

Hamline University

DigitalCommons@Hamline

School of Education and Leadership Student
Capstone Projects

School of Education and Leadership

Summer 2019

How Can Educators Make Use Of Feedback Types And Process To Optimize Student Performance?

Trang Nguyen

Follow this and additional works at: https://digitalcommons.hamline.edu/hse_cp



Part of the [Education Commons](#)

Recommended Citation

Nguyen, Trang, "How Can Educators Make Use Of Feedback Types And Process To Optimize Student Performance?" (2019). *School of Education and Leadership Student Capstone Projects*. 348.
https://digitalcommons.hamline.edu/hse_cp/348

This Capstone Project is brought to you for free and open access by the School of Education and Leadership at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education and Leadership Student Capstone Projects by an authorized administrator of DigitalCommons@Hamline. For more information, please contact digitalcommons@hamline.edu.

HOW CAN EDUCATORS MAKE USE OF FEEDBACK TYPES AND PROCESS TO
OPTIMIZE STUDENT PERFORMANCE?

By

Trang M. Nguyen

A capstone submitted in partial fulfillment of the requirements for the degree of Master
of Arts in Teaching

Hamline University

St. Paul, Minnesota

August 2019

Primary Advisor: Julianne Scullen, Ed.S.

Content Reviewer: Samsam Warsame, M.A.

Peer Reviewer: Abigail Snyder

I have created a professional development workshop as a summative project after months of intensive research on answering the question: “*How can educators make use of feedback types and process to optimize student performance?*” However, the Capstone project title was adapted to “*How to Provide Feedback Effectively*”. This project is designed for educators teaching in a variety of fields and grade levels due to the prevalence of feedback in education. Feedback can impact learners in various ways; therefore, feedback providers’ lack of awareness about the multiple effects of their comments may lead to misuse of this tool. As a result, I wanted to create this project to help educators optimize their teaching productivity when applying feedback. The project’s objectives are to indicate multiple types of feedback and their impacts to learners, as well as providing the best practice for applying feedback.

This project will be presented over four hours and divided into two sessions, with each session lasting two hours. While the first session focuses on teachers’ feedback, the second session targets peer feedback. In the first session, I will address multiple research findings about feedback, which were described in detail in my Capstone paper. I will then categorize multiple types of feedback, using these studies, and present the effects of each type to participants. I will also instruct teachers to apply the best practice of feedback. Throughout multiple activities in this session, I will allow the audience to exercise providing feedback and reflect on the process of providing it.

The second session is dissected into two major parts: the first part is a review of the previous session, and the second part demonstrates studies regarding peer feedback. In the first part of this session, I will quickly summarize the information about feedback that I had presented previously, and then invite the participants to take part in some

activities to deepen their knowledge. They will learn to identify the feedback types and consider their effectiveness. They will then be asked to determine an alternative way of providing feedback if the given feedback was considered to be ineffective.

In the second part of this session, I will share research regarding peer feedback. In addition to illustrating many types of peer feedback and their effects on learners, I will indicate problems that teachers might face when assigning peer feedback to students. Finally, some solutions to these issues will be provided to the audience, and they will have an opportunity to practice and discuss about these solutions in group activities. Along with these two presentations, I will provide the audience with checklists and a guideline for a feedback process, which was adapted from the most important research within my literature review and subsequent presentations.

My professional development project was created utilizing Malcolm Knowles' adult learning guidelines (1992). In his work, Knowles emphasized the importance of the interaction among multiple representation of materials, audience, and speaker. This form of interaction allows the audience to actively and naturally explore the materials, instead maintaining a passive stance. To optimize the interaction opportunities, I designed presentations that include many group activities, and the audience is encouraged to talk and contribute ideas. They will be given research materials about feedback and invited to think and learn together with the speaker. They will then be asked to generate a feedback provision platform, which can optimize educators' teaching productivity. Instead of being "reactive learners", who can only ask questions at the end of the presentation, the audience will be encouraged to be "watchdog learner", who can interrupt the presentation anytime to raise questions and clarify ambiguous concepts. This message will be clearly

stated in the beginning of the session, but also indirectly delivered throughout the series of student-centered-activities being mentioned above. More evidence for my attention to the adult learners' interaction on the platform is shown via the frequency of assessment used. I will provide a pre-assessment at the beginning of the session in the first activity 1—*Giving Feedback to Your Imaginary Students*—to examine the audience's prior knowledge about feedback. I will also frequently apply formal assessments by observing the audience's responses and questions in group activities to make sure that they comprehend the given content. By using multiple forms of assessment, I can ensure the quality of the audience' interaction among themselves, to the speaker, and the platform.

The presentations, notes, and handouts below will assist readers in making sense of the research study. I hope this project will provide the audience with compressive information about feedback and aid them in implementing the most suitable feedback provision methods into their curriculum.

I. PRESENTATIONS AND NOTES

PRESENTATION # 1

How to Apply Feedback Effectively

By Trang Minh Nguyen



Source: Feedback [digital image]. Retrieved from: <https://www.atebgroup.co.uk/living-solutions/advice-support/feedback/>

Hi everyone,

As educators, I am sure that you have used feedback many times as a tool to help students evaluate and optimize their learning progress. Yet, have you ever wondered if your feedback really serves its purposes? Does it actually help your students, or would it turn them away from learning the subject?

The topic for my presentation today is “How to apply feedback effectively?” We will investigate different factors that may affect the quality of feedback and its best practice recommended by multiple feedback researchers.

This is a two-hour long presentation, so the amount of information that I am going to provide could be overwhelming at times. Therefore, please feel free to interrupt me any time to ask questions or request me to clarify any part that is ambiguous to you.

ACTIVITY # 1

Giving Feedback to Your Imaginary Students

- You will be given some students' work samples. You can choose to comment on either a Math or English assignment
- Spend 7 minutes to write feedback to the students
- Be ready to share your feedback with your partners



Source: Mendes, N. (2019, June 26). Don't know how to get feedback at work? Here are some practical ways to start. Retrieved from <https://www.atlassian.com/blog/inside-atlassian/practical-ways-to-get-feedback>

Now before going into the actual studies about feedback, I want you to do a quick exercise to help you warm up your brain. The activity is called Giving Feedback to your Imaginary Students.

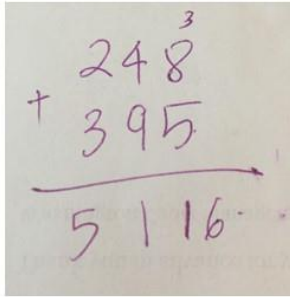
Imagine that you are going to grade your students and give them some feedback based on their performance.

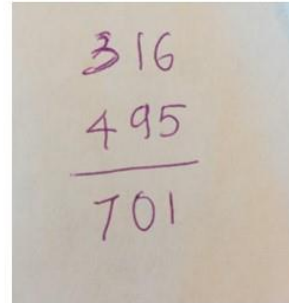
You will be given some students' samples and you can choose to work on either a Math or English assignment.

Now I want you to spend seven minutes to write feedback to your students. After you are done, be ready to share your feedback with your elbow partner.

MATH

Provide feedback to the student's work below:


$$\begin{array}{r} 248^3 \\ + 395 \\ \hline 5116^1 \end{array}$$

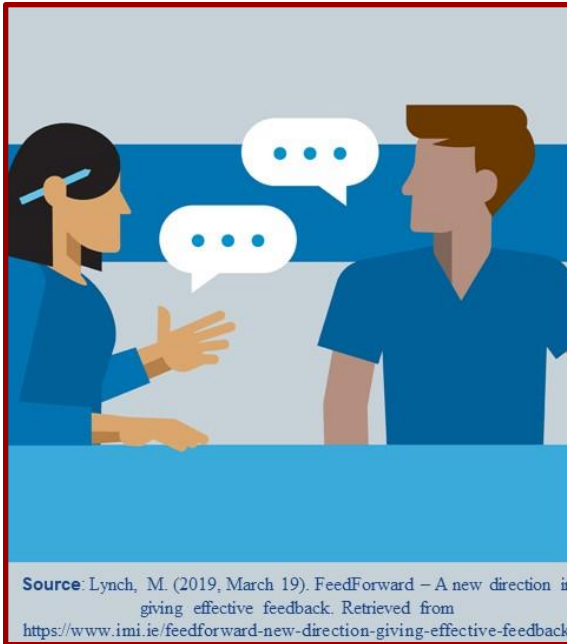

$$\begin{array}{r} 316 \\ - 495 \\ \hline 701 \end{array}$$

ENGLISH

Provide feedback to the student's work below:

(This is a short excerpt from a student's family description)

"There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much."



Sharing Your Feedback

- What did you see in your student's paper?
- What did you write in response to the student's work?
- Why do you think it is important to provide such feedback in the specific cases?

Ok, 7 minutes is over, so let's turn to your elbow partner and share your feedback based on these questions:

- What did you see in your student's paper?
- What did you write in response to the student's work?
- Why do you think it is important to provide such feedback in the specific cases?

