

Growth Mindset: Attitudes and Practices at CamEd Business School

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Running head: Growth Mindset at CAMED Business School

Abstract: *The purpose of this paper is to assess the growth mindsets of students at CamEd business school. It also assesses classroom practices that either foster or hinder growth mindset and authentic learning, and assesses the mindset of CamEd as organization itself. The assessments were conducted through comprehensive surveys made available to students, lecturers and staff. The findings showed the mindsets of the students to be mixed, with a leaning towards a fixed mindset. Overall, lecturers reported practices that foster a growth mindset in their classrooms, including setting high expectation and providing additional support to reach these aims. As an organization CamEd practices healthy and open discussion between lecturers and leadership. Some of the areas of improvement for classroom teachers were to more intentionally create an atmosphere where it is safe to make mistakes as part of the learning process and provide process praise rather than person and praise. Both of these recommendations are discussed thoroughly. It was also recommended to directly teach the science behind the concept of growth mindset to students. The final recommendation is to improve proactive collaboration among staff at CamEd.*

Keywords: Growth mindset

1. Background

Carol Dweck's research into attitudes about intelligence, learning and the brain has had significant repercussions on education. She has coined the terms growth mindset and fixed mindset to describe a student's attitude toward intelligence and their learning abilities.

Dr. Dweck and her colleagues have studied student's attitudes about failure. They found that some students recovered much more quickly than others, and found that the underlying beliefs about intelligence were key to their success. In her research, "*How Mindset works*" she argues that "when students believe they can get smarter, they understand that effort makes them stronger. Therefore they put in extra time and effort, and that leads to higher achievement" (Dweck, 2017).

In light of this research, there has been much discussion and further resources developed to help educators foster growth mindsets in students. Mindsets themselves are not fixed. Teachers play a significant role in developing growth mindsets in their students' lives. There are practices employed by teachers that can encourage students towards a growth mindset and other practices that put students in a fixed mind-set, more focused on appearing smart, rather than actual learning. In addition to this, an organization itself can have a mindset. This paper seeks to describe the current mindset of CamEd as an organization, its students, and the mindsets of the different groups of classes at CamEd as self-reported by students and lecturers as well as give recommendations to improve the growth mindset of students at CamEd.

2. Methodology

Three surveys were made available to CamEd students, faculty and staff from October 5th- through October 25th

2018. The surveys were available online and could be accessed via a link – (https://docs.google.com/forms/d/1M-QkkBPYe4Guk0cOdC2pdxI_hoMXd6jb-fKIXR09c_g/edit)

The surveys were taken from mindsetworks.com and provide an informal assessment of students' growth mindset, the collective mindset of individual classrooms, and the mindset of the CamEd as an organization. These surveys provide a starting point for lecturers and leadership staff to implement practices that increase the growth mind attitudes across CamEd as an organization.

Four hundred and twenty-four CamEd students participated in the *What's my Mindset?* survey. The aim of this survey was to gauge the students' mindsets as growth, fixed, or mixed. Roughly 70% of participants were female, the remaining 30% male. Students from all four year groups were represented.

Fourteen lecturers responded to the *What's my Classroom Mindset?* survey. These were anonymous, and there are no identifying factors as to which classrooms these are. This small sample size gives a glimpse into the classrooms at CamEd, but may not be indicative of the whole. Only five lecturers/staff participated in the *What is CamEd's Mindset?* survey, this is not a large enough sample size to provide an accurate picture of the organization's culture and mindset, but the paper will comment briefly on what the participants shared and give suggestions on how to improve the growth-mindset among staff and school culture to be more conducive of growth, inclusiveness, and motivation.

3. Discussion and Findings

3.1 Discussion: *What is my Mindset?*

Mindset can significantly impact the behavior of students. Fixed mindset is characterized by a desire to look smart,

seeks to achieve greatness with minimal effort, and avoids real challenges. It also is threatened, rather than inspired by, the success of others. Making mistakes is a source of shame, because it threatens the belief that a person is good or smart.

On the other hand, a growth mindset is less concerned with appearing smart, and instead is convinced that through hard work, effort and practice achieving goals is possible. A growth mindset sees mistakes as part of the learning process and sees them as an opportunity to improve and grow.

To summarize the fixed mindset:

- Avoiding challenges
- Gives up easily
- Sees effort as fruitless or worse
- Belief that intelligence is fixed
- Threatened by others' success
- A need to be perceived as smart or good

The growth mindset:

- Believes that intelligence and talent can be improved through effort
- Embraces challenges
- Persist in the face of setbacks
- Sees effort as the path to mastery
- Learn from criticism
- Finds lessons and inspiration in the success of others. (Holmes& Dweck, 2017).

Students can be inclined towards a growth mindset; they can have a mixed mindset holding some growth mindset beliefs and some fixed mindset beliefs, or they can be firmly in a fixed mindset. Mindsets themselves are not static; they change as students' process new information and gain experiences.

One key approach and basis for fostering a growth mindset in students is directly teaching the malleability of the brain. Just as muscles can grow and develop with practice, new skills and concepts become more understandable with time, effort, and strategies. Directly teaching the neuroscience behind growth mindset is an important factor to help students grasp a growth mindset. (Dweck, 2017, para. 2- 4)

Understanding the science of the growth mindset and the basic neuroscience of the brain helps students understand why a growth mindset can make sense for them. Directly teaching the science of the growth mindset can provide confidence for those already inclined towards a growth mindset. For those with a mixed mindset it will help nudge them towards a growth mindset, and for those firmly in a fixed mindset thought process it will provide new information that will hopefully provide a much needed perspective shift.

Brock and Hundley (2017) in their *"The Growth Mindset Playbook"* sums it up like this:

The human brain is a complex and wondrous thing, and helping your students understand exactly how the components of the brain are engaged in the learning process will help them buy into the idea that their brain, like

everyone else's, has the ability to grow and change. Once kids understand the power they have to grow their own brains being smart becomes less of an abstract quality that only some people possess and more an outcome that can be achieved by anyone willing to work for it. (p. 43-44)

3.2 Findings: *What is my Mindset?*

Answers from the student survey neither fall into the growth or fixed mindset completely. This is what we refer to as a mixed mindset holding some beliefs compatible with a fixed mindset, and other beliefs more closely aligned with a growth mindset.

The statements characteristic of a growth mindset include:

- No matter how much intelligence you have, you can always change it a good deal.
- I like my work best when it makes me think hard.
- I like work that I'll learn from even when I make mistakes
- When something is hard, it just makes me want to work more in it, not less.

A response of agreeing or strongly agreeing with these statements would be indicative of a growth mindset.

- 82% of students agree or strongly agree that "I like work that I'll learn from even when I make mistakes." This is a strong leaning towards a growth mindset, with a healthy recognition that mistakes are part of genuine learning.
- 63% of students agree or strongly agree with the statement "No matter how much intelligence you have, you can always change it a good deal. This statement indicates a belief that can be learned, and important facet of the growth mindset.
- Just over half agree or strongly agree with the second statement "I like my work best when it makes me think hard." This is indicative of a mixed mindset among students.
- The majority of students remained neutral towards the statement "When something is hard, it just makes me want to work more in it, not less." A key aspect of a growth mindset is a desire to engage with challenging material.

While there is some indications of a growth mindset among students, in this set of statements, overall replies are mixed – some leaning towards growth, some leaning towards fixed and some mixed implied by the neutral replies.

The statements characteristic of a fixed mindset include:

- You can learn new things, but you cannot really change your basic level of intelligence.
- I like my work best when I can do it really well without too much trouble.
- I like my work best when I can do it perfectly without any mistakes.
- To tell the truth, when I work hard, it makes me feel as though I am not very smart.

Agreeing or strongly agreeing would be indicative of a fixed mindset. A response of disagree or strongly disagree is indicative of a growth mindset.

- Fewer than 40% of students disagreed or disagreed strongly with the statement “You can learn new things, but you cannot really change your basic level of intelligence.” This is evidence of a fixed mindset among students. Student must be challenged to help them move into a growth mindset mentality.
- Sixty percent of students reported they “like work best when I can do it really well without too much trouble.” This is indicative of a fixed mindset and must be challenged to help students reach their full potential.
- Fifty percent of students reported they like work best when they can do it perfectly without any mistakes. While this may be a student’s goal, true learning encompasses mistakes and it is important to help a student understand the role of mistakes in the learning process.
- Forty percent of students admitted that working hard, made them feel not very smart. 33% percent disagreed or strongly disagreed, and the remainder chose neutral as a response. This too, shows a mixed mindset with there being neither a strong leading in either a growth mindset or a fixed mindset.

