

# Inclusive and Equitable Quality Education: An Exploration of a Shared Preference for Active Learning

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## Abstract

*The sustainable development goals (SDGs) of the UNDP of interest to educators aim to “ensure inclusive and equitable quality education and promote life-long education opportunities for all” with “equal access for all women”. Development programs that focus on women’s participation in education describe the development of active learning. Building intrinsically motivated participation in society is seen as both the critical path towards a goal of sustainable development and the goal itself. A desired outcome, mirrored in an education path of highly participatory, active learning, would seem to make sense. It is worth looking to see if there are indicators that support the assumption. This article presents a survey of Kyoto Tachibana University English language students taking part in active learning classes in EAP (English for Academic Purposes, Dept. of Int’l English). Through an initial focus on gender issues, the appreciation the majority of students have for participatory classes was discovered. The survey confirmed active learning inclusivity and gave a corpus of feedback describing a shared preference for group-work classes that cited the value of building skills of critical reasoning, self-expression and comparing opinions, or, as one student expressed it, “not just input but output” in class, over and above exclusively listening to a teacher.*

*Key Words: Inclusive and equitable education, Life-long learning, Civil society participation, (i)NGO, UNDP SDGs, Corpus research*

## Introduction

The UNDP (United Nations Development Program) is acting towards girl’s education in pursuit of SDGs (Sustainable Development goals). Goal 4 of the UNDP SDGs is to “ensure inclusive and equitable quality education and promote life-long education opportunities for all” and focuses, in Target 4.3, on “equal access for all women”. The UNDP “Sustainable Development Goals Book Club for Young Readers”, for example, features, amongst a comprehensive set of topics, a book “Bright Sparks: Amazing Discoveries, Inventions and Designs by Women” which the author “wrote as a response to his daughter mentioning that she had never heard of anything invented by a woman” Hutch (2018) and aims to boost “the

self-confidence of girls out there who might be inclined to hide their light under a bushel” (Tuam Herald, n.d.).

Sustainable development initiatives work to invite active participation of women in society. Such programs begin with education. This means that students are satisfactorily prepared for society and that girls are equally educated. Support is required from all members of a community, including men’s groups, to achieve an understanding and commitment to program goals. “Learning organisations” (Korten, 1980) that represent the grass-roots of society, support members to take their seat at the table of civil society and steer their own development. This ownership of development processes sees participation rates increase and become an intrinsic motivation that is acknowledged amongst iNGOs (international NGOs), such as the OECD (Organisation for Economic Co-operation and Development), who agree that autonomy builds active participation in society. Positive role models of active adults in community cooperation affects children powerfully and is correlated with a reduction of delinquency and higher attendance and performance at school (Cohen & Tatian, 2018).

Building autonomous, intrinsically motivated participation in society is seen as both the critical path towards a goal of sustainable development and the goal itself. And so, education in the world is moving towards active education and, from there, towards meaningful work and whole-life societal participation. This desired outcome, mirrored in a preparatory education path of highly participatory, active learning, would seem to make sense. However, it is worth looking to see if there are indicators that support the assumption. As we think of whole society development and focus on women’s participation in education, we could ask ourselves:

- Is Active Learning effective?
- Is Active Learning inclusive? Does it suit women – is there a gender difference?

This article is a study of student reactions to Active Learning in the English for Academic Purposes program of Kyoto Tachibana University (KTU EAP).

#### Definition

Traditional classes are conventional classes where students learn from the teacher. Active Learning is a modern concept where students learn from each other through the use of collaborative groupwork to increase students’ engagement and cooperation.

### Active Learning

Satisfaction in education means that students' intrinsic interest and motivation are built (Deci, 1985). A preference, therefore, is towards students being more active participants in their learning than traditional lecture-based classrooms. Active learning is extensively defined in the literature (Bonwell, et al.,1991; Freeman, et al., 2014; Peck, 2016; Prince, 2004) as collaborative learning conducive to joyful learning, experiential learning (Kolb, 1984), knowledge acquisition (Vygotsky, 1987) and benefiting learners of diverse types (Kahneman, 2011). Active learning has become the dominant mode of education programs seeking to address civil society development.