**While
assessing
your
feedback,
ask
yourself...**

- Do you find yourself giving more praise or criticism?
- Are you specifying your student's mistakes?
- Did you give them alternative solutions?

Tie to your perceptions and goals when giving feedbacks

Now let's come back here. I will not ask you to share your comments to the whole class but hold on to this assignment because we will come back to it later.

However, before moving on to the next slides, I want you to first reflect on and ponder these questions:

- Do you find yourself giving more praise or criticism?
- Are you specifying your student's mistakes?
- Did you give them alternative solutions?

[Pause]

It is important to ask yourself these kinds of questions because the answers are tightly linked to your perceptions and goals when giving feedback.

How so?

Feedback



Sources:

Mendes, N. (2019, June 26). 3 types of peer feedback to avoid (and 1 to aim for). Retrieved from <https://www.atlassian.com/blog/software-teams/how-to-give-better-feedback>
(2019, April 11). How giving feedback promotes growth. Retrieved from <https://talentadore.com/feedback-promotes-growth/>

A lot of us think about feedback simply as a tool to tell students whether their answers are correct or not. But feedback should have more purposes than that.

It can be an appreciation of students' good work, advice on how students should improve in the future, or a question that challenges students to find an alternative solution to a problem.

So, what is feedback?

Definition of Feedback

- Common educational tool
- Can be applied in various fields and subjects
- Internal or external sources of information given to learners
- **Goals:** help students
 - detect their errors
 - consolidate their correct understanding

Source: Anderson, R. C., Kulhavy, R. W., & Andre, T. (1972). *Conditions under which feedback facilitates learning from programmed lessons*. *Journal of Educational Psychology*, 63, 186–188. doi:10.1037/h0032653.

Feedback is a very common educational tool, which can be applied in many fields and subjects. It is defined as internal or external sources of information given to learners. The goal of educators when giving feedback usually is to help students detect their errors and consolidate their correct understanding.

Why do we need to learn about methods of writing feedback?

- Top 10 influential tools
- Positive
- No effect
- Negative
- Crucial
 - Aware of these impacts
 - Optimize student learning

Source: Hattie, J. A. C. (2009). Visible learning: A synthesis of 800+ meta-analyses on achievement. Oxford, UK: Routledge.

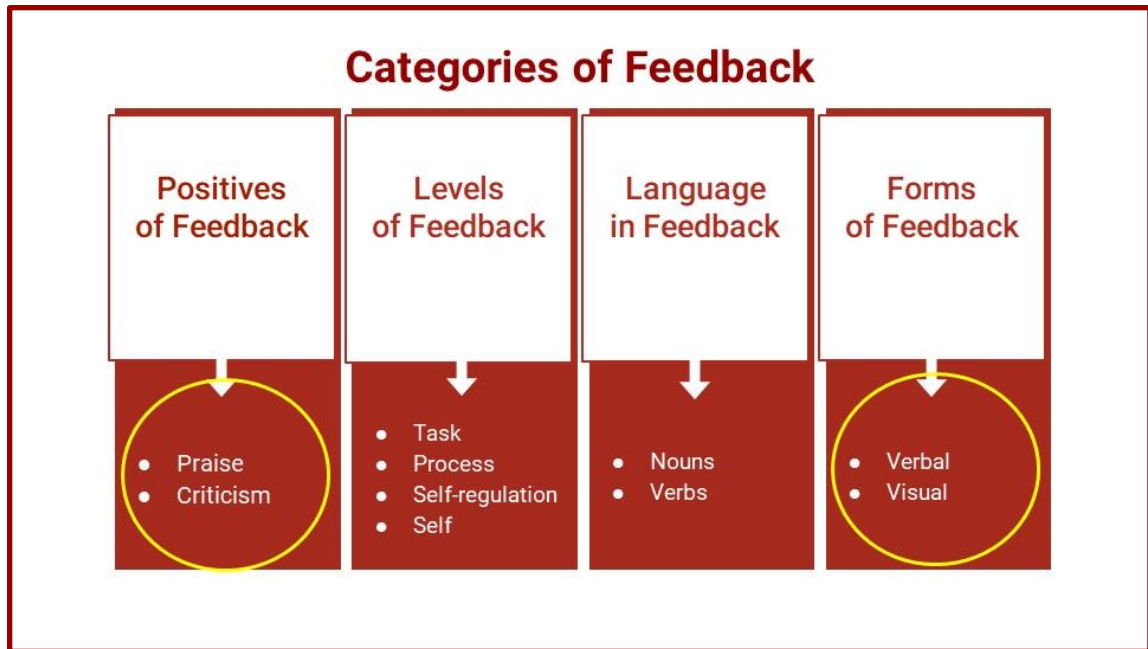
So why do we need to learn how to use feedback?

This is because feedback is one of the top ten influential educational tools. However, besides giving positive impact to students, feedback might have a neutral effect or even influence students negatively. To optimize student learning, educators should be aware of the impact of their comments on students.

Today's Agenda

- Multiple types of feedback
- Effects of each type
- How to improve feedback quality

Because it is crucial for you to know how to use feedback, in today's presentation, I am going to categorize feedback into multiple types and indicate their effects on learners' performance. And I will also illustrate some tips on how to improve your feedback quality.



I will start with talking about multiple types of feedback. Feedback could be categorized based on many factors.

- You can look at the positives of feedback, whether feedback is given as praise or criticism.
- You can divide it into different levels, and I will explain more to you about these levels in a bit.
- You can also pay attention to the language used in feedback, whether you are using nouns or verbs in your statement.
- And finally, the forms being used in your feedback are also important, meaning it can be either given under verbal or visual form.

Now, out of those four ways of categorizing feedback, two of those do not significantly differ in their effects on learners' performance. Those are positives and forms of feedback.

Researchers found that some praise can impact students positively, negatively, or neutrally. The same rules apply to criticism: it can either have a positive, negative, or neutral influence on students. Now having said that, creating a balance between praise and criticism is important, because students need both types. While some praise gives students confidence in their performance, some criticism can benefit students by motivating them to improve.

Similarly, visual and verbal feedback can both affect learners positively, negatively, or neutrally. Both types are important to students because some students prefer visual learning methods, while others can benefit more from verbal approaches. Therefore, educators should use both forms in their comments to be fair to both types of learners.

Later, in this presentation, I will go back to praise and criticism to deepen your understanding about how the two types can have similar impacts on students.

Having said that, the rest of the other two categories—levels of feedback and language used in feedback—can affect students in significantly different ways. And how so?

4 Levels of Feedback

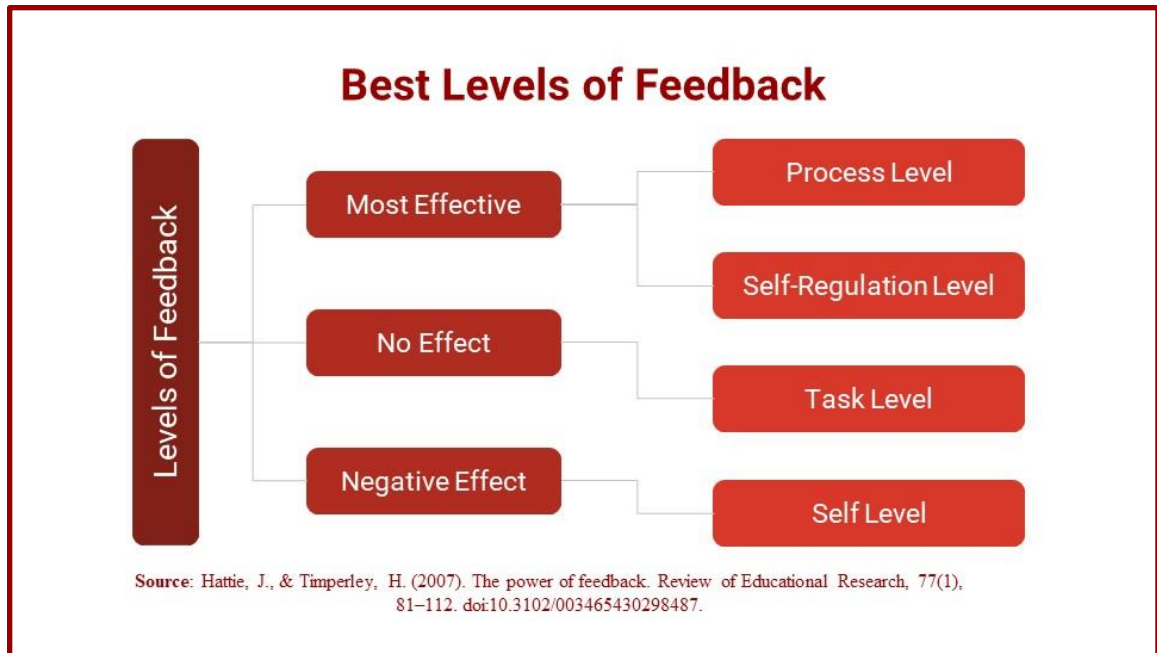
01	Task Level	<ul style="list-style-type: none">• Describing the correctness of the answers• <i>"Your answer is incorrect"</i>
02	Process Level	<ul style="list-style-type: none">• Describing or suggesting a learning strategy• <i>"You should apply Pythagorean theorem here"</i>
03	Self-Regulation Level	<ul style="list-style-type: none">• Follow up Questions• <i>"What would happen when you double the width?"</i>
04	Self Level	<ul style="list-style-type: none">• Describing learners' traits• <i>"You are smart!"</i>

Source: Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81–112.
doi:10.3102/003465430298487.