One interesting note is that in comparing the results of year four students with year one students, shows no significant different in beliefs held. The trend of beliefs held follows a very similar curve among both groups.

In summary, while there is some evidence of a growth mindset among students at CamEd, there is not enough evidence to say that growth mindset attitudes are prevalent among students. A number of students also replied neutral in response to statements, indicating that they are not accustomed to reflecting on their own attitudes towards learning, which would be indicative of a fixed mindset. It is possible to describe the student body as having a mixed mindset which encompasses some beliefs of a growth mindset and some of the fixed mindset. There is no significant difference in beliefs between year four, and year one students.

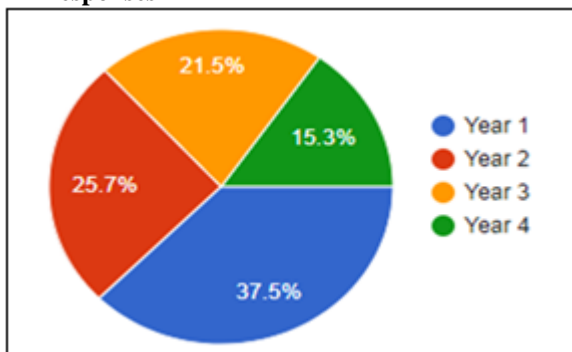
See charts for survey results, and refer to figure 1 in the appendix for an analytical breakdown of the survey responses.

“What’s my Mindset Quiz”

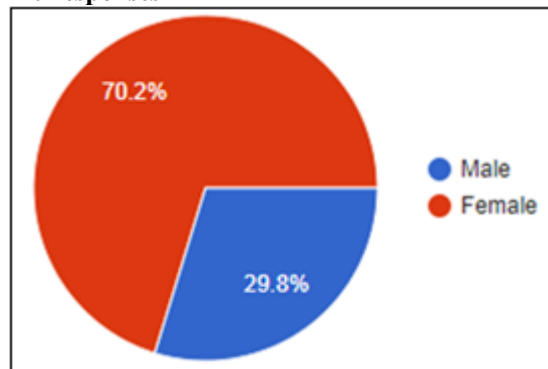
424 responses

What year are you in?

424 responses

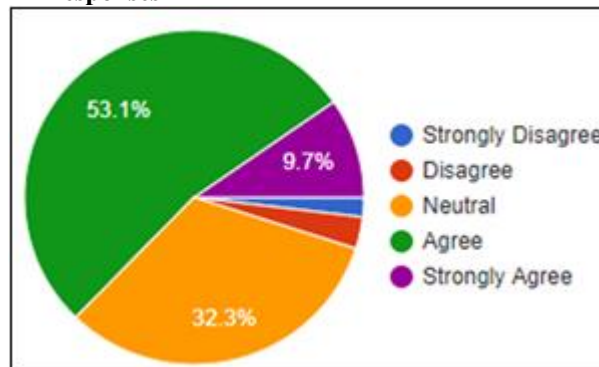


Sex
420 responses



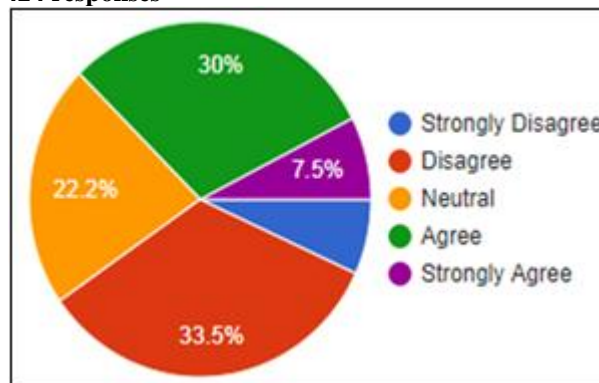
1) No matter how much intelligence you have, you can always change it a good deal.

424 responses



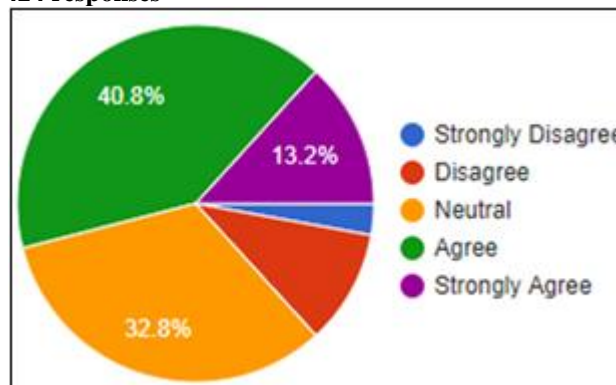
2) You can learn new things, but you cannot really change your basic level of intelligence.

424 responses



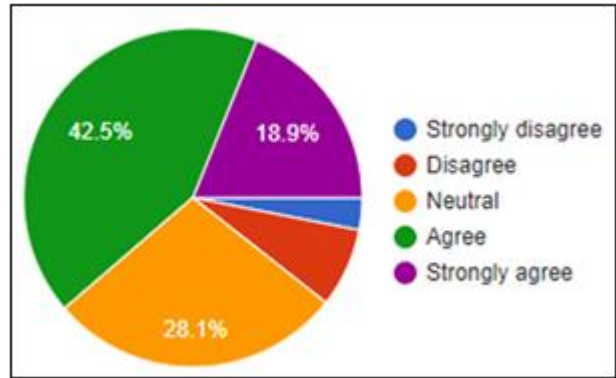
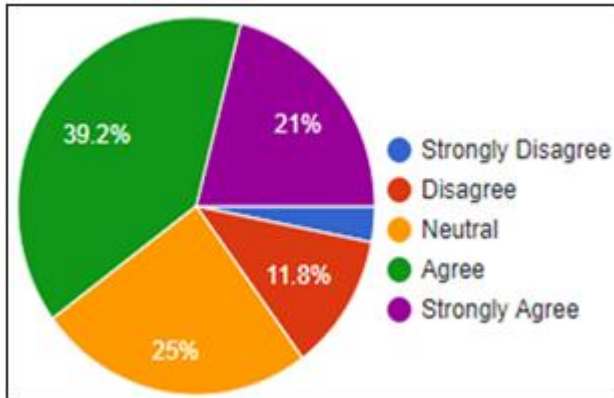
3) I like my work best when it makes me think hard

424 responses



4) I like my work best when I can do it really well without too much trouble

424 responses

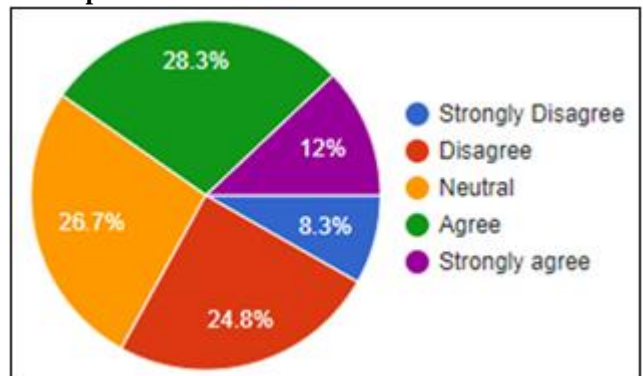
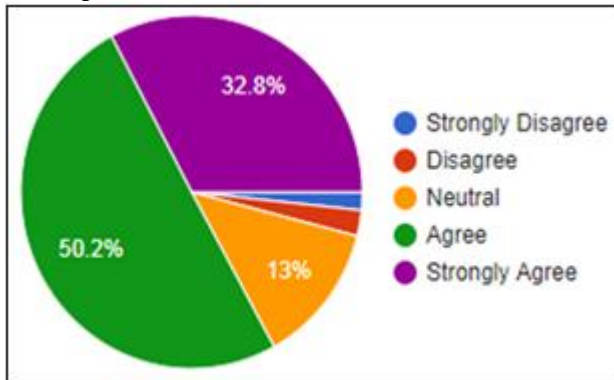


8) To tell the truth, when I work hard, it makes me feel as though I'm not very smart.