### History of Education in Japan

With the influence of Western culture during the Meiji era, the traditional class format was adopted. Active Learning, already adopted in the U.S., began to be introduced to Japan around the year 2000 by professors at Japanese universities and started to attract attention from around 2012. In 2014, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) officially introduced it as a new learning method.

### Advantages of Groupwork

A disadvantage of traditional classes is that the instruction tends to be a one-way information transfer. There is a tendency for students to leave questions unanswered and their understanding does not progress. However, in a modern class, students can easily seek clarification from each other during the class. Working together improves productivity and interpersonal skills such as speaking and listening, and leadership. Students can work with others to motivate themselves and discover their own strengths and personalities. These skills prepare future paths, whether it be further education or employment.

### Groupwork and Groupthink

A disadvantage of traditional classes is that the individuality of the student may be lost. However, groupwork must be managed with care to avoid the same issue. As a result of the pressure of the group, the individual may seek harmony and try to avoid conflict and join in "Groupthink". In an alternate phenomenon, known as "Groupshift", an individual's opinion may shift to a more extreme point of view in reaction to the group.

### Managing Groupwork

The leader of a group plays an influential role and knowing that leaders should support

both the forward and the quiet student alike is essential in managing groupwork. If groups can work well together, they can solve problems more efficiently and more unique and diverse opinions can be gathered.

Does Active Learning Suit Everyone?

According to a study at Shinshu University, Nagano, (2012), there was not much difference in test results between students who took only traditional classes and those who took only modern classes. However, the students with lower academic ability did benefit from participating in the modern class.

### **Surveys of 1<sup>st</sup> and 2<sup>nd</sup> year KTU EAP students**

We wanted to know if there are any differences in preferences for traditional and modern classes. If there was any gender bias in students' opinions of these education systems it could speak to a shortcoming of active learning to approach the development goals of the UNDP that are rooted in women's access to appropriate, quality education and their uptake of same.

An Initial, Small Survey

An in-class survey was carried out of a group of KTU EAP Active Learning students (7 students) finding that the majority preferred traditional classes with boys all preferring traditional classes and girls split 50:50. The results suffered from having too small a sample group and by the influence of the group on the individual in class.

Initial Reasons for Students' Preferences

The 7 students speculated that the reasons for liking traditional classes might be that students are shy to speak to each other. However, they decided that those who like modern classes may enjoy more lively, active learning and sharing opinions with friends. Their discussion evaluated efficacy, interaction with a native speaker and the stresses involved in each type of classroom. To further tease this out, a task was assigned to these 7 students to write a paragraph on their hypothesis. Various reasons emerged as to why group-work classes might be more appealing to students:

- "We need to get a lot of information during class. So, this lesson style is very important for us."

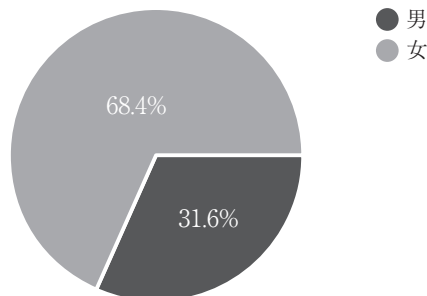
- “Students can discover their own opinion. So, this type of class is important for us.”
- “Many students want to understand by exchanging their opinions. We can get power to speak and communicate by expressing opinions.”
- “It can develop students’ qualities and abilities to solve problems better. In exploratory learning, students will be able to find problems by learning by themselves and make independent decisions. So, modern classrooms are important for our education.”

What was the preference for traditional or modern classrooms across a larger body of students?