Let's first talk about 4 levels of feedback. Two researchers named Hattie and Timperley have divided feedback into 4 levels: task, process, self-regulation, and self level.

- Task level of feedback analyzes the correctness of the answers, for example: *"Your answer is incorrect"*
- Process level indicates feedback that describes or suggests a learning strategy. For instance: *"You should apply Pythagorean theorem here"*
- Feedback can also be listed under self-regulation level, which includes follow up questions such as: *"What would happen when you double the width?"*
- And finally, the last level of feedback is self level, which focuses on learners' traits, like *"You are smart!"*

So out of those four levels, which levels are most effective to students?



Interestingly, researchers found that only two levels of feedback would affect students positively: process and self-regulation level.

Again, process level refers to feedback that analyzes students' methods of solving a particular problem or suggests an alternative way of answering it. On the other hand, self-regulation level genuinely is a follow up question to a solution. Those two levels are usually used to help students improve and be consistent with their learning task.

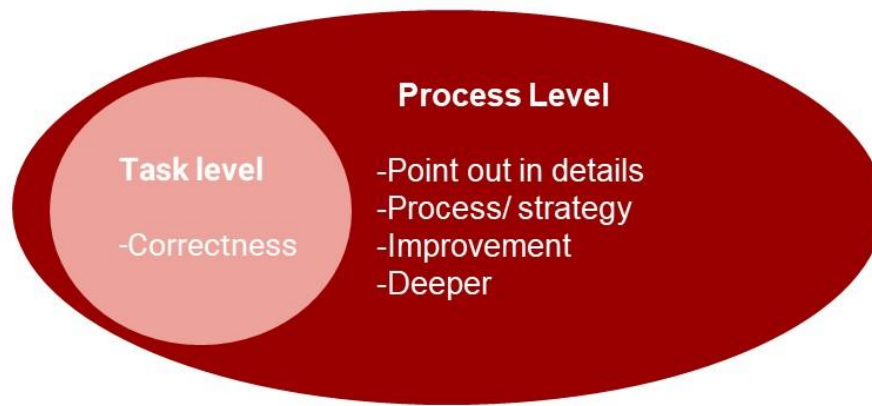
This is because the first type, process level, can give students a clear picture about their performance, allowing them to self-monitor their learning progress.

The second type, self-regulation level, also assists students in learning because it stimulates their curiosity about the subject using questions, helping students to see the problem in multiple perspectives.

On the other hand, task level of feedback, which indicates the correctness of the students' answers, doesn't make any difference in students' learning process.

Why is that? What is the difference between task level and self-regulation level that leads to such distinction in their effects?

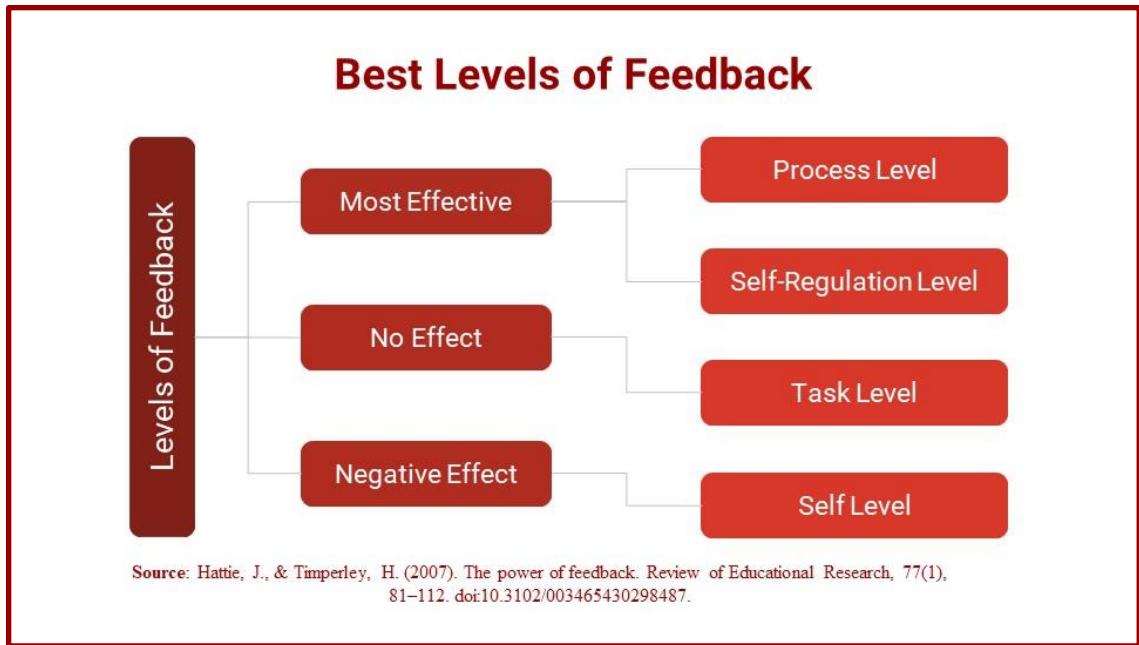
Task Level vs. Process Level



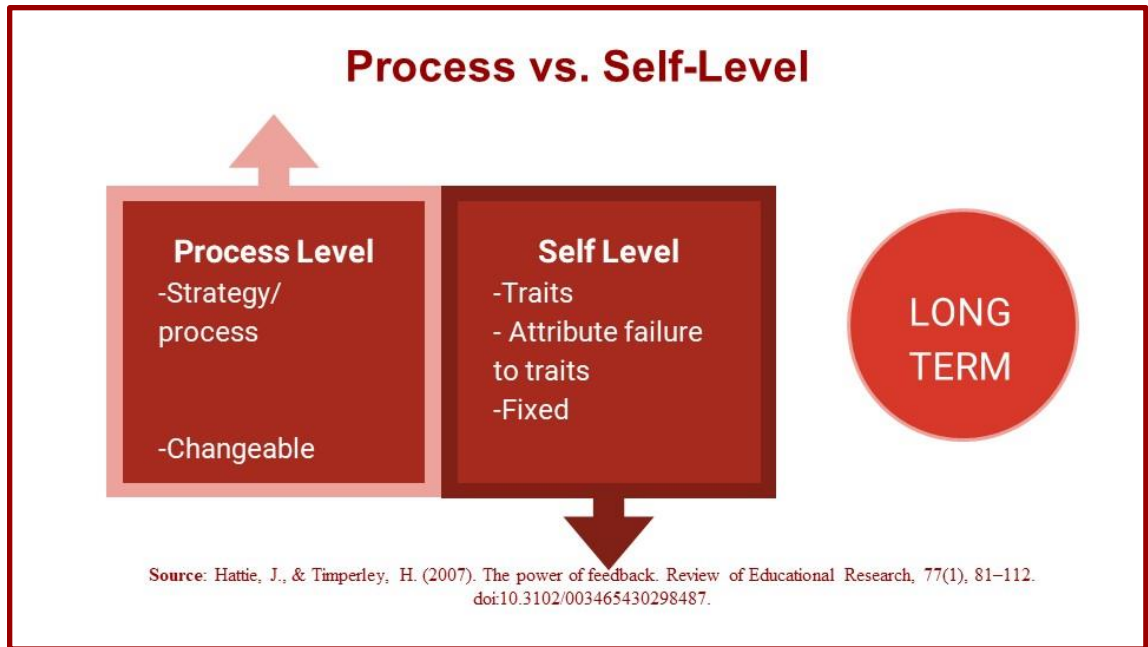
Source: Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. doi:10.3102/003465430298487.

To answer the question, let's take a look at the relationship between the two feedback levels

- The similarity between task and process level is that they both show students the correctness of their answers.
- However, task level only indicates the surface information about this correctness, meaning it demonstrates whether students' answers are correct or not. Meanwhile, process level of feedback specifies the good or bad in the students' strategies of answering. From there, students are more likely to know how to improve in the future. In other words, process level provides guidance to students in a much deeper sense.



Now we have talked about three levels of feedback: process, self-regulation, and task level. The last level that I want to tackle is self level, which is the comment regarding students' traits. The interesting fact about self level of feedback is that many studies showed that this level can impact students negatively. So, what about self level of feedback influences students negatively?