424 responses

5) I like work that I'll learn from even if I make a lot of mistakes.

424 responses

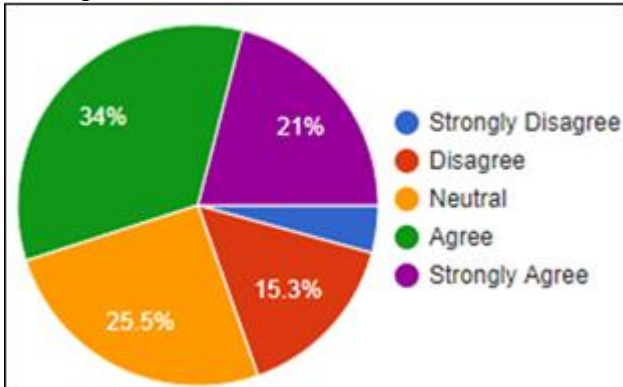


3.3 Discussion: What is my Classroom's Mindset?

Students may enter the classroom with a predetermined mindset, but classroom practices affect those mindsets tremendously. Two key aspects to developing a classroom that fosters a growth mindset are creating a culture where mistakes are allowed and expected as part of the learning process and providing process praise. Feedback that helps students develop the motivation to try new strategies, recognizes effort and problem solving.

6) I like my work best when I can do it perfectly without any mistakes.

424 responses



An important aspect of fostering a growth mindset is creating a culture where it is safe to make mistakes as part of the learning process. Dweck (2016) references a study in her book *Mindset* where students were tasked with a complex set of managerial responsibilities in a computer simulation. They were instructed to run a simulated organization and had to place, guide and motivate employees. The students were placed in two groups. One group was given a fixed mindset and were instructed that the simulations measured their basic capacity, essentially the higher their capacity the higher their performance. The other group was placed in a growth mindset and told that management skills were developed through practice. The task was quite difficult and both groups made a large number of mistakes in the beginning. Those in the growth mindset group learned from their mistakes and outperformed those in the fixed mindset group. Those in the fixed mindset group did not profit from their mistakes.

7) When something is hard, it just makes me want to work more on it, not less.

424 responses

From this study we learn the value of creating classroom environments where mistakes are expected as part of a valuable learning experience. A great violinist would spend

extra rehearsal time focusing on the trouble spots and practice them until they could play them confidently. Likewise, teachers can help students value (not be ashamed of their mistakes) because it tells you where to focus your efforts in order to improve.

Mistakes are often a source of shame for students, especially those operating in a fixed mindset, which doesn't see effort as part the equation for success. A growth mindset recognizes that effort and a willingness to make mistakes goes a long way towards achievement. It is essential that teachers make this part of their classroom culture, and not allow other students to shame or put down others for their mistakes or not understanding a new concept quickly. It is human nature to avoid sources of shame and if academic mistakes are a source of shame, students will go out their way to avoid making them, and in the process stop learning (Maats & O'Brien, 2014).

Boaler's three strategies for taking the shame out of mistakes and creating a classroom culture where mistakes are encouraged and celebrated as part of learning include:

- **Start class with the norm that you love and want mistakes.**

Teachers have the power to create a new norm around mistakes that gives permission for students to speak up and risk making mistakes, by stating it at the beginning of the year and repeating it until it becomes part of the classroom culture.

- **Talk about mistakes**

Use mistakes as teaching tools, to help students focus in the tricky parts of work. Highlight mistakes, help students share mistakes with each other and discuss mistakes. Remind students that when we study and focus on mistakes we grow and become more efficient learners.

- **Give work that encourages mistakes.**

This ensures that students are working at a level that is properly difficult for them and ensures learning. ("Three ways to celebrate mistakes in class," 2016)

A second key aspect of a classroom which fosters a growth mindset is feedback which consists of process praise, feedback that recognizes engagement, perseverance, strategies, and improvement. Allison Master in her article, "Praise That Makes Learners More Resilient" (2015) makes a distinction between person praise and process praise. While person praise praises talent, "You're such a good drawer." or intelligence "You're so smart." Process praise focuses on the process, which they can control. These processes may include – engagement, study habits, focus, and effort.

Dweck (2007) also recognizes the value of process praise and says that ". . . process praise (praise for engagement, perseverance, strategies, improvement, and the like) foster hardy motivation. It tells the students what they've done to be successful, and what they need to do to be successful again in the future" (para.22).

The danger of person focused praise Masters says, comes when students face a challenge or difficulty, and don't want to risk being seen as "not smart" or good enough. Person praise that focuses on students' ability ties their sense of self-worth to the feedback they get: when it's positive, they feel good about themselves; but when it's negative, they feel bad about themselves. According to Allison Master's 2015 article, *Praise That Makes Learners More Resilient*,

When they make a mistake, it implies that they are NOT smart or good, which can make them feel helpless. They feel they can't do anything to fix the situation. They often feel negative emotions, feel bad about themselves, and want to quit the task. They get fixated on errors (their own and other children's). They often continue to perform poorly. (p.2)

Process feedback is mindfully giving feedback that acknowledges planning and trying a variety of approaches. Process feedback helps reinforce the need to attempt a variety of problem solving methods, helping develop perseverance in students. The power of such feedback has been measured in a study by Dweck.

One of her experiments asked 400 fifth graders in New York City schools to take a short, easy test, on which almost all performed well. Half the children were praised for "being really smart." The other half was complimented for "having worked really hard."

Then they were asked to take a second test and given the option of taking one that was pretty simple and they would do well on or one that was more challenging, but they might make mistakes. Of those students praised for effort, 90 percent chose the harder test. Of those praised for being smart, the majority chose the easy test. She has conducted similar experiments and studies in a variety of school districts—low income and high income, homogenous and mixed in cultures and races.

Masters includes strategies for giving process feedback in the same article mentioned earlier. These include "highlighting students' use of strategies and resourcefulness," "emphasizing students' persistence and the fun of succeeding at challenging tasks" and simply being generous with process praise as a teacher (p.4).

One of the keys in helping students develop resourcefulness and willingness to try strategies is to help them develop an awareness of their own metacognition. Brock and Hundley (2017) in *The Growth Mindset Playbook* describe metacognition as:

Understanding and having control over the higher level thinking processes associated with learning, such as planning strategizing and evaluating progress. Metacognition is a conscious approach to thinking and learning as a process of implementing strategies and evaluating outcomes, they can apply that learning to a variety of situations far beyond the immediate context in which they are working. (p.56)

It is important to help students to identify and articulate which learning strategies and work habits helped them be

successful and meet their goals. Encouraging students to understand and articulate these preferences also provides the teacher useful information to differentiate instruction and personalize instruction.

Brock and Hundley (2017) use the example of a baseball player at bat to explain metacognition to students. When learning a new skill a player will try different stances, turn their head and body to different angles. Once the most effective stance is found a player will stick with it, although, they will adjust it slightly depending on the circumstances. Just as it would take time and practice to learn an effective position in sports, it takes time and effort to find an effective stance for academic learning. Many students may assume they are “genetically predisposed to being bad learners” when really, they just haven’t found the right strategy for them. The contrast between a fixed mindset and a growth mindset is the difference between wildly swinging the bat with no strategy at all, and taking the time to learn. Just as a good coach helps you with the first a strong teacher helps you with the latter (p.60).

Students can develop metacognition through exercise such a metacognition survey, and share the results with a peer. Sample questions could include:

- Describe a time you felt frustrated learning something new?
- What do you do when you don’t understand something?
- How do you connect information to things you already know?
- Describe the feeling of learning something new?

Developing a sense of metacognition and keeping track of their individual progress also provides a way for students to move away from comparing themselves to others and the need to perform, and to shift their focus onto their own authentic learning journeys.

3.4 Findings: *What is my Classroom’s Mindset?*

A teacher’s role is fundamental in creating an atmosphere with a focus on genuine learning rather than appearing smart. In addition to asking students to assess their personal mindsets, lecturers were also asked to assess the mindset of their classrooms. These questions aimed provide a sample of classroom culture and his survey focused on several key aspects of a classroom that fosters a growth mindset including:

A “safe space” to learn and make mistakes without penalty. Mindsetworks.org (2015) -See questions 1, 12.