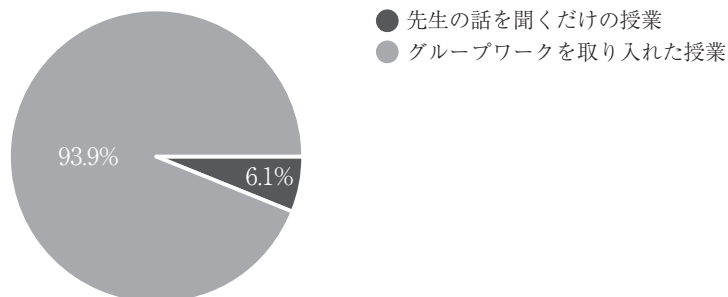
### The Main Survey

An online survey on Google Forms was carried out consisting of 1<sup>st</sup> and 2<sup>nd</sup> year students of KTU, EAP, to which 98 students replied. We then compared our research with the initial student sample collected. The initial group of 7 students helped formulate the survey questions in a way that made sense to them, in Japanese, for the larger student group to be surveyed. Students are familiar with active learning in EAP and they would be familiar with traditional, teacher-centered classrooms from high school. So, which type of class did students prefer?

性別  
98 responses



どちらの授業の方が力がつくと思いますか？  
98 responses



## Results

The online survey of 98 students found that 94% of students preferred modern classes. With students overwhelmingly expressing this favorable opinion, there is an implicit confirmation of the success students of a wide range of academic abilities had with groupwork and hence, its numerous benefits to their academic and personal development. Meanwhile, students who participated in both the initial and subsequent surveys learned something about themselves and the effects of groupwork and recognized the need for the individual to be proactive within groups.

It was found that this preference was expressed regardless of gender. Active Learning may benefit women and men equally well. This result has wide reaching importance given the development of Active Learning around the world as a tool for societal development that engenders active participation in society and fundamental to that, the empowerment and participation of women in society.

Q : どちらの授業の方が力がつくと思いますか？ (“Which class do you think will be more powerful?”)

- グループワークを取り入れた授業 (“Classes that incorporate group-work”)
- 先生の話聞くだけの授業 (“Classes that only listen to the teacher”)

Gender	Students n = 98	グループワークを取り入れた授業 (“Classes that incorporate group-work”) 93.9% (92 students)	先生の話聞くだけの授業 (“Classes that only listen to the teacher”) 6.1% (6 students)
男(man)	31.6% (31 Ss)	93.55% (29 Ss)	6.45% (2 Ss)
女(woman)	68.4% (67 Ss)	94.03% (63 Ss)	5.97% (4 Ss)

To our initial question, there was no gender difference in preference for groupwork-based learning. Groupwork-based learning was overwhelming preferred by both groups. On this question, a lot more was learned.

### Analysis of Groupwork Preference (その理由は？ “The Reason Is?”)

In the survey, students gave reasons for their preferences of traditional or modern classes, yielding a corpus of opinion to be analyzed. None of the students mentioned gender as a

factor. All but six of the responses were unequivocally in favor of active learning and group-work.

#### Word Frequency

In the analysis of the corpus of student responses as to why they prefer groupwork, keywords are not enough to know what the student meant in their comment. Instead, I analyzed phrases, reading them, one by one, to relate sentiments therein to various categories of motivation, either intrinsic motivation or identified (Deci, 1985) and ideal-self motivations (Dörnyei, 2005), and separately, psychological needs (Deci, 1985) and, separately again, critical thinking abilities towards language acquisition (Bloom, 1956).

#### Motivation

Intrinsic motivation is regarded as a preferable motivation since the student has internalized love for her subject. Close in quality to this is identified motivation, an extrinsic motivation, yet one in which students self-direct their behaviour towards identified goals and accept the importance of learning (Deci, 1985). Another motivation, ideal-self (Dörnyei, 2005) motivation can be grouped with this category of identified motivation since, with ideal-self motivation, the student seeks to bridge the gap between the actual self and the ideal self, which is considered a significant predictor of motivation in language learning behaviour.

