

## PROCEEDINGS OF THE



2nd

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"BOLSTERING THE TEACHERS OF TOMORROW, TODAY"

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## PROCEEDINGS OF THE ICTE'22 INTERNATIONAL CONFERENCE ON TEACHER EDUCATION 2022

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## UNCOVER CREATIVE THINKING SKILLS DEVELOPMENT IN ACCELERATED CLASS (CASE STUDY: NATIONAL PLUS SCHOOL IN NORTH SULAWESI, INDONESIA)

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### ABSTRACT

Rintisan Sekolah Berbasis Internasional or Prepared International Standard School) which already exposed by law, such as accelerated class or national school plus. While this class charge higher rate wher than common class, many parents merely hoping that English usage in class can accelerate their children. On the other hand, it should be develop critical thinking skills for students to differentiate accelerated class from others. This research tried to find evidence and uncover critical thinking skills development in accelerated class. Whole study took place in North Sulawesi with 19 school in K-12 gode (from elementary until high school), and collect data from observation, interview also destinaire. There are some important key results from it, which are: (1) the assumption of accelerated class, between merely English usage or critical thinking skill, (2) teachers and students wish in creating critical thinking skill outcome from learning process, (3) teacher having difficulties in planning critical thinking skill effort in class, (4) students somehow want critical thinking skill is being held in accelerated class using proper learning process, and (5) good facility and English usage is not enough to accelerated class with such high rate.

Key word: Creative Thinking Skills; Development; Accelerated Class

## INTRODUCTION

Indonesia as one of ambitious development country has many dreams in its education progress. One of the its dream is how to create better generation in future using accelerated education. Going back in 2011, there were some ideas which are generated into real life program named as RSBI (Rintisan Sekolah Berbasis Internasional or Prepared International Standard School). While this RSBI later aready disposed by law, it is still come across in Indonesia's K-12 education using other names, such a accelerated class or national school plus.

Even though there are many researchers, Indonesian researchers also foreign researchers, already tenerved empirical evidences about this kind of education style, people still believe this can make their children getting better education for their brighter future. However, accelerated class mostly doing their data using English language in their learning process, thus the school would be stamped as "international Standard" and differentiate students as from other "common school" (Coleman, 2009a, 2009b). While these International Schools are getting more expensive, there are also many parents choose them, thus they grows in very quickly and making Indonesia as one of the highest number International School compared to other south east Asia countries(Ginanjar, 2017; Nugraheni, 2018). However, the label of "International School" has already lost its permit based upon new rule which thereby allow "International School" as school which has expatriate children inside it, With author Click here to access/download; Title Page; Thinking Skill 18122019 - with author pdf not local students (Liaurw, 2015; Mariati, 2007; Purnomo, 2012; Rinaldi & Saroh, 2016). Thus, many schools change their labels and creating other form as accelerated class inside their school.

On the other hand, others assumed that accelerated class in school is not merely about teaching using English, but it should leverage students within their critical thinking skill and teachers would be able to exploit further innovative methods rather than in common class. Because of one most important thing in educational success should be include thinking skills consistently (P. A. Facione, 2000). However, this assumption does not have any supporting data while many schools which claiming their accelerated schools already charge more expensive rate comparing to common school. Many parents would love to pay more for this kind of class and hoping their children would have better education, better learning process and better skill than others(Ginanjar, 2017; Ipnugraha, 2013). But it seems that they are confused while being asked what kind of better skill they are hoping for their children.

While this phenomenon is still happening in Indonesia, with many different terms and definitions, many education experts also questioning how these schools really can accelerate students in any other way rather than just charge more rate to parents (Herlinda, 2018). This acceleration still needs more explanation, whether it is a better understanding towards learning material, or better children development or even better critical thinking skill. However, critical thinking skill is still becoming hottest issue in this accelerated class, since that its rate is very expensive comparing to common class (Siregar, 2018).