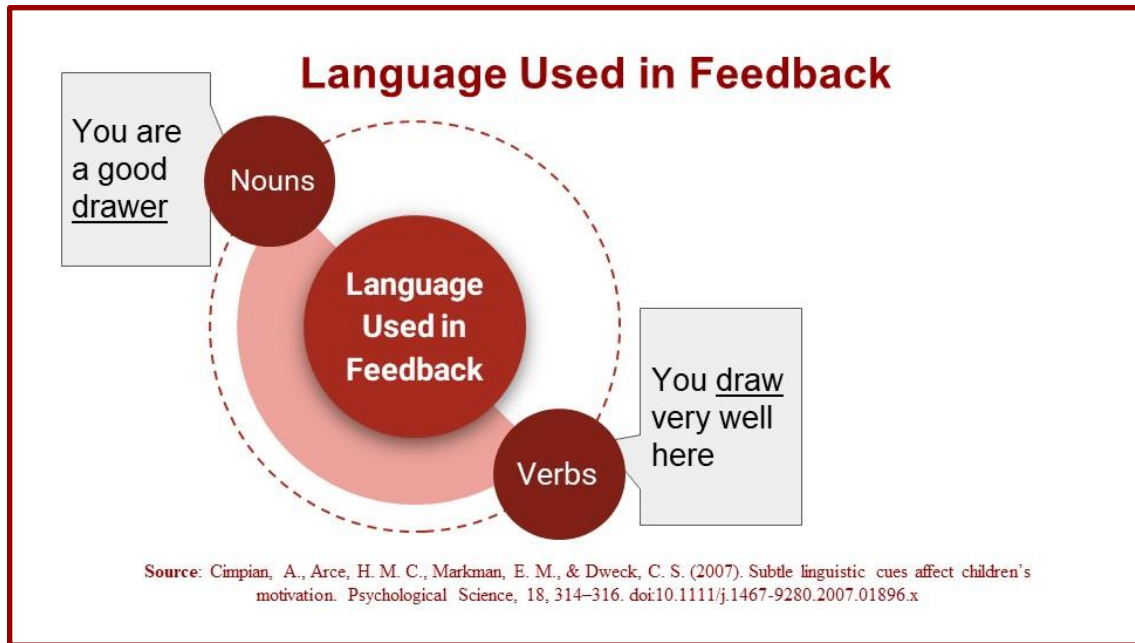
To help you understand the cause of this negative effect, I want to first make a comparison between process and self level.

The most significant distinction between the two levels is that the first level focuses on students' strategy or process of answering a question; self level, on the other hand, focuses on students' traits.

The danger of self level of feedback is that it may condition students to attribute students' failure to their traits. So unintentionally, educators who use this feedback level are sending the message that my student failed at this task because he or she is incompetent, or not gifted enough to learn this subject. Instead of persuading students that individuals' success in a task is changeable, as long as they put effort in it, the teachers are ingraining in students the idea that "students success or failure is fixed and linked to their performance."

Therefore, it doesn't matter if self level of feedback is given as praise or criticism, it still affects students negatively, especially in the long term.

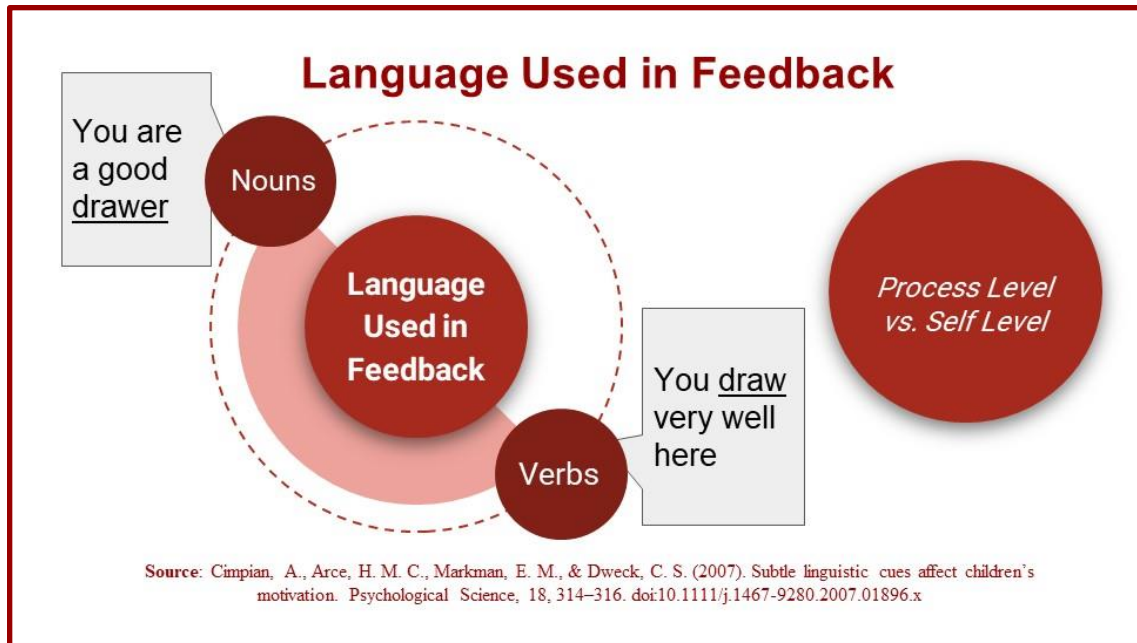
The reasons for it is students who are frequently given the feedback like "You are smart", learn to attribute success to their traits. As a result, when they fail in the future, they are more likely to lose confidence in their ability and give up on their tasks out of frustration. So, this type of comment could be damaging, and we want to avoid it as much as possible.



Now I have talked about four levels of feedback and their effect on students' performance, the next category that I want to tackle, which is equally influential to students, is language used in feedback.

With the same contents, feedback can be given in two different linguistic forms: nouns and verbs. For instance, you are trying to compliment someone with their drawing, you can either say: "You draw very well here", or "You are a good drawer." Those two forms can make a difference in students' respond. Why is it? Let's take a guess.

[Pause for audience's guess]



[Answer]: So, the reason for the difference in the two forms of language used is quite similar to the concept of process and self level.

Comments like “You draw very well here” is addressing the success in students’ method of drawing, and in this case, it is more like process level of feedback. On the other hand, when someone says, “You are a good drawer”, the feedback provider is actually labeling the student’ trait, and so this comment can be listed as self level of feedback. Now you see, just a twist in the language used, from draw to drawer, from well to good, it can make a huge difference in how students respond to your comments. While the feedback that applies verbs gives students the impression that their performance is not fixed, feedback using nouns tends to leave students with the thought that their performance is associated with their traits or ability.

So again, just like any self level of feedback, nouns feedback can condition students to attribute the failure to their traits, which leads to frustration and tendency to quit. So even when this is praise, it doesn't necessarily bring about a positive effect on students in the long run.

Another point that I want to raise here is in the distinction between the mindsets of nouns and verbs feedback users: nouns feedback users focus on students’ traits, and verbs feedback applicators target students’ performance or strategies. So, it is fair to say that feedback using nouns and verbs are subtypes of self and process level.

How to provide feedback effectively?

Step 1: Knowing your students' learning objectives

- Align your feedback to the learning objectives
- What knowledge are students missing? How to patch it?

Step 2: Knowing your goals

- Not just giving correct answer
- Other skills?
- Help students be independent learners
 - Self-evaluation
 - Self-improvement

I have divided feedback into four categories, and you also know about their effects on student performance. Now I want to give you some tips on the process of providing feedback. Where should you start? What do you need to keep in mind when providing feedback?

First, I believe that the most important step in providing your feedback is to know your students' learning objectives very well. Educators should first determine the contents that they want students to be able to grab, or at least be guided to capture throughout teachers' feedback. After shaping the learning objectives, I want you to try your best to align them to your feedback. By doing this, you will be able to detect the knowledge that students are missing and then help them to patch that loophole.

The second step after knowing the learning objectives is to know your goals. So instead of just aiming to give correct answers to students, what skills do you want students to get out of this process?

- You might want students to be able to write parallel sentences in an essay. How do you guide students to do that through your comments?
- A social studies teacher might want their students to be able to compare World War I and II, so what would you do to your feedback to help students learn the comparison skill?

On top of that, we should always guide students to become independent learners. Now if we only give students the correct answers, students will always rely on our feedback to

know whether they are on the right path or not. However, we want students to be able to evaluate themselves. They should know how to improve using the small pieces of information from our feedback. And this is when the levels of feedback by Hattie and Timperley will come into play.

We can respond to students as elaborated questions, which are also referred as self-regulation feedback. This level of feedback can motivate students to reflect on their mistakes and self-discover an alternative solution.

We can also provide process feedback, or those which analyze the students' strategies of responding. The analysis of students' answers allows learners to evaluate the quality of their solutions. They can know exactly where to fix and where they have done very well. Thus, later they can self-improve by avoiding the same mistakes or strengthen their current correct knowledge.

HANDOUT #1

Teachers' and Students' Checklist when Writing Feedback

- ☐ Am I using process or self-regulation levels of feedback?
- ☐ Am I NOT using task or self levels of feedback?
- ☐ Am I using verbs instead of nouns in my feedback?
- ☐ Am I using BOTH praise and criticism?
- ☐ Am I utilizing BOTH visual and verbal feedback?