- 86% of the responses indicated that lecturers usually or always grading students while they are learning something new.
- 50% of responses indicated sometimes, usually or always when asked about being teased about “poor performance, mistakes or being slow.”

It is likely that both concerns about grades and/or teasing from classmates reinforce a fixed mindset that discourages students from taking risks and distracts from authentic learning with the need to appear smart in front of classmates and their teacher.

A clear understanding of what they are trying to learn and why Mindsetworks.org (2015) -See questions 2, 3.

- 86% percent of lecturers indicated usually or always providing students a rubric.
- A high majority (86% responded usually or always) of lecturers also reported that students are encouraged to ask the relevance of a topic.

A high percentage of positive responses to this question indicate practices that foster a growth mindset.

Clear expectations to achieve highly and the support to do so Mindsetworks.org (2015) -See questions 4, 7

- 79% responded usually or always in regards to differentiated levels of support being provided to reach common high standards.
- 93% of lecturers responded always or usually to providing specific feedback on how to improve when they give a wrong answer.

A high percentage of positive responses to these questions also indicate high incidences of practices that foster a growth mindset.

Some aspects that foster a fixed mindset were also included in the survey questions. These include:

Recognition for performance compared to others, rather than their individual progress. Mindsetworks.org (2015) - See questions 8, 9, 10, 11

- 79% of lecturers responded usually or always in regards to rewarding or praising students for completing work quickly. While in some settings such as turning in an assignment ahead of a deadline may be admirable (this may be an opportunity for process praise) students who are completing assignments quickly and easily are not learning. This may be an opportunity to challenge students with more difficult work.
- Half the lectures reported that students who achieved most highly on tests received the greatest public recognition and the remaining half responded sometimes or rarely and half responding usually or always. This too fosters a fixed mindset, by recognizing talent rather than effort and progress. This could be reflective of different styles within CamED.
- Lecturers were also split 50/50 when asked about receiving public recognition for receiving individual progress. 50% of lecturers replied rarely or sometimes and 50% responded usually or always. This is a mixed result and again, is probably reflective of different styles of teaching within CamEd.
- 72% of lecturers reported that student grades reflected mastery of specific standards rather than average or sum of points, reflecting genuine learning.

Feedback highlighting their personal attributes rather than the processes that they control. Mindsetworks.org (2015) -See questions 5 & 6

- 86% of lecturers replied that they recognize effort in the form of rewards, rewards or grading practices. This practice would potentially foster a growth mindset by recognizing and celebrating effort.

- 72% responded that they usually or always tell students that they are smart when they performed well. This practice potentially fosters a fixed-mindset, and more effective method of praise and feedback is process praise as previously discussed.

In summary, there are several practices that CamEd lecturers are employing that are fostering a growth mindset. These include:

- Providing the students a clear understanding of what they are trying to learn and why.
- Setting clear expectations to achieve highly and providing the support to do so.

There are also key elements that can be improved upon to better foster a growth mindset in classrooms. These include:

- Creating learning space where it is safe to make mistakes
- Providing more effective feedback that focuses more on process than person

Recognition for student’s individual progress

Recognition for performance compared to others, rather than their individual progress. Mindsetworks.org (2015) - See questions 8, 9, 10, 11.

- 79% of lecturers responded usually or always in regards to rewarding or praising students for completing work quickly. Completely
- The response to question 9 in regards to students performing highly on tests receiving the greatest public recognition was almost split 50/50 with half responding sometimes or rarely and half responding usually or always.

Feedback highlighting their personal attributes rather than the processes that they control. Mindsetworks.org (2015) -See questions 5 & 6.

- 86% of lecturers replied that they recognize effort in the form of recognitions, rewards or grading practices. This practice would potentially foster a growth mindset.
- 72% responded that they do this usually or always provide feedback that highlights their intelligence, by telling them they are smart when they performed well. This practice potentially fosters a fixed-mindset, and more effective methods of praise will be discussed later.

In summary, as expected there are several key elements that, CamEd lecturers are employing that are fostering a growth mindset. These include:

- Providing the students a clear understanding of what they are trying to learn and why.
- Setting clear expectations to achieve highly and providing the support to do so.

There are also key elements that can be improved upon to better foster a growth mindset in classrooms. These include:

- Recognition for individual progress rather than performance compared to others
- Creating learning space where it is safe to make mistakes
- Providing more effective feedback that focuses more on process than person

“What’s My Classroom Mindset?”

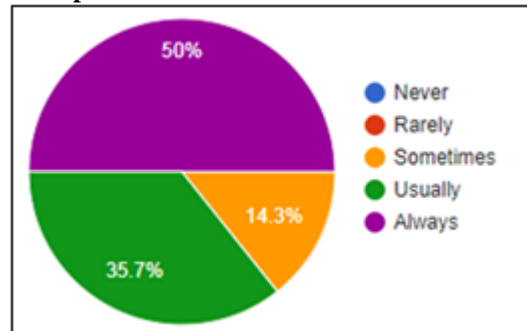
Questions Responses 14

14 Responses

Summary	Individual
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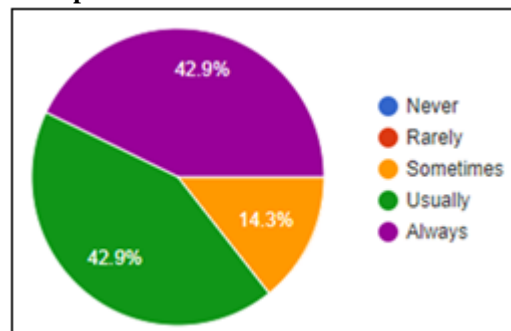
1) Students are graded on assignments when learning something new.

14 responses



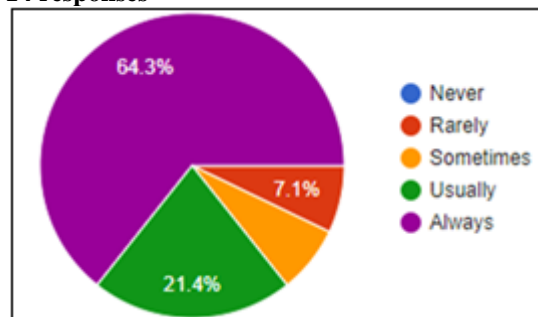
2) Students are provided rubrics in student-friendly language before they begin a major assignment

14 responses



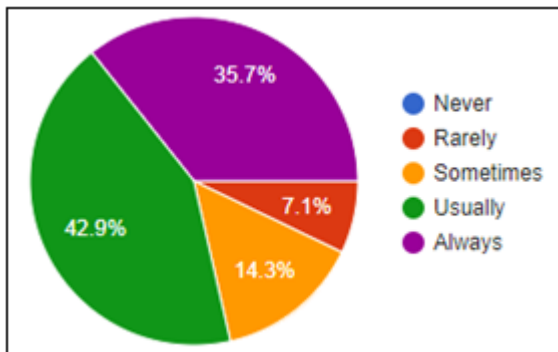
3) Students are encourages to ask the teacher why the class is learning

14 responses



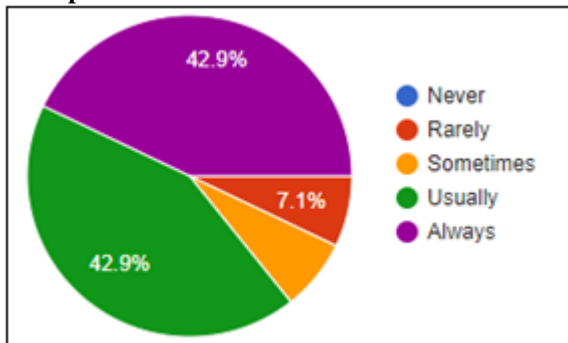
4) All students are expected to reach a common high standard but they are given different levels of support and time to accomplish it

14 responses



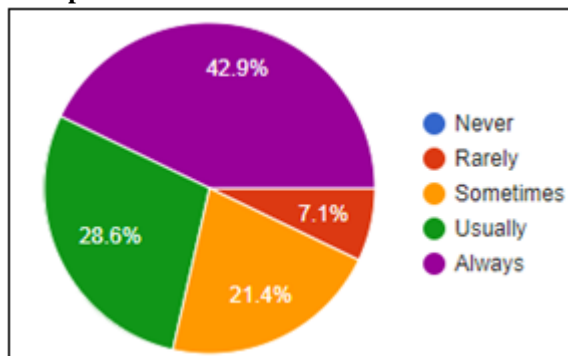
5) Students receive recognition for effort in structured ways, such as awards, rewards, or grading practices.