While critical thinking is one of essential skill which students should be possessed, it also needed by teachers as well (Ariyana, Pudjiastuti, Bestary, & Zamroni, 2018; Ginanjar, 2017; Mariati, 2007; Purnomo, 2012; Putri, 2010). Thus, critical thinking skill should also be built from teachers before it goes to students. While this can be interpreted that critical thinking is skill which required instructions and practice, not merely commong learning process in class (Snyder & Snyder, 2008). So, it should focus on instructional strategies and assessment techiques rather than in using English as students' main language in class.

It means that critical thinking should be the main reason why parents put their children into accelerated class and pay more rather than just hoping that their children learning English as main language in class (Purnomo, 2012; Rinaldi & Saroh, 2016). However, there are many researchs that still believe (and even from local government point of view) that accelerated class in Indonesia (and some Asian countries also (Coleman, 2009b)) that English is one of the most important thing to differentiate "those students" from others.

Thus, this research tries to find evidences from schools which have accelerated class, whether they really can improve learning process, especialy leveraging critical thinking skill rather than just enjoying English in their class for any subject. While most of accelerated classes charge parents with higher rate, this research tried to pull sample survey and analyze it whether it really worthed for parents putting their children in accelerated class, or there should be another improvement for school with such class in order to make themselves as worthy as they advertised to public.

This research took place in North Sulawesi and took whole RSBI school as sample of accelerated class population in every level of K-12 education which are: elementary, junior high school and high school. There are 19 schools included in this research which are: 8 from elementary schools, 5 junior high schools and 6 high schools. We were trying to observe as well as interviewing and taking some document samples to find proper evidence which will be analyzed later.

## **CRITICAL THINKING**

Critical thinking skill itself in philoshophical point of view can be assumed as one of the most ideal way for a person because it focuses on how he/she can do something in best situation (Sternberg, 1986). It also stated that critical thinking should create students that can identifying problems and clarifying them as well as understanding and analysing them (Lai, 2011; Pithers & Soden, 2000). Thus, when students can have critical thinking skill, they should be able to (1) analyzing argument and claiming evidence, (2) giving inductive or deductive reasoning, (3) also evaluating or judging and (4) making decision while solving problems comprehensively (P. A. Facione, 1990; Lai, 2011).

Critical thinking is essential because of it will lead students in problem solving and it should teach students "how to think" rather than teaching them "what to think" which leads into higher order of instructional design strategies (Snyder & Snyder, 2008). It also need to change the teachers from "teacher role" into facilitator (Lai, 2011; Sternberg, 1986, 1987), which means that teachers in accelerated class who want really achieve critical thinking skill for their students should also change their role.

Critical thinking can also be achieved by changing its evaluation style in class, which start questioning students such questions: "what is my goal in learning this?", "how is my progress?" and so on (N. C. Facione, Facione, & Giancarlo, 1994; P. A. Facione, 1990, 2000; Lai, 2011). Thus, it means that teachers should not use old-fashioned style in their evaluation, such as multiple choice, common essay or brief answers. They should create problem solving evaluation and based upon some definite project along its learning process.

Critical thinking evaluation is considered in various ways by many researchers. Some using collaboration approach in its evaluation (Gokhale, 1995), or using CCTDI (California Critical Thinking Disposition Inventory) which created by Facione (N. C. Facione et al., 1994; P. A. Facione, 1990, 2000), and also challenging students in for their ideas in identifying and analyzing problems (Ennis, 1993; Fisher, 2001; Pithers & Soden, 2000). These evaluations can not be done simultaneously, since that all of them need different approach by teachers, and it depends by learning environment also by students' capability in doing learning process.

So, teachers should choose what kind of evaluation So, critical thinking as main purpose in accelerated class should also do the same thing, change its teachers' role also revolutionize its evaluation styles, while maintaining English usage in its class. However, it is still need empirical evidence which will be explained later in this research. This evidence should become foundation of suggestion or maintaining the learning process in accelerated school itself.

### RESEARCH METHOD

This research using field study in order to collect data from whole schools which have accelerated class in North Sulawesi. Using expost facto method which means identifying something that has already happened, we used interview, observation and document study to prepare whole