To capture the main points from my presentation, I have created a checklist that can be used for yourself or your students to provide peer feedback. And peer feedback is going to be the focused topic for the next session.

This checklist will allow you to make sure that you are on the right track when providing feedback.

[Pause for 1 minute so that the audience can have some time to look at the handout]

Now the first purpose of this checklist is to help you ensure that you are avoiding ineffective levels of feedback like task or self level; instead, you should focus on the effective ones such as process or self-regulation levels of feedback. You should also use more verbs than nouns in your feedback. And finally, it is fairly important for you to have a balance between praise and criticism, as well as visual and verbal feedback.

ACTIVITY # 2: Reviewing your Feedback

Look at your students' paper again

Think about your goals and objectives and ask yourself

- What skills do you want students to achieve from this assessment?
- How to respond to your students differently this time?

Be ready to share your ideas

Jot down your thought



Source: Mendes, N. (2019, June 26). Don't know how to get feedback at work? Here are some practical ways to start. Retrieved from <https://www.atlassian.com/blog/inside-atlassian/practical-ways-to-get-feedback>

Now I have given you the tips on how to provide effective feedback. We are going to do a small activity, which would allow you to reflect on your feedback skills.

Let's take a look at your students' paper again and start pondering on your goals and objectives when providing feedback to your students. Then ask yourself:

- What skills do you want students to achieve from this assignment?
- How will you respond to your students differently this time?

Be ready to share your ideas to your partners and then the whole class because I really want to listen to your thoughts. Let's take about seven minutes for you to jot down your idea on a piece of paper.

Sharing with Your Classmates

- What are significant changes in your feedback?
- What do you want to implement or avoid in when providing feedback in the future?



Source: Tree drawing [digital image] Retrieved from: <https://www.kisspng.com/png-idea-clip-art-share-813737/preview.html>

Ok seven minutes is over. Now I want you to form groups of three to four people and discuss these questions among each other:

- What are significant changes in your feedback?
- What do you want to implement or avoid when providing feedback in the future?

Then we will start having a whole class discussion afterward.

[Pause for audience' discussion]

Ok, let's turn back here. Now I really want to hear your thoughts about how this presentation change your perception about feedback.

- What was the major change that you have done to your feedback this time? [Take the answers from 5-7 people]
- What about your implementation plan? What do you want to work on or avoid in the future? [Take the answers from 4-5 people]

Closure

- Feedback can be useful or dangerous
- Leave a long term effect to students' cognition
- Important to be careful about our methods of using feedback
- **This session**
 - Feedback Categories, Effects, Methods of Giving Feedback
- **Next session**
 - Practice Categorizing and Using Feedback, Peer Feedback

Alright, our time is almost over. I am going to quickly review the content of today's presentation.

By this time, we should have known that feedback can be extremely useful or very dangerous if we do not use it properly. Although the initial goals of feedback users could be to improve students' performance, feedback sometimes can cause long term side effects. One of the negative effects is to discourage students from studying a subject or lower their confidence in their learning abilities. Therefore, it is important for teachers to be mindful about their methods of using feedback.

In this session, I have addressed four feedback categories, their subcategories, their effects to learners, and finally the best methods of providing feedback.

In the next session, we are going to practice categorizing feedback and applying the feedback guidelines that were suggested to you. Then we will move on to a new topic: peer feedback, which is also a common feedback tool.

Thank you for your participation today and I look forward to talking to you again.

PRESENTATION # 2



How to Provide Feedback Effectively

Trang Minh Nguyen

Source: Designed for simplicity, flexibility, and power [digital image]. Retrieved from: <http://teammatesv4.appspot.com/>

Hi everyone, welcome back to my second Capstone project session: *“How to Provide Feedback Effectively”*

Today's Agenda

- Review the previous session
 - Recall types of feedback and best practice
 - Categorize levels of feedback
 - Determine their effectiveness
- ★ **Peer Feedback**
 - Research Studies
 - Obstacles
 - Tips and Solutions

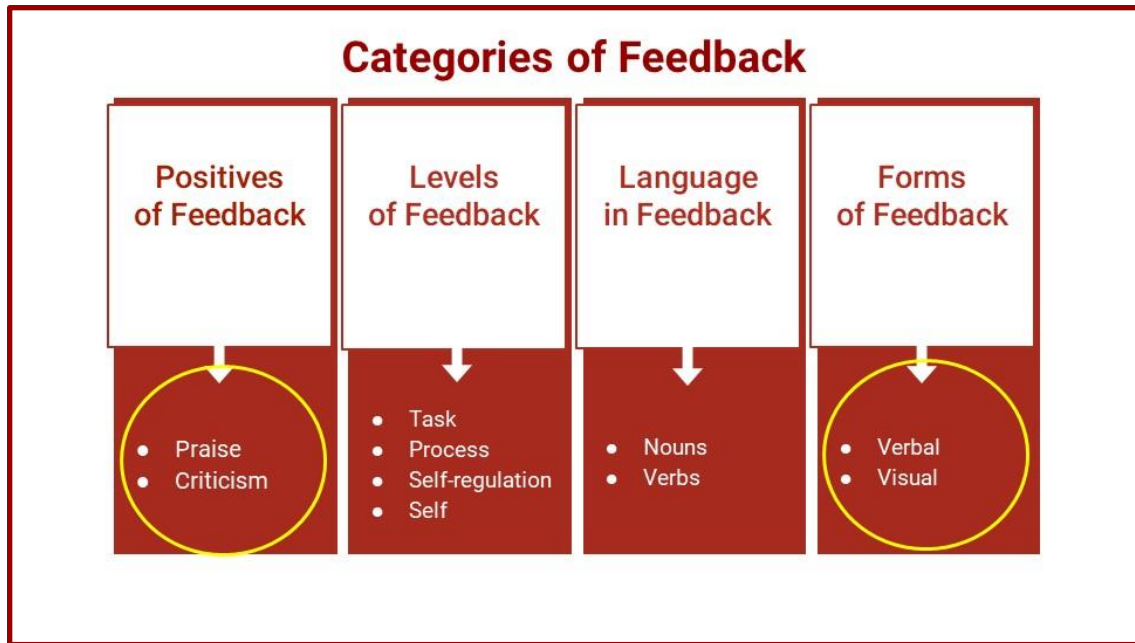
I will start off by going directly to today's agenda.

The content of today's session is a bit less dense than the last session' because half of this session will focus on reviewing and practicing.

We will begin by reviewing the materials from the previous session, which was related to types and best practice of feedback.

We will then exercise categorizing multiple levels of feedback and determining their effectiveness.

Then, we will move on to a new material, which is about peer feedback. We will analyze some research findings regarding this topic and the obstacles when assigning peer feedback to students. And finally, I will provide some solutions to these issues.



Let's first recall the four categories of feedback. We knew that feedback can be categorized in four ways: based on their positives, levels, language used, and forms.

When it comes to positives, we are talking about whether a feedback is given as praise or criticism; and forms of feedback refer to verbal or visual comments.

Research showed that there was no distinction in students' responses to teachers' feedback, regardless it was a praise or criticism. Yet, both types of feedback are necessary. Similarly, both verbal and visual feedback are essential, and they can both impact students positively, neutrally, or negatively. Nevertheless, since both praise and criticism, as well as verbal and visual are essential, educators should combine both positives and feedback forms in their comments to optimize student learning.

Now the two categories that can impact students in multiple ways are levels of feedback and language used in feedback.

In our practice review today, we will only focus on levels of feedback because positives and forms of feedback are quite easy to identify, and they do not differ in their effects on students. We will neither focus on language used in feedback, since it basically is a subtype of feedback levels.

Reviewing Previous Session

- 4 categories of feedback and subcategories
- Effects of different types of feedback on learners
- Best methods of providing feedback

We will now begin with reviewing the previous session.

Last time we have tackled four categories of feedback and their subcategories. We also addressed the effects of each type of feedback on learners. Then we have investigated the best methods of providing feedback.

4 Levels of Feedback

01	Task Level	<ul style="list-style-type: none">• Describing the correctness of the answers• <i>"Your answer is incorrect"</i>
02	Process Level	<ul style="list-style-type: none">• Describing or suggesting a learning strategy• <i>"You should apply Pythagorean theorem here"</i>
03	Self-Regulation Level	<ul style="list-style-type: none">• Follow up Questions• <i>"What would happen when you double the width?"</i>
04	Self-Level	<ul style="list-style-type: none">• Describing learners' traits• <i>"You are smart!"</i>

Source: Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81–112. doi:10.3102/003465430298487.

So, what were those four levels of feedback? Hattie and Timperley have divided feedback into 4 levels: task, process, self-regulation, and self level.

Task level of feedback describes the correctness of students' answers but does not analyze how and why the solutions are right or wrong. This type of feedback is shown to insignificantly impact students' performance.