14 responses



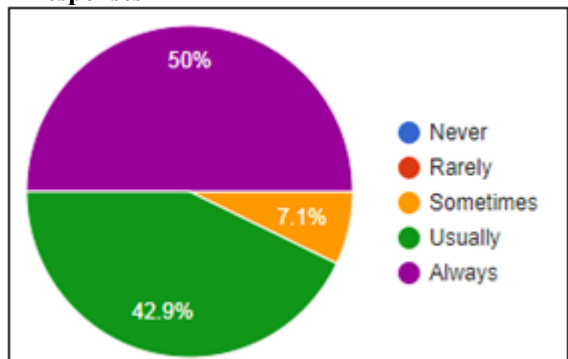
6) Students are told that they are smart when they perform well.

14 responses



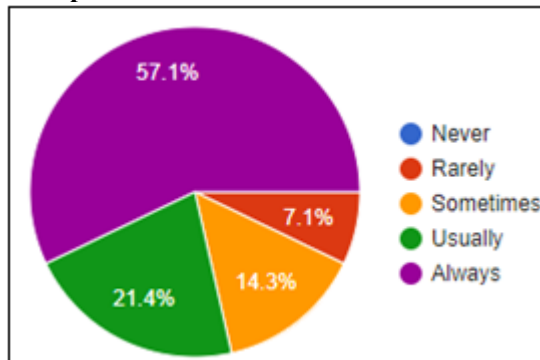
7) When students make mistakes or give wrong answer, they get specific feedback on how to improve.

14 responses



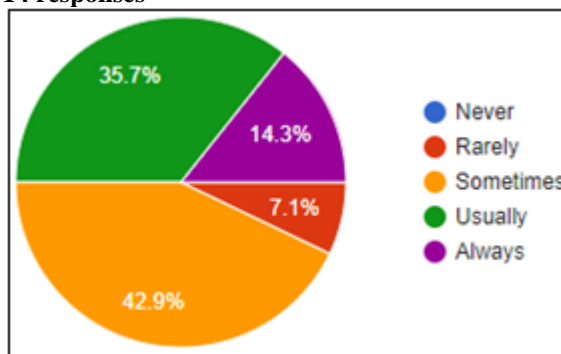
8) Students are rewarded or praised for completing work quickly

14 responses



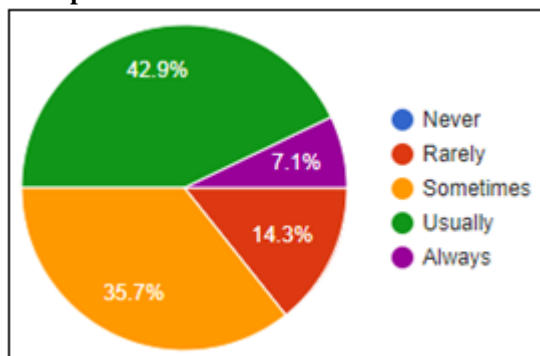
9) Students who perform most highly on tests receive the greatest public recognition

14 responses



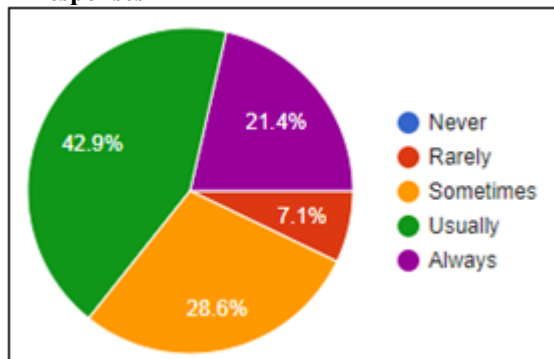
10) Students who make the most individual progress receive public recognition from the teacher.

14 responses



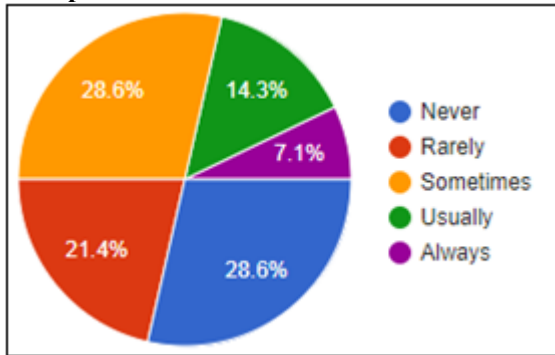
11) Students grades reflect mastery of specific standards rather than average or sum of points earned

14 responses



12) Students tease each other about poor performance, mistakes, or being slow

14 responses



3.5 Discussion: What is CamEd's Mindset?

Dweck, in her book *Mindset*, distinguishes between a “culture of genius” and a “culture of development” when considering the growth mindset orientation of an organization. When an organization is operating under a fixed mindset, it is operating with a culture of genius mentality, conveying the message that employees either have what it takes to succeed or not. Conversely, a culture of development fosters an atmosphere where people to continuing to grow, develop, and collaborate in order to be their best versions of themselves and continue improving. Through a survey similar to the ones taken by CamEd employees – she asked employees whether they agreed or disagreed with various statements. As she compiled the results she not only found a consensus about whether a company held fixed or growth mindset beliefs but also some of the implications of those beliefs.

Some of the benefits of a company, with a growth mindset belief, include a greater sense of empowerment, ownership, and commitment. Employees also reported that their companies supported creativity, innovation, and reasonable risk taking. Another benefit is that the managers’ had more positive views of the employees and reported higher rates of collaboration, and commitment to learning and growing. (p.142-143)

3.6 Findings: What is CamEd's Mindset Survey – See appendix (figure 4.)

The third survey *What is CamEd's mindset?* asked staff and lecturers to assess the culture and mindset of CamEd as an organization. The survey was made up of 20 questions assessing various areas of CamEd as an organization and was taken by 5 staff members. The survey looked at several areas relevant to a growth mindset in an organization including:

- Leadership opportunities for a wide variety of people (See questions 1-5)
- Collaboration among teachers (See questions 6-10)
- Teacher development and feedback (See questions 11-16)
- Meeting the needs of individual students. (See questions 17-20)

Questions 1-5 focused on decision making processes and leadership opportunities.

- 80% of participants strongly agreed that leadership opportunities were available to all staff members and staff members are invited to participate throughout the school year. The remaining 20% were neutral.
- 60% of participants agreed or strongly agreed that there were systems in place to involve teachers in decision making processes.
- 80% of participants agreed or strongly agreed that administration and leaders communicated decision making processes and elicit input.
- 80% agreed or strongly agreed that staff are able to be ideas “on the table” and “take them off” safely during planning, collaboration and decision making meetings.
- 80% agree or strongly agree that teachers are invited to give critical feedback about administrative practices and how they would like additional support.

Overall, this seems to be an area where CamEd has a strongly developed sense of growth mindset. It seems employees feel there is strong communication between leadership and administration and lecturers. It also appears lecturers feel safe to share ideas freely without risk criticism and have open discussion around decisions impacting the school. It would appear that leadership is modeling a growth mindset and is open to receiving critical feedback themselves and is willing to give teachers the support needed to succeed.

Questions 6-10 focus on teacher collaboration.

- 40% disagreed or strongly disagreed that staff members are reluctant to work with or support new or struggling teachers (40% agreed and 20% remained neutral)
- 60% agreed or strongly agreed that teachers observe one another and provide feedback to develop best practices.
- 40% strongly agreed that there were cliques or camps, (20% disagreed, and 40% remained neutral)
- 40% of participants strongly agreed that they collaborate several times a month in order to share or develop lesson plans, assessments, and student work.
- 60% percent of participants agreed or strongly agreed that teachers tend to protect or guard lesson plans, strategies, tests, etc from one another.

The answers in this section are a great deal more mixed, than the previous section. While there may be strong collaboration in some departments, it is not yet a school wide practice and is an area of improvement. Some teachers may feel well supported by colleagues while others feel isolated professionally. Leadership could improve these scores, by working to make collaboration a clear value of the school, encouraging a culture of supporting those who are struggling to succeed.