#### Psychological Needs

Groupwork can promote internalization and self-determination of extrinsic motivations by satisfying students' psychological needs (Deci) which, in practice, means that students enjoy a degree of autonomy to think and express themselves, feel a conducive relatedness with each other and each other's opinions, along with a sense of competency and achievement in their abilities in the classroom.

#### Critical Reasoning Skills Towards Knowledge Acquisition

Groupwork produces the conducive mood students need for efficacy in learning (Kahneman, 2011), giving them a space to play and manipulate materials in knowledge acquisition (Vygotsky, 1987), developing critical reasoning skills along the way (Bloom, 1956).

#### Tables

Each category in motivation, psychological needs and learning skills, with examples of

sentiments expressed by students defining the scope of each category, is tabled and the combined totals are summed per category. Arguably, some definitions of each category were more limited, for example, competence, hence its smaller numbers. However, definitional keywords were provided by respondents to an open, non-leading question and results would represent students' awareness of their own interests and issues. It's interesting to find consistency in the patterns compared between the two groups – men and women.

#### Analysis of Groupwork Preference; その理由は？ (“The Reason Is?”)

Overall, there were quite similar trends in male and female opinions, with some differences, as shown in tables 1 to 4, below. As a note, the women were more active to take up the survey and responded in twice the number of the men. Both groups were equally vocal as a proportion of their group size, as seen by frequencies of meaningful expressions used.

In terms of motivating and deepening active participation, both groups frequently mentioned liking groupwork for learning other's opinions and expressing themselves. This implied autonomy and opportunity to communicate with others contains too an implied practice of critical reasoning skills. A student response that summarizes this and implies an intrinsic pleasure in practicing skills that give the ability to be more active, reads, “Groupwork can be active and output is important because we can practice English communication and have a power to speak English which makes it easier to join the class”.

In response to lecture-based tuition, in which students are mainly tasked to listen, students describe it as “boring” where they can feel “sleepy” and have difficulty sustaining attention. As expressed by one student, “It's better to have an output in addition to an input”.

Overall, feedback can be summarized by the response, “It's easy to lose concentration. On the other hand, groupwork can run better because you actually think for yourself and express your opinion”.

A. In terms of motivation, both groups overwhelmingly hinted at identified (Deci) and ideal-self motivations (Dörnyei) for desiring groupwork, over and above intrinsic motivations (Deci). Women's reasons for liking groupwork relate to intrinsic and identified motivation in the proportion, 15% and 85% respectively, while for the men, it was 18% and 82%, respectively (Table 1).

B. Both groups placed autonomy, relatedness and competence (Deci), in that order, with significant weighting on autonomy over the other two, as a psychological need satisfied by



groupwork. For the women, the proportion was 51%, 28% and 21%, respectively, while for the men it was 44%, 33% and 23% respectively (Table 2).

C. In terms of a hierarchy of reasoning skills (Bloom) built through groupwork, verb keywords indicate both groups experienced a similar pattern, verb frequency centering on the mid-tier categories, ‘understand’, ‘apply’ and ‘analyze’, along with the peak-skill category, ‘create’, all higher in the hierarchy of skills than merely ‘remembering’. There was significant overlap in verbs used by both genders (33%), however, women referred notably to an ability to deepen thinking through groupwork (Table 3).

D. There was a difference between groups where women, more than men, used the nouns, ‘opinion’, ‘self’, ‘opportunity’ and ‘partner’, indicating that opportunities in groupwork to express opinions and ideas are particularly appreciated by women.

Meanwhile, men spoke more of ‘class’, ‘teacher’, ‘English’ and ‘understanding’, to express their particular needs as learners, that are satisfied by Active Learning, that is, learning by doing, not just listening.

Women and men used the keyword ‘output’ in equal proportion, indicating a shared, identified motivation and an appreciation of groupwork classes that facilitate language production (Table 4<sup>(1)</sup>).