Process level analyzes or suggests a learning strategy, which also illustrates the correctness of students' answers but in a much deeper sense. This type of feedback, according to the researchers, is very effective, as it gives students the direction to improve.

The third level of feedback is self-regulation level, which includes follow up questions such as: "What would happen when you double the width?" This level also affects students positively. This is because it encourages students to reflect on their solutions and challenges them to find a better way of solving it.

Finally, the last level of feedback is self level, which focuses on learners' traits, like "You are smart!" This is the most damaging level of feedback because it teaches students to associate their performance to their traits, leading them to think that their failure is unchangeable. It can cause frustration, tendency to give up, and lower self-esteem for students in the long term.

How to provide feedback effectively?

Step 1: Knowing your students' learning objectives

- Align your feedback to the learning objectives
- What knowledge are students missing? How to patch it?

Step 2: Knowing your goals

- Not just giving correct answer
- Other skills?
- Help students be independent learners
 - Self-evaluation
 - Self-improvement

In the previous session, I also suggested initial steps when providing feedback.

I have talked about the importance of knowing your learning objectives and goals because these two elements would lead your feedback in the right direction.

I also emphasized the importance of helping your students to be independent learners by teaching them to self-evaluate and self-improve throughout your feedback.

So, having these mindsets should be the initial step when providing feedback.

HANDOUT #1

Teachers' and Students' Checklist when Writing Feedback

- ☐ Am I using Process or Self-regulation levels of feedback?
- ☐ Am I NOT using Task or Self levels of feedback?
- ☐ Am I using Verbs instead of Nouns in my feedback?
- ☐ Am I using BOTH praise and criticism?
- ☐ Am I utilizing BOTH Visual and Verbal feedback?

During feedback provision, you can use this checklist to make sure you are on the right track.

You might want to make certain that you are using the recommended feedback levels, which are process and self-regulation levels.

It is also important to avoid ineffective feedback levels such as task and self level.

Ask yourself whether you are using more verbs or nouns in your feedback.

And finally, having a balance between praise and criticism, as well as visual and verbal feedback is also crucial.

Activity # 3

Identifying Feedback Levels

- Your group will be given some **teachers' feedback**
- **Identify the Feedback levels** that these comments can be listed in
- Task, Process, Self, Self-regulation
- Tell us whether this feedback is considered “**effective**” or “**ineffective**” based on previous research
- Replace with a different feedback if it is considered to be “**ineffective**”

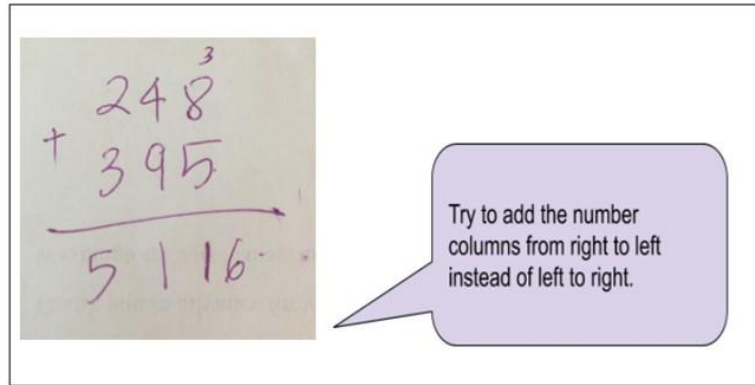
Now I have quickly reviewed the previous session. To help you better recall these materials, we are going to do a quick exercise called Identifying Feedback Levels.

Like I said earlier, we have learnt four ways to categorize feedback, but for the purpose of today, we are going to focus on levels of feedback only.

To do that, you will be divided into groups of three to four. Your group will be given some teachers' feedback. I want you to first identify the feedback levels that are suitable to these comments; so, it can be either task, process, self, or self-regulation level. After you finish identifying feedback levels, you will determine whether this feedback is “effective” or “ineffective” based on the previous research. Now if a feedback is “ineffective”, replace it with a feedback that is more appropriate to your goals and students' learning levels. You will have about ten minutes to categorize, determine the effectiveness of the feedback, and suggest alternative feedback if necessary.

[Discussion time]

Activity # 3: *Identifying Feedback Levels*



The image shows a handwritten addition problem on a piece of paper. The numbers are 248 and 395, with a plus sign between them. A horizontal line is drawn below the numbers, and the result 5116 is written below the line. A purple speech bubble points to the result with the text: "Try to add the number columns from right to left instead of left to right."

TASK

SELF

SELF-REGULATION

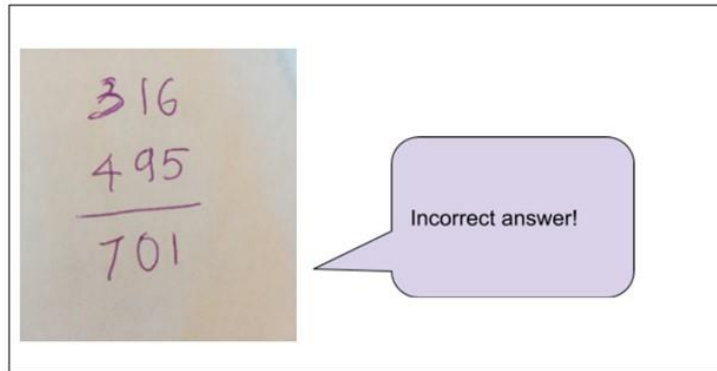
PROCESS

Let's talk about the feedback given to you. What do you think this feedback can be categorized as?

Why do you think this feedback is _____?

Is it effective or ineffective and why?

Activity # 3: Identifying Feedback Levels



TASK

SELF

SELF-REGULATION

PROCESS

What about this feedback?

Why do you think this feedback is _____?

Is it effective or ineffective and why?

Since it is considered to be ineffective, how would you change this feedback?

Activity # 3: *Identifying Feedback Levels*

$$\begin{array}{r} 248^3 \\ + 395^1 \\ \hline 5116^1 \end{array}$$

Seems like you don't understand how to add number columns. You need to work harder!

TASK

SELF

SELF-REGULATION

PROCESS

What level of feedback is this?

Why do you think this feedback is _____? Is it effective or ineffective and why?

Since it is considered to be ineffective, how would you change this feedback?

Activity # 3: Identifying Feedback Levels

“There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much.”

This is a run-on sentence.

TASK

SELF

SELF-REGULATION

PROCESS

What level of feedback is this?

Why do you think this feedback is _____?

Is it effective or ineffective and why?

How would you modify this feedback to make it more effective?

Activity # 3: Identifying Feedback Levels

"There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much."

A sentence should include both subject and verb. Is there any missing part of the sentence here?

How would you complete this sentence?

TASK

SELF

SELF-REGULATION

PROCESS

What level of feedback is this?

Why do you think this feedback is _____?

Is it effective or ineffective and why?

Activity # 3: Identifying Feedback Levels

"There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much."

"He" is a third person singular subject.
→ Add "s" or "es" to the verbs connected to this type of subject.

TASK

SELF

SELF-REGULATION

PROCESS

What level of feedback is this?

Why do you think this feedback is _____?

Is it effective or ineffective and why?

Peer Feedback



- Definition
- Why is it important to focus on it?
 - Peer pressure
 - Save our time
 - Similar to teachers, students need guidance to apply feedback
 - Can be positive, neutral, or negative
 - Affect our teaching quality

Seems like you have got the concepts from the previous session. Now we are going to address some new materials about peer feedback.

What is Peer Feedback? Peer Feedback is usually given when a group of students or individuals exchange their own work to one another in order to evaluate, advise, and learn from each other.

Why do I want to talk about it?

Firstly, students are usually affected by peer pressure. Sometimes they do things because they are inspired by their peers, not teachers. Especially, teenagers often look up to their peers to behave. Therefore, we want to take advantage of this factor to improve student learning, and peer feedback can fulfill that purpose.

In addition, if we assign peer feedback to students properly, it can save a lot of our prep time.

The third reason for addressing peer feedback today is that not all students are aware of how feedback can affect their peers. Like teachers, students need guidance on applying feedback. They should be aware that their feedback can impact learners positively, neutrally, or negatively. These effects can directly influence our teaching quality, so we want to instruct students to provide peer feedback before assigning them this task.

ACTIVITY # 4

Instructing your imaginary students

Go back to your students' work--given to you last session

Imagine

- You are going to ask students to evaluate each other's work
- How would you instruct your students to provide peer feedback?

Work in group

Before talking about research regarding peer feedback, let's deal with our imaginary students again. So, I want you to go back to your students' work given to you in the last session. I also have extra copies if you do not bring them with you.

Here is the instruction. Imagine that you are going to ask students to evaluate each other's work. How would you instruct your students to provide peer feedback?

In groups of four, I want you to come up with a guideline to help students provide peer feedback. The guideline could be given as a checklist or process instructions, depending on how you want it to be.

After seven to ten minutes, we will share your guidelines to each other.

Share your instruction

What are your 3 must-have instructions?