Questions 11- 16 focus on teacher development and ongoing feedback and support from administration to help teachers continually improve and grow as professionals.

- 80% of participants agreed or strongly agreed that expectations, standards and evaluation protocols are made clear to teachers in advance.

- 100% of participants agreed or strongly agreed that administrators communicate a sincere belief that staff members can develop their teaching skills with practice.
- 80% agree or strongly agree that teachers receive clear feedback and ongoing support for their practice outside of their formal evaluations.
- 40% agree or strongly agree that teachers, coaches, and administrators work together to design goals and plans for teacher development. (the remaining 60% were neutral)
- 60% of participants agreed or strongly agreed teachers receive professional development that is targeted to their professional needs and goals.
- Finally, 60% agreed that time is provided in the work day for coaching, co-planning/co-teaching and structured professional learning

The organization seems to have done an excellent job of setting high standards for their teachers and providing useful feedback outside formal evaluations to meet those standards. However, there seems to be mixed feeling in regards to professional development and setting aside time collaborate and continue to learn professionally. This could be due to variance across departments.

Questions 17-20 focus on administration and teachers working together to meet the needs of individual students.

- 80% of participants agree or strongly agree administrators and teacher believe they can help all students to meet their learning goals
- 60% of participants agree or strongly agree there are structures for teachers and administrators to share information and work together to meet the specific needs of individual students.
- 80% of participants feel neutral when asked if there is an “us against them” feeling between teachers and students (20% of participants agreed)
- 80% of participants agreed or strongly agreed there is a culture of continuous improvement where we are constantly looking at our current state and setting improvement goals year to year.

Overall, this in another area of strength for CamEd, showing high scores for a continuous culture of improvement and belief in student ability. There is room for improvement in the developing systems and structures to better work together to meet the needs of specific students.

To summarize, as expected there are several key practices that CamEd as an organization are employing that fosters a growth mindset. These include:

- Strong communication between leadership and administration and lecturers.
- A feeling of safety among lecturers to share ideas freely without risk criticism and have open discussion around decisions impacting the school.
- Setting high standards for their teachers and providing useful feedback outside formal evaluations to meet those standards.

There are also key elements that can be improved upon to better foster a growth mindset in classrooms.

- Extending professional development opportunities and setting aside time for colleagues to collaborate
- Better develop structures and systems to better meet the needs of individual students.

4. Conclusions

Overall, CamEd seems to be a dynamic university that is doing much right to help develop students with a growth mindset mentality. While the student body itself is overall a mixed mindset, beginning to grasp the possibility of learning and growing there is space for improvement. Among the teaching staff key strengths are providing the students a clear understanding of their learning objectives and the rationale behind them. Also CamEd sets high expectations for their students and provides the support needed to do so. Key recommendations for lecturers are to be intentional about creating a classroom culture that allows for mistakes as part of the learning process, and providing process based feedback as opposed to person centered feedback. A second recommendation is for lectures to consistently recognize student’s individual progress and improvement. The leadership seems to effectively model a growth mindset themselves, and this is evident in the findings. There is space for improvement especially when it comes to colleagues collaborating in productive ways. CamEd has a solid foundation on which to continue to build a culture of growth and development that encompasses students, lecturers and leadership.

5. Recommendations

Recommendations: *What is my Mindset?*

Directly teach students the science behind the growth mindset concept to all students. Ensure all students, have a clear understanding that intelligence like a muscle can be trained and developed through practice and effort.

Recommendations: *What is my Classroom’s Mindset?*

- Create a learning space where it is safe to make mistakes
- Providing more effective feedback that focuses more on process than person
- Recognition for individual progress rather than performance compared to others

Recommendations: *What is the Mindset of my Organization?*

- Continue to maintain its strong culture of growth, and continue to provide leadership opportunities to a variety of staff. It would do well to remain open to honest and critical feedback from lecturers
- Take a deeper look into the scores on collaboration, perhaps looking department by department, to analyze why these scores are more mixed. Leadership would also do well to encourage a school wide campaign of collaboration, and perhaps providing experienced settled professors an incentive to mentor younger or more inexperienced lecturers.
- Offer a wider variety of professional development opportunities to lecturers and staff, ensuring professional development for a wide demographic of professionals. Finally, CamEd might consider how they can better

develop structures and systems to better meet the needs of individual students.

6. Limitations

One of the limitations of this paper is that it relies on self-reported data; this means students staff and lecturers reported their own perceptions of themselves, their classroom and organization. Another key limitation is the small sample size of the second and third survey given to lecturers and staff respectively. Only four-teen lecturers completed the *What is my Classroom’s Mindset?* Survey, and only five staff members completed the *What is the Mindset of my Organization?* survey. A third limitation of this paper is that the role of culture and how it impacts collaboration, and lecturer student interaction is not considered. CamEd is a multi-cultural organization and this cannot be ignored when considering the way forward.

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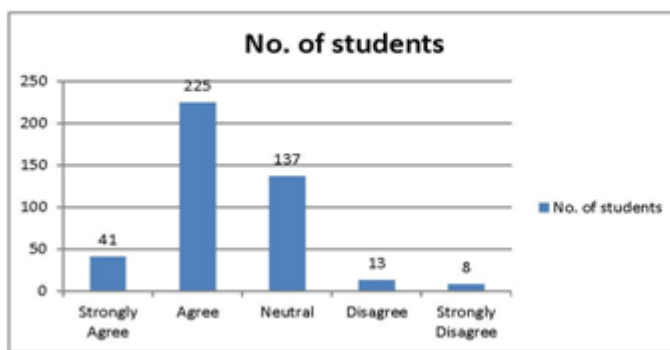
[10]Zentall, S. R., & Morris, B. J. (2010). “Good job, you’re so smart”: The effects of inconsistency of praise type on young children’s motivation. 107 (2):155-63. doi: 10.1016/j.jecp.2010.04.015.

[11]Zentall, S. R., & Morris, B. J. (2010). “Good job, you’re so smart”: The effects of inconsistency of praise type on young children’s motivation.

Appendix Figure 1

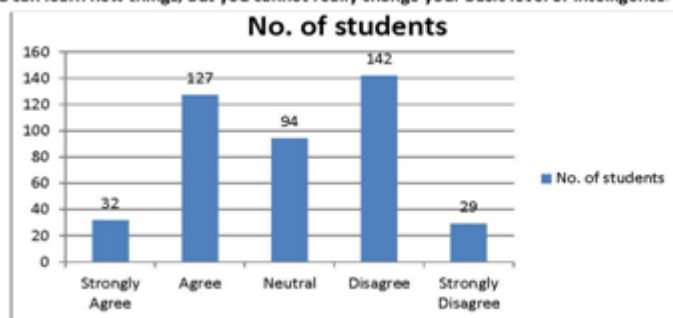
What is my mindset survey question results (CamEd Students).

1. No matter how much intelligent you have, you can always change it a good deal.



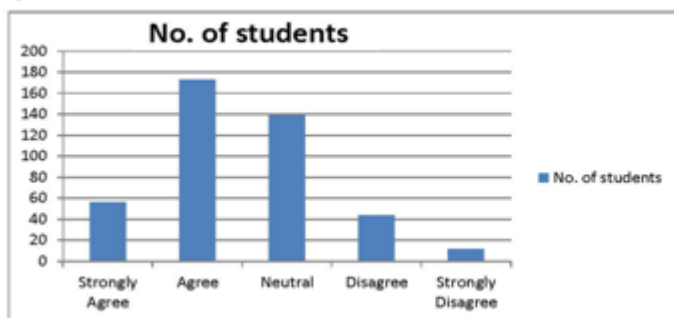
Result to Question 1	
Response	No. of students
Strongly Agree	41
Agree	225
Neutral	137
Disagree	13
Strongly Disagree	8

2. You can learn new things, but you cannot really change your basic level of intelligence.



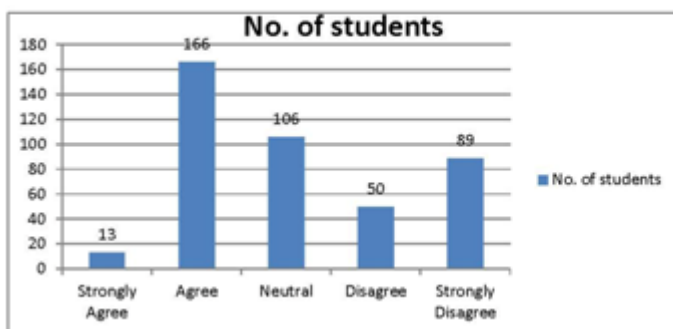
Result to Question 2	
Response	No. of students
Strongly Agree	32
Agree	127
Neutral	94
Disagree	142
Strongly Disagree	29

