers as the current standard of education practices are very different to the ones in those studies. "based on theories proposed long ago": the dominant theories of social science subjects change dramatically as new theories present a better representation of reality [6]. The discussion on best educational practices has moved on from the 80’s so your papers are no longer as relevant.

I will however explain why the Oakes paper is problematic (I could not find the original Davis paper so cannot confirm it’s conclusions). Oakes comes from a position where she already believes tracking to be bad and then she rights a paper to justify this belief. That is why there is a difference between a social science (psychology) and a natural science (physics). In social sciences it is an acceptable research technique to consider an issue from a biased perspective whereas in a natural science is considered terrible scientific practice (I have studied both physics and psychology at university). In an interview Oakes gave in 1997 [7] she concedes that if resources were allocated correctly to the lower tracks then the tracking system would be beneficial. This allocation had not happened yet as the role of Teaching Assistants was still being explored [8] however now we recognise their role and where they are most effective. It then comes down to how do we get a bureaucratic system to spend money on classroom support. The UK [England and Wales specifically] is threatening to ax the teaching assistant (TA) program [9] because it sees an easy way to save money. With mixed ability classes in the UK right now teachers have to apply for additional support for children who they believe need it and this is taking too much time and is inefficient. With tracked classes it is much easier.
takes time and ends up being inefficient system. With tracking it is much easier now to say we recognise TAs use and we will allocate them to the lowest tracked classes as those are the children that need the most support. With mixed ability classes you end up losing support like what is happening in the UK right now.

Another study [10] has this abstract:

"We use a new strategy for overcoming the endogeneity of track placement and found no evidence that tracking hurts low-ability students... When we take school choice into account, we evidence that low-ability children may be helped by tracking."

The discuss the importance of taking into account school choice when studying tracking and find evidence to the contrary of your studies.

4. Teachers

Higher tracks better teachers: Teachers are given multiple classrooms of different tracks each year. You may have a higher track of first year pupils and a lower track of sixth year pupils. I analysed why this happens in the second round. As shown your "scientific" evidence for this point cannot be verified (Davis paper). In round two I also explain why a single stay on tracking (where the author is biased against tracking) would lead to the conclusion of "teachers being more enthusiastic and organised" in higher tracks compared to lower tracks. I also show that these are not the defining characteristics of "good" teachers. I say my analysis is more realistic because I worked in a school, was educated with streamed classes and come from a family of teachers. This also means that your argument bad teachers get given lower classes is false.

Teacher selection and ineffective teachers: You said tracking should not be applied because bad teachers exist. We now both agree it is possible to implement better hiring practices independently of implementing tracking, I.E. this is a separate debate and not a reason to not implement tracking.

"I don't see how this makes a compensation to the problem of having bad teachers"

I explained in round two how teachers feel a responsibility to pupils not yet in their class because there is the probability that pupils will change class after reassessment. teachers want this transition to be smooth. If they recognise that one of their colleagues are weaker teachers they are now more likely to provide suggestions and constructive criticism which improves the level of
are now more likely to provide suggestions and constructive criticism which improves the level of teaching in every class. Mixed ability classes see this happen less as teachers are focused on their own class and trying to provide a teaching plan that is effective for all abilities (this is a lot harder: see my arguments in round one).

Test system under the same conditions: All you prove here is that comparative testing with social systems is difficult. This is an argument to read all papers in social science with a degree of cynicism (this includes the papers you cited).

I thank my opponent for an intense and interesting debate.


For the final round let's summarize everything and give a final conclusion.

Intelligence or intelligences

Pro contended the tracking model was effective at improving intelligence. However, this model is good at developing better logical and linguistic intelligences, but ignores the other intelligences.
Pro accepted this but objected that schools shouldn’t be a place to develop the other kinds of intelligences. In my opinion this is not like that. We should give our best to have the most complete education we can have. Improving just two of the nine modalities of intelligence is not the most complete education we can have.