Why are they important for students to know before and during writing feedback?

Ok, let's turn back here, thanks for your great discussion. For the sake of our time, we will not share the entire instructions. But I want you to condense the instructions and pick out the three most important ones.

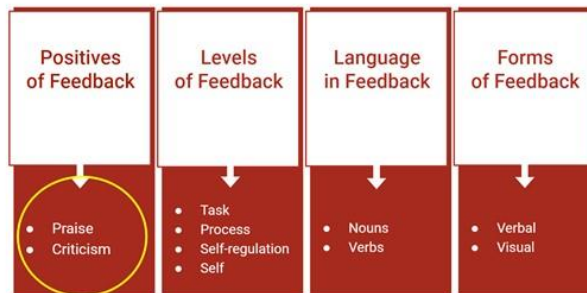
What three guidelines should students receive, and why are they most important for them to know? I will give you about four more minutes to make the decision, and then we can start sharing your top three instructions.

Alright, what are your top three?

[Sharing time]

What do researchers say about Peer Feedback?

- Same to teachers feedback--categories
- Some are more effective than others
- Know these elements that affect their peers



Thank you for sharing your thoughts about how to instruct your students to provide peer feedback. Now I think you are ready to look at the research findings about peer feedback.

Researchers came to a conclusion that peer feedback can be categorized similarly to teacher feedback. Meaning, we can categorize them based on the positives, levels, language used, and forms of feedback. These types of peer feedback also affect learners in different ways, either positively, negatively, or neutrally. So, it is crucial that students are aware of the diversity of feedback' influence.

Now why am I bringing peer feedback here if it is similar to teacher feedback? Well, because teachers might face some other issues when assigning peer feedback.

Potential Problems

Similarity with teacher-feedback

- Unaware of the effect of feedback types to the peers

Difference between teacher-feedback and peer-feedback

- Unaware of teachers' learning objectives
- Biased with peers that they are closed to and vice versa

We knew that one of the potential challenges for teachers when assigning peer feedback is that students might have lack of awareness about the feedback' impacts. However, teachers might face other issues.

Firstly, not all students are mindful about their learning objectives. Now if you are educators, there is a high chance you know very well your goals and learning objectives, which makes providing feedback becomes easier. That might not be the case for your students.

Another obstacle is that students might be biased to certain individuals. They might give a higher grade or nice comments to their close friends but could be harsher to the ones that they do not like.

How to Prevent These Problems?

Ideas: turn to your elbow partners

POTENTIAL PROBLEMS

Similarity with teacher-feedback

- Unaware of the effect of feedback types to the peers

Difference between teacher-feedback and peer-feedback

- Unaware of teachers' learning objectives
- Biased with peers that they are closed to and vice versa

So how can we prevent these problems from happening?

I want you to come up with some solutions to these dilemmas by turning to your elbow partners and discuss with them your ideas.

[5 minutes later]

What are your solutions to these issues?

How to Prevent These Problems?

Ideas: turn to your elbow partners

- Randomized
- Anonymous
- Emphasize learning objectives
- Acknowledge about feedback categories--best practice
 - Examples of effective and ineffective feedback
 - Explanation of our claims about their effectiveness

Now the solutions to our problems are actually within itself.

Researchers have suggested that when assigning peers, teachers should group students randomly and anonymously to prevent bias.

We should also keep emphasizing our learning objectives so that your students can align their comments with the desired knowledge.

Another solution is to acknowledge our students about multiple feedback categories and the best practice of feedback. While showing the best practice, we ought to demonstrate the examples of effective and ineffective feedback and explain to students why such comments are effective or ineffective.

Suggested Platform

- **Checklists for teachers**
 - When instructing students
- **Suggested Feedback Guideline for Students**
 - Based on studies
 - Can be modified

I have created a platform to be applied for yourself or your students when instructing them to provide peer feedback.

One of them is a checklist for you when guiding your students.

Another one is a feedback guideline designed for your students. This is adapted from a research in 1986; and of course, you can modify any of these platforms to fit it into your curriculum.

Checklist

- ☐ Did I assign peers randomly?
- ☐ Did I assign peers anonymously?
- ☐ Am I addressing the students' learning objective
- ☐ Am I proposing good and bad examples of feedback?
- ☐ Am I explaining why such feedback was or was not constructive
- ☐ Am I emphasizing on bad examples to help students avoid common mistakes?

Now with the checklist, I want you to make sure that you are assigning the peers randomly and anonymously. Besides, you should address the learning objectives and skills that you want students to get from the assignment. In addition to the knowledge about the subject contents, students should also know different impacts of their peer feedback. Finally, in order to help students distinguish multiple types of feedback and understand their effects on learners, teachers should provide adequate examples of effective and ineffective feedback and explain why the feedback influences their peers that way.

Feedback Guideline for Students

In groups

- Spend 3 minutes looking at the guideline
- Discuss
 - What do you like about the checklists and guideline?
 - What would you add on or change if you were applying the platforms to your classroom?

Now the last handout that I gave you was a feedback guideline for students.

I want you to spend three minutes to look at the guidelines.

Afterward, let's form groups of three to discuss what you like about the checklists and guidelines. What do you want to add or change if you were applying the platforms to your classroom?

Suggested Feedback Guideline for Students

Process of Writing Feedback

1. Detecting the problems of your peers
2. Diagnose the problems
 - Explain why the answers were problematic
 - Do not provide the correct answer yet
1. Suggest a solution or revision methods
 - Consider a strategy that would be suitable for your peers
 - View the task in multiple perspectives
1. Reflect on your peers' work (added)
 - Compare and contrast their work to their peers'
 - Build new knowledge from their reflection on the works of themselves and their peers

Adapted from: Flower, L., J. R. Hayes, L. Carey, K. Schriver, and J. Stratman. 1986. Detection, Diagnosis, and the Strategies of Revision. *College Composition and Communication*, 37(1), 16–55. doi:10.2307/357381.

Ok, let's turn back here. What are your thoughts about these platforms?

What do you like about the platform and what do you want to modify if you were using it in your curriculum?

Questions & Discussion

Trang Minh Nguyen
How to Provide Feedback Effectively

Now, it is time for more questions and discussion. This part of the presentation is for you to raise questions about anything that you are still unclear or want to elaborate on. Or just simply discuss about something related to this topic which may benefit me and our audience here.

[Q&A and discussion time]

Thank you for your awesome idea and questions!

Now to end this workshop today, I want to expand your thought about the application of this project. The focused users of my project are teachers and students; however, this project can also benefit other fields' professions such as athletics, nurses, or salesperson. In short, any field which requires training and professional evaluations can take advantage of this project. You can even use it in your daily conversation when giving advice to other people.

I hope that the information provided to you were helpful and I look forward to seeing this project being implemented in your classrooms.

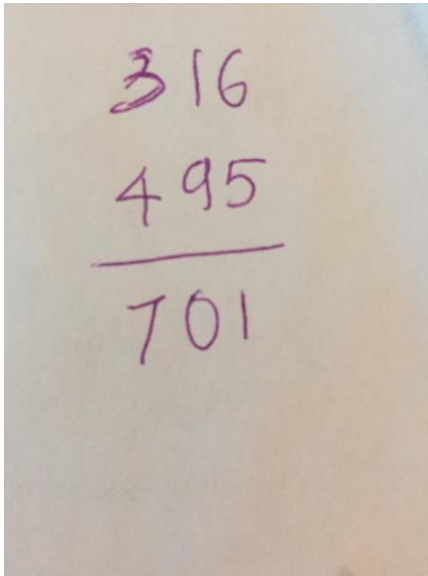
II. ACTIVITIES HANDOUTS

ACTIVITY # 1

The audience will be asked to provide feedback on a student's work. They can choose to either comment on a Math or English assignment.