### Tables of Word Frequencies for Groupwork (その理由は？ “The Reason Is?”)

Table 1 Motivation for Engagement with the Lesson

Women’s reasons for a preference for classes that incorporate groupwork				
Motivation type	Intrinsic	Identified		Ideal self
Example concepts	Fun	Reason to be active	Interest in class efficacy	Know self / opinion
Freq (33 expressions)	5	1	18	9
Totals	5 (15%)	28 (85%)		
Men’s reasons for a preference for classes that incorporate groupwork				
Freq (22 expressions)	4	4	11	3
Total	4 (18%)	18 (82%)		

(1) Table 4 was the result of the same data analyzed by Mr. Junichi Mori, Professor, Kyoto Tachibana University. I would like to express my sincere thanks for his help.

Table 2 Psychological Needs Conducive to Learning

Women's reasons for a preference for classes that incorporate groupwork								
Psychological needs	Autonomy allowed by the teacher				Relatedness with other students			Competence student feels
Example concepts	Can learn from each other and think for myself	Can express self / own opinion	Not get bored to listen just to the teacher	Want interaction with teacher	Listen / learn other's opinions	Create good environment	Communication	Improve my skills by sharing
Frequency (84 expressions)	17	16	8	2	14	7	2	18
Totals	43 (51%)				23 (28%)			18 (21%)

Men's reasons for a preference for classes that incorporate groupwork								
Frequency (39 expressions)	7	4	5	1	7	3	3	9
Totals	17 (44%)				13 (33%)			9 (23%)

Table 3 Frequency of Verbs in Critical Reasoning Skills

Women's reasons for a preference for classes that incorporate groupwork						
Skills	Remember	Understand	Apply	Analyze	Evaluate	Create
Frequency (62 expressions)	0	14 (22.5%)	18 (29%)	14 (22.5%)	3 (5%)	13 (21%)
Totals	0	62				

Men's reasons for a preference for classes that incorporate groupwork						
Frequency (29 expressions)	0	5 (17%)	13 (45%)	3 (10%)	2 (7%)	6 (21%)
Totals	0	29				

Frequency, 91 expressions		<b>Acquire</b> (1) (2)	<i>Activate</i> (1)	<b>Concentrate</b> (1) (2)	<i>Compare</i> (1)	<i>Assert</i> (1)
Women, 62 expressions		<b>Know</b> (5) (1)	Apply (1)	<i>Investigate</i> (1)	<i>Agree</i> (1)	<b>Cooperate</b> (2) (3)
Men, 29 expressions		Learn (1)	Converse (1) (4)	Strengthen / Deepen thinking (13)	Think for yourself (3)	Create (2)
Expressions used by both genders: 30 uses in common (33%)		Learn better / deeper (3)	Convey (2)			Learn new ways of thinking (1)
		Learn independently (1)	<i>Discuss</i> (1)			<b>Improve</b> (6) (2)
		<b>Understand</b> (2) (1)	Do activities (2)			Give opinion (1)
		<b>Understand deeper</b> (1) (1)	<i>Exchange</i> (1)			Teach (1)
			<b>Express</b> (3) (1)			
			<b>Practice</b> (2) (1)			
			Participate (3)			
			Remark (1)			
		<b>Share</b> (3) (3)				
		<i>Use</i> (1)				

Table 4 Frequency of Nouns in Learner Needs

keyword	意見 Opinion, 発言 Remark	自分 Self	機会 Opportunity	相手 Partner	アウトプット Output
Male	9	3	2	1	2
Female	29	25	7	6	4
Ratio <sup>(1)</sup>	1 : 1.6	1 : 4.2	1 : 1.75	1 : 3	1 : 1

keyword	授業 Class	先生 Teacher	英語 English	理解 Understanding	
Male	8	4	6	2	
Female	4	4	7	3	
Ratio <sup>(1)</sup>	4 : 1	2 : 1	1.7 : 1	1.3 : 1	

(1) Ratio of male to female uses of keywords, adjusted ( $\sqrt{2}$ ) in proportion to sample size as there were twice as many female responses as male responses.