Pro also argued that the traditional system is not holistic. Let’s compare how many intelligences are developed in each model:

**Tracking:** logical, linguistic (both from regular subjects), kinesthetic (PE), musical (some have music classes) ==> four out of nine  
**Traditional:** logical, linguistic (both from regular subjects), kinesthetic (PE), musical (some have music classes), interpersonal, intrapersonal, existencial (by interacting with different people who lives in different realities, have different abilities, etc.) ==> seven out of nine.

It doesn't take much analysis to observe the traditional system teaches almost two times the amount of intelligences the tracking system teaches. If we have two chose between two systems, logic mandates to choose the one with more benefits, in this case the traditional system.

Finally, Pro said that objected my argument that every top track will have the same group of people. I contended that studies show that if you do good at maths related subjects you will do good at language and music related subjects. Pro responded that those studies showed the capacity you have to solve a problem related to those intelligences, but that didn't mean they you will do good at the actual subjects. This has no logic. Let me explain this in an easy way:

==> If you are in the top track in maths you are good at solving problems related to maths. To be in the top track it isn’t enough to study a lot, you have to have the problem solving capacity. If you study a lot but don’t have the problem solving capacity, you won’t reach the top track.  
==> If you are good at solving problem related to maths, you are good at solving problems related to language and music. (as conceded by Pro and proved by the studies)  
==> If you are good at solving problems related to language and music you will be in the top track of the subject related.

==> Conclusion: If you are in the top track in maths you will be in the top track at language and music.
This same logic applies changing the subjects.

So the top ranks will be composed by the same group of people. This, as I showed previously, generates some problems, like stigmatization and exclusion.

**Social development**

As discussed earlier, this model causes problems for the social development of kids.

On one hand we have the stigmatization. In mixed ability classes there's already a tendency to put tags to the silly ones and the intelligent ones. However, this tags are imaginary, at the end of the day, all of the pupils are part of the same group. But tracking makes this imaginary tag real. There's no subjectivity on those tags, there's no equity at the end of the day. This model segregates the smart ones from the silly ones, and enhances the stigmatization.

On the other hand, it generates social class stigmatization. Scientific studies, The general intelligence factor is one of those, show that the higher the social class, the more intelligent you are. So basically, tracking will not segregates smarts from "sillies", but also poor from riches. This cause the stigmatization to be deeper, but also it generates a sort of echo chamber. You only interact with people the same intelligence as you, the same class as you.

**An unfair system**

As studies show, the tracking system cause inequality and unfairness.

The tracking system produces:

- "an effect of reducing equality of opportunity."
- "good teachers have a preference for teaching in high-skilled classes", so less intelligent people will be in disadvantage
- "reduce intergenerational mobility."
• “amplification of the peer effect”, which is losing self stem by seeing your peers being better than you
• "reinforces the negative effects of the parental background", this means family background is more decisive; poor pupils will have it even harder than the rich ones
• "reduce mean performance"
• stigmatization and discrimination
• etc.

As Pro contended that the studies I cited before were "outdated" I will cite some newer papers. Guess what? They reach the same conclusions

Does Educational Tracking Affect Performance and Inequality? - Hanushek and Wößmann
Does school tracking affect equality of opportunity? New international evidence - Brunello and Checchi
The Color of Discipline: Sources of Racial and Gender Disproportionality in School Punishment - Skiba, Michael, Nardo and Peterson
Tracking and sense of futility - Houtte and Stevens

Economy

It’s not the central argument, but is part of the whole picture. If a policy is impossible to apply in the actual conditions, we can't afford supporting it. Previously, I demonstrated how tracking is way more expensive than the actual system. So, in order to make this model real we would have to: invent money from thin air or taking money away from other important area.

Conclusion

The harms this system causes outweigh the benefits. Applying the tracking system would be impractical and unfair. On balance, we shouldn’t support a system which enhances inequality and incomplete education, we shouldn’t support the tracking system.
Incomplete education, we shouldn’t support the tracking system.