3. I like my work best when it makes me think hard.



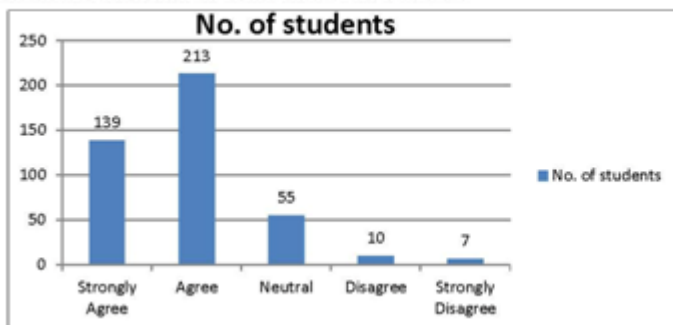
Result to Question 3	
Response	No. of students
Strongly Agree	56
Agree	173
Neutral	139
Disagree	44
Strongly Disagree	12

4. I like my work best when I do it really well without too much trouble



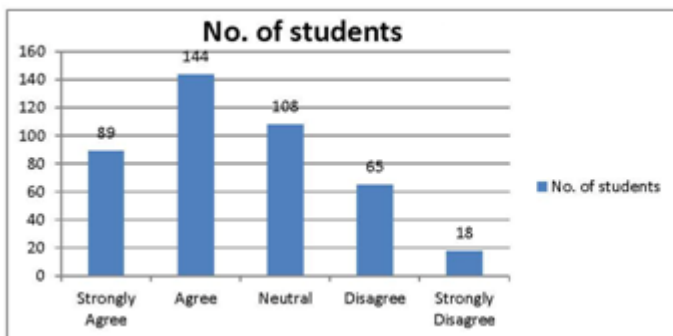
Result to Question 4	
Response	No. of students
Strongly Agree	13
Agree	166
Neutral	106
Disagree	50
Strongly Disagree	89

5. I like work that I will learn from even if I make a lot of mistakes



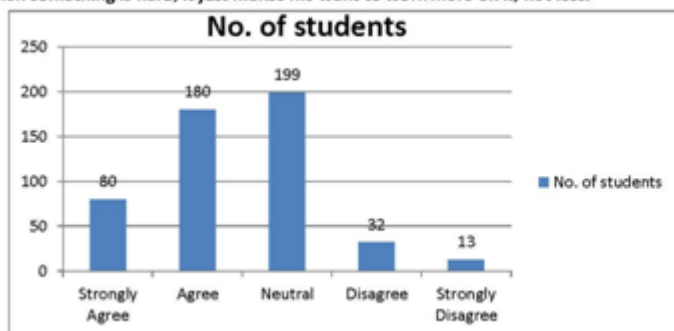
Result to Question 5	
Response	No. of students
Strongly Agree	139
Agree	213
Neutral	55
Disagree	10
Strongly Disagree	7

6. I like my work best when I can do it perfectly without making any mistakes.



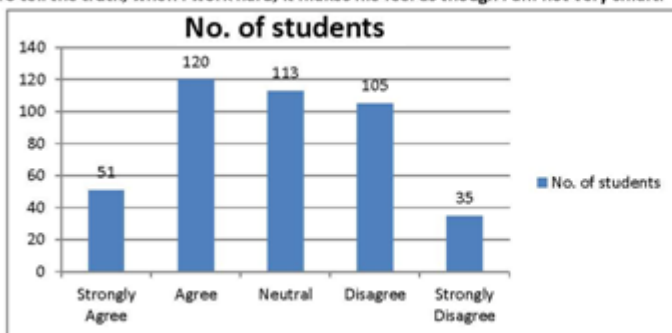
Result to Question 6	
Response	No. of students
Strongly Agree	89
Agree	144
Neutral	108
Disagree	65
Strongly Disagree	18

7. When something is hard, it just makes me want to work more on it, not less.



Result to Question 7	
Response	No. of students
Strongly Agree	80
Agree	180
Neutral	199
Disagree	32
Strongly Disagree	13

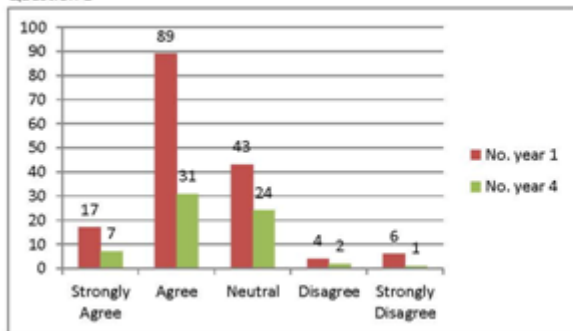
8. To tell the truth, when I work hard, it makes me feel as though I am not very smart.



Response	No. of students
Strongly Agree	51
Agree	120
Neutral	113
Disagree	105
Strongly Disagree	35

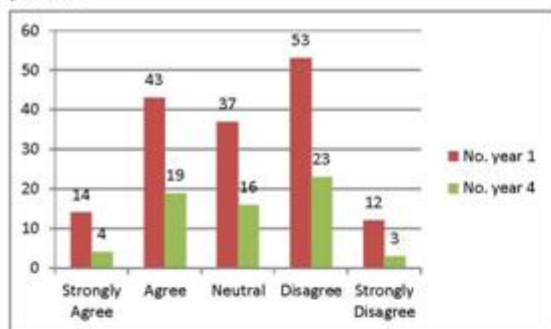
What is my mindset survey questions results (YEAR 1 VS YEAR 4)

Question 1



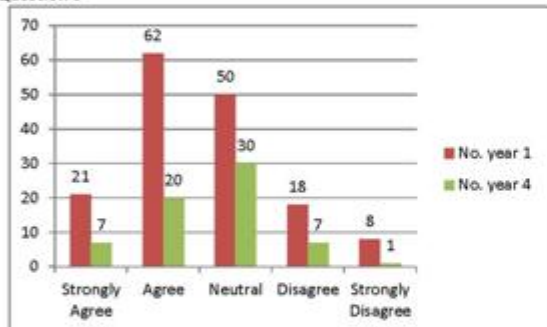
Response	No. year 1	No. year 4
Strongly Agree	17	7
Agree	89	31
Neutral	43	24
Disagree	4	2
Strongly Disagree	6	1

Question 2



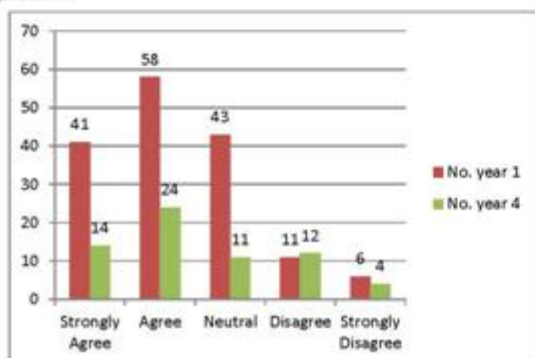
Response	No. year 1	No. year 4
Strongly Agree	14	4
Agree	43	19
Neutral	37	16
Disagree	53	23
Strongly Disagree	12	3

Question 3



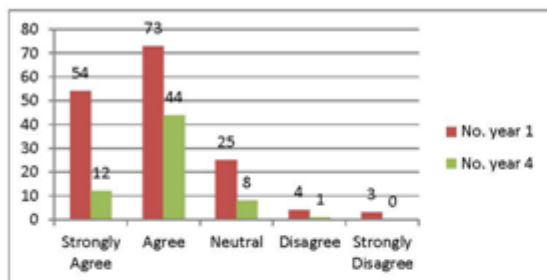
Response	No. year 1	No. year 4
Strongly Agree	21	7
Agree	62	20
Neutral	50	30
Disagree	18	7
Strongly Disagree	8	1