## Conclusion

Results were both surprising and overwhelmingly positive. There was a very large difference between the initial surveyed opinions of 7 students and the larger group of 98 students. The initial group of three men all favored traditional classes whereas the truer result from a larger sample yielded around 94% in favor of active learning. The initial group of four women favored equally both types of classes whereas the truer result from a larger sample was the same as the men at 94% in favor of active learning.

### A. その理由は？ (“The Reason Is?”)

The feedback analyzed from the larger group of students mirrored the 4 replies of the initial survey of 7 students in which they suggested that group-work helps them learn to express themselves and practice communication with each other and develop their opinion making and critical reasoning skills.

Summarizing the analysis, both women and men praised groupwork for satisfying their motivation as learners to engage in the lesson, their psychological needs in learning and their acquisition of abilities and skills to accomplish learning goals.

### B. Results Compared with the Literature

There is a concern in the literature that inclusivity is bound up with demographics in the classroom. In one case study (Opie, 2019), women business students would be perceived to participate more in group-work situations if they were in the minority in the classroom and

if they had a female professor. The groups I surveyed would not be representative of this situation, being that women were in the majority and having mixed teaching staff. In a study of second or foreign language students, Zubiri-Esnaola, et al. (2020) acknowledge that group-work—what the authors call Interactive Groups (IGs)—is regarded as helpful in creating the conditions in which interaction, participation and collaboration are increased to create effective dialogic learning. Their research findings indicated that “IGs promoted effective conditions for the inclusive participation of all learners”.

### C. Inclusive and Equitable Quality Education

In my survey, regardless of gender, active learning was liked. This is a positive result that suggests that both men and women may be equally motivated and learn equally well in group-work situations and, moreover, become equally active therein. The result is welcome that satisfies the educational underpinnings of the UNDP sustainable development goals that suggest that active learning may provide inclusive and equitable quality education.

## Sample of Responses in Groupwork Preference (その理由は？“The Reason Is?”)

A sample of 36 responses, as space permits, are translated. A comprehensively informative, positive response, along with an example of an equivocal response are italicized. Keywords pertaining to a common sentiment are grouped (as seen by underline style, below) and recorded in the charts above.

It's boring just listening

It's easy to lose concentration, on the other hand groupwork can run better because you actually think for yourself and express your opinion

To cultivate not only listening but also the ability to speak and cooperate

You can know both your opinion and the other people's opinion

I thought it would be nice to hear a lot of opinions

It improves your ability to express your opinions in English

We can get a lot of opportunities to think and express our opinion to others

*I don't like just listening but if we have a lot of group-work we speak in Japanese, so I don't want to do a lot of groupwork*

There are people who don't listen carefully in traditional classes

I have more opportunities to speak in English

It's fun

I can listen to many opinions

When working in a group, I and my partner can acquire knowledge and skills

It's a proactive way to learn and apply what you've learned

Creating a good atmosphere in the classroom will motivate Ss to be active

It will help Ss to improve their speaking skills because it helps Ss to produce output  
*There are many disadvantages to just listening to the teachers class such as feeling sleepy or not being able to concentrate enough but I think it is because group work is not only fun but it's also good for students to actively express their own opinions and compare their own opinions with those of the other students*

I think it is better to have an opportunity to speak English positively

Because I want to keep my motivation for class

You can listen to various opinions and a new way of thinking

I think it is effective and important for learning to express people's opinions

It's better to have an output in addition to an input

It's important to speak to the student

It's important to think of the opportunity to use English for communication

We can think ourselves

Because I don't want to sleep

I can say something myself

I can hear the opinions of others

I can know the opinions of other people

I will acquire the power to think for myself and combine with the other people

I can take in various opinions

I can share the opinions of various people

We are sleepy to listen to teacher

We don't get bored and can have power to speak English in group-work

We want to practice speaking English conversation

Groupwork can be active and output is important because we can practice English communication and have a power to speak English which makes it easier to join the class

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