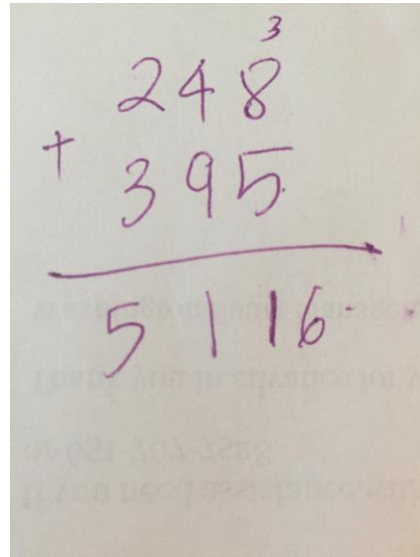
MATH

Provide feedback to the student's work below



A photograph of a student's handwritten math work. It shows the addition of 316 and 495. The numbers are written in purple ink on a light-colored background. A horizontal line is drawn under the second number, 495, and the sum, 701, is written below it.

$$\begin{array}{r} 316 \\ + 495 \\ \hline 701 \end{array}$$



A photograph of a student's handwritten math work. It shows the addition of 248 and 395. The numbers are written in purple ink on a light-colored background. A horizontal line is drawn under the second number, 395, and the sum, 5116, is written below it. There is a small '3' written above the '8' in 248.

$$\begin{array}{r} 248^3 \\ + 395 \\ \hline 5116 \end{array}$$

ENGLISH

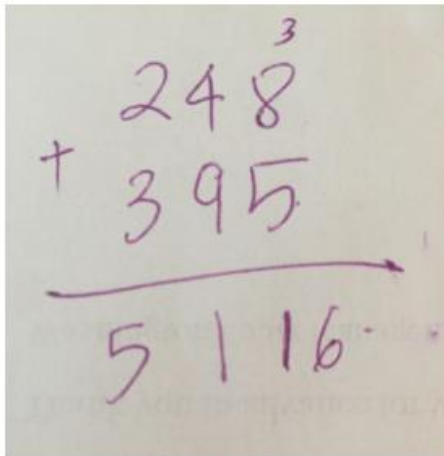
Provide feedback to the student's work below:

(This is a short excerpt from a student's family description)

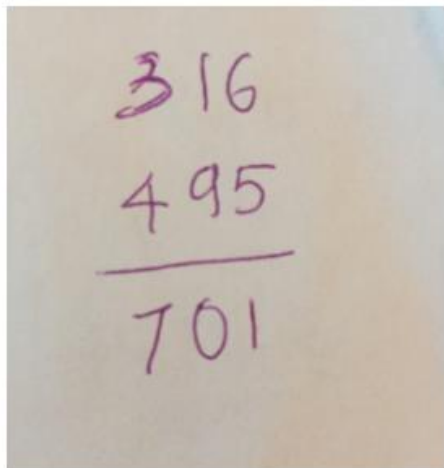
“There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much.”

ACTIVITY # 2

The audience will be given six different feedback statements. They will be asked to name the levels of each feedback using Hattie and Timperley's model (2007). They will then determine whether the feedback is effective or ineffective. If the feedback is ineffective, they will need to replace it with a more powerful feedback.


$$\begin{array}{r} 248 \\ + 395 \\ \hline 5116 \end{array}$$

Try to add the number columns from right to left instead of left to right.


$$\begin{array}{r} 316 \\ + 495 \\ \hline 701 \end{array}$$

Incorrect answer!

$$\begin{array}{r} 248 \\ + 395 \\ \hline 5116 \end{array}$$

Seems like you don't understand how to add number columns. You need to work harder!

“There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much.”

This is a run-on sentence.

“There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much.”

A sentence should include both subject and verb. Is there any missing part of the sentence here?

How would you complete this sentence?

“There are five people in my family. I, my sister, my brother, and father, and my mother. My father is my favorite family member he is very funny and hardworking. He love play soccer and bike with me and my siblings every morning. I love my dad very much.”

“He” is a third person singular subject.
→ Add “s” or “es” to the verbs connected to this type of subject.

III. TAKE HOME HANDOUTS:

HANDOUT # 1

Teachers' and Students' Checklist

Providing Feedback

- ☐ Am I using Process or Self-regulation levels of feedback?
- ☐ Am I NOT using Task or Self levels of feedback?
- ☐ Am I using Verbs instead of Nouns in my feedback?
- ☐ Am I using BOTH praise and criticism?
- ☐ Am I utilizing BOTH Visual and Verbal feedback?

HANDOUT # 2

Teachers' Checklist

Instructing Students to Write Feedback

- ☐ Did I randomize partnership?
- ☐ Did I assign peers anonymously?
- ☐ Am I proposing good and bad examples of feedback?
- ☐ Am I explaining why such feedback was or was not constructive?
- ☐ Am I emphasizing on bad examples to help students avoid common mistakes?

HANDOUT # 3

Feedback Guidelines for Students

Process of Writing Feedback

1. *Detecting the problems of your peers*
2. *Diagnose the problems*
 - Explain why the answers were problematic
 - Do not provide the correct answer yet
3. *Suggest a solution or revision methods*
 - Consider a strategy that would be suitable for your peers
 - View the task in multiple perspectives
4. *Reflect on your peers' work*
 - Compare and contrast their work to their peers'
 - Build new knowledge from their reflection on the works of themselves and their peers

References

- Anderson, R. C., Kulhavy, R. W., & Andre, T. (1972). Conditions under which feedback facilitates learning from programmed lessons. *Journal of Educational Psychology*, 63, 186–188.
- Beaman, R., & Wheldall, K. (2000). Teachers' use of approval and disapproval in the classroom. *Educational Psychology*, 20, 431–446.
- Bowker, J. C., Thomas, K. K., Spencer, S. V., & Park, L. E. (2013). Examining appearance-based rejection sensitivity during early adolescence. *Journal of Research on Adolescence*, 23, 375–388.
- Bukowski, W. M., Newcomb, A. F., & Hartup, W. W. (1998). The company they keep: Friendships in childhood and adolescence. *Cambridge, UK: Cambridge University Press*.
- Burhans, K. K., & Dweck, C. S. (1995). Helplessness in early childhood: The role of contingent worth. *Child Development*, 66, 1719–1738.
- Cimpian, A., Arce, H. M. C., Markman, E. M., & Dweck, C. S. (2007). Subtle linguistic cues affect children's motivation. *Psychological Science*, 18, 314–316.
- Coker, C. A. (2004). Motor learning and control for practitioners. *Columbus, OH: McGraw-Hill*.
- Denton, A. W. (2018). Improving the Quality of Constructive Peer Feedback. *College Teaching*, 66(1), 22-23.
- Designed for simplicity, flexibility, and power* [digital image]. Retrieved from: <http://teammatesv4.appspot.com/>

Feedback [digital image]. Retrieved from: <https://www.atebgroup.co.uk/living-solutions/advice-support/feedback/>

Flower, L., Hayes, J. R., Carey, L., Schriver, K., & Stratman, J. (1986). Detection, diagnosis, and the strategies of revision. *College Composition and Communication*, 37(1), 16-55.

Furman, W., Brown, B. B., & Feiring, C. (Eds.). (1999). The development of romantic relationships in adolescence. *New York, NY: Cambridge University Press*.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63(1), 103-15.

Gelman, S.A., & Heyman G.D. (1999). Carrot-eaters and creature-believers: The effects of lexicalization on children's inferences about social categories. *Psychol Sci*, 10, 489–493.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112.

Hattie, J. A. C. (2009). Visible learning: A synthesis of 800+ meta-analyses on achievement. *Oxford, UK: Routledge*.

Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35, 835–847.

Kawashima, R., Tajima, N., Yoshida, H., Okita, K., Sasaki, T., Schormann, T., Ogawa, A., Fukuda, H., Zilles, K. (2000). The effect of verbal feedback on motor learning—a PET study. *NeuroImage*, 12, 698-706.

- Kirazci, S. (2013). Effects of verbal and visual feedback on anticipation timing. *Social Behavior and Personality*, 41(7), 1133-1140.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254–284.
- Lynch, M. (2019, March 19). FeedForward – A new direction in giving effective feedback. Retrieved from <https://www.imi.ie/feedforward-new-direction-giving-effective-feedback>
- Mendes, N. (2019, June 26). 3 types of peer feedback to avoid (and 1 to aim for). Retrieved from <https://www.atlassian.com/blog/software-teams/how-to-give-better-feedback>
- Mendes, N. (2019, June 26). Don't know how to get feedback at work? Here are some practical ways to start. Retrieved from <https://www.atlassian.com/blog/inside-atlassian/practical-ways-to-get-feedback>
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, 75, 33–52.
- O'Leary, K. D., & O'Leary, S. G. (1977). Classroom management: The successful use of behavior modification (2nd ed.). *New York: Pergamon Press*.
- Phielix, C., Prins, F. J., & Krischner, P. A. (2010). Awareness of group performance in a CSCL-environment: effects of peer feedback and reflection. *Computers in Human Behavior*, 26, 151–161.

Tree drawing [digital image] Retrieved from: <https://www.kisspng.com/png-idea-clip-art-share-813737/preview.html>

van den Boom, Gerard & Paas, Fred & Van Merriënboer, Jeroen J. G.. (2007). Effects of elicited reflections combined with tutor or peer feedback on self-regulated and learning outcomes. *Learning and Instruction*, 17, 532-548.

Webb, H. J., & Zimmer-Gembeck, M. J. (2015). Body image and body change strategies within friendship dyads and groups: Implications for adolescent appearance-based rejection sensitivity. *Social Development*, 24, 1–19.

Williams, L. R. T., & Jasiewicz, J. M. (2001). Knowledge of results, movement type, and sex in coincidence timing. *Perceptual and Motor Skills*, 92, 1057-1068.

Zimmer-Gembeck, M. J. (2002). The development of romantic relationships and adaptations in the system of peer relationships. *Journal of Adolescent Health*, 31, 216–225.

Zimmer-Gembeck, M. J., Siebenbruner, J., & Collins, W. A. (2001). Diverse aspects of dating: Associations with psychosocial functioning from early to middle adolescence. *Journal of Adolescence*, 24, 313–336.