Question 4



Response	No. year 1	No. year 4
Strongly Agree	41	14
Agree	58	24
Neutral	43	11
Disagree	11	12
Strongly Disagree	6	4

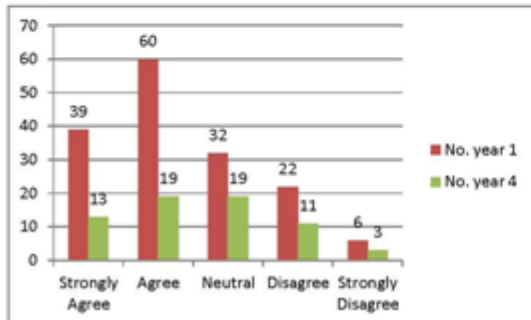
Question 5



Result of Question 5

Response	No. year 1	No. year 4
Strongly Agree	54	12
Agree	73	44
Neutral	25	8
Disagree	4	1
Strongly Disagree	3	0

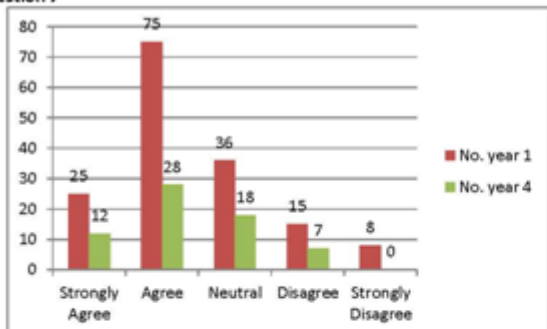
Question 6



Result of Question 6

Response	No. year 1	No. year 4
Strongly Agree	39	13
Agree	60	19
Neutral	32	19
Disagree	22	11
Strongly Disagree	6	3

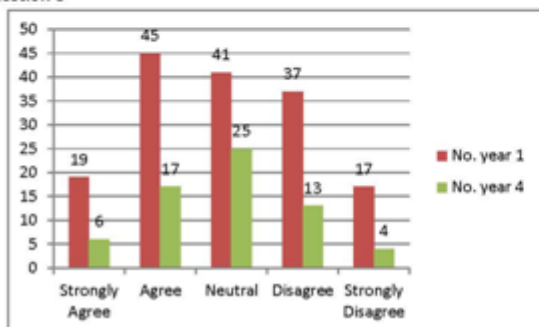
Question 7



Result of Question 7

Response	No. year 1	No. year 4
Strongly Agree	25	12
Agree	75	28
Neutral	36	18
Disagree	15	7
Strongly Disagree	8	0

Question 8



Result of Question 8

Response	No. year 1	No. year 4
Strongly Agree	19	6
Agree	45	17
Neutral	41	25
Disagree	37	13
Strongly Disagree	17	4

Figure 2

11/14/2018

What is CamEd's Mindset?

What is CamEd's Mindset?

A growth mindset is the belief that a person can learn and grow through hard work and effort. Teachers play a powerful role in fostering this mindset in student's through teaching practices, feedback, and support provided. Similarly leadership and peer relationships in an organization play an important role in helping teachers have a growth mindset themselves.

This survey is to help assess the ways in which CamEd leadership and faculty are encouraging growth mindset, and to recommend specific strategies to improve teacher's motivation and effort. Your survey is anonymous unless you choose to identify yourself and the results will focus on patterns. For more information or to learn about the results of this research please contact Ediri .O. Anderson at Eddie@cam-ed.com

I am writing to you to request your participation in this brief survey. The survey is very brief and will only take about 10 minutes to complete.

* Required

1. **1. Leadership opportunities are open to all staff members and staff members are invited to participate periodically throughout the school year. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

2. **2. We have systems where teachers are directly involved and participate in decision-making and planning for site initiatives. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

3. **3. Administration and leaders communicate decision-making strategies with staff and elicit their input. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

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1/5

11/14/2018

What is CamEd's Mindset?

4. **Staff are able to put ideas “on the table” and “take them off” safely during planning, collaboration, and decision-making meetings. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

5. **Teachers are invited to give critical feedback about administrative practices and how they would like additional support. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

6. **Staff members are reluctant to work with or support new or struggling teachers. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly Agree

7. **Teachers observe one another and give each other feedback to develop the team's best practices. ***

Mark only one oval.

- Strongly disagree
 Disagree
 Neutral
 Agree
 Strongly agree

8. **We have exclusive cliques or “camps” within our faculty.. ***

Mark only one oval.

- Strongly Disagree
 Disagree
 Neutral
 Agree
 Strongly agree

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2/5

11/14/2018

What is CamEd's Mindset?

9. **9. Teachers collaborate several times a month, sharing or co-developing lessons, assessments, and student work. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

10. **10. Our teachers tend to protect or guard our lessons, strategies, tests, etc. from one another. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

11. **11. Instructional expectations, standards, and evaluation protocols are made clear to teachers in advance. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

12. **12. Administrators communicate a sincere belief that staff members can develop their teaching skills with practice and feedback. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

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3/5

11/14/2018

What is CamEd's Mindset?

13. **13. Teachers receive clear feedback on and ongoing support for their practice outside of formal evaluations. ***

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

14. **14. Teachers, coaches, and administrators work together to design goals and plans for teacher development. ***

Mark only one oval.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

15. **15. Teachers receive professional development that is targeted to their professional needs and goals. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

16. **16. Time is provided in the work day for coaching, co-planning/co-teaching, and structured professional learning. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

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4/5

11/14/2018

What is CamEd's Mindset?

17. **17. Administrators and teachers in our school truly believe that they can help all students to meet learning goals. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

18. **18. There are structures for teachers and administrators to share information and work together to meet the specific needs of individual students. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

19. **19. There is an "us against them" feeling between teachers and students. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

20. **20. There is a culture of continuous improvement where we are constantly looking at our current state and setting improvement goals year-to-year. ***

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Your participation in the survey is completely voluntary and confidential.

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5/5

What's My Classroom Mindset?

A growth mindset is the belief that a person can learn and grow through hard work and effort. Teachers play a powerful role in fostering this mindset in students through teaching practices, feedback, and support provided. This survey is to help assess the ways in which Cam Ed teachers are encouraging growth mindset, and to recommend specific strategies to improve students motivation and effort. Your survey is anonymous unless you choose to identify yourself and the results will focus on patterns rather than assessing individual teachers. For more information or to learn about the results of this research please contact Ediri .O. Anderson at eddie@cam-ed.com

In this survey, please assess the mindset of a single classroom. To get the most accurate feedback, answer as honestly as you can, thinking about what things look like on the level of daily practice (rather than the ideal to which you aspire). In the feedback, you will get tips on ways that you can build a classroom environment that supports students as learners most effectively.

I am writing to you to request your participation in this brief survey. The survey is very brief and will only take about 5 minutes to complete.

* Required

1. 1. Students are graded on assignments when learning something new. *

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

2. 2. Students are provided rubrics in student-friendly language before they begin a major assignment. *

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

3. 3. Students are encouraged to ask the teacher why the class is learning a topic. *

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

11/14/2018

What's My Classroom Mindset?

4. **All students are expected to reach a common high standard but they are given different levels of support and time to accomplish it. ***

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

5. **Students receive recognition for effort in structured ways, such as awards, rewards, or grading practices. ***

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

6. **Students are told that they are smart when they perform well. ***

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

7. **When students make mistakes or give a wrong answer, they get specific feedback on how to improve. ***

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

8. **Students are rewarded or praised for completing work quickly. ***

Mark only one oval.

- Never
 Rarely
 Sometimes
 Usually
 Always

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2/3

11/14/2018

What's My Classroom Mindset?

9. **9. Students who perform most highly on tests receive the greatest public recognition. ***

Mark only one oval.

- Never
- Rarely
- Sometimes
- Usually
- Always

10. **10. Students who make the most individual progress receive public recognition from the teacher. ***

Mark only one oval.

- Never
- Rarely
- Sometimes
- Usually
- Always

11. **11. Student grades reflect mastery of specific standards rather than average or sum of points earned. ***

Mark only one oval.

- Never
- Rarely
- Sometimes
- Usually
- Always

12. **12. Students tease each other about poor performance, mistakes, or being slow. ***

Mark only one oval.

- Never
- Rarely
- Sometimes
- Usually
- Always

Your participation in the survey is completely voluntary and confidential.

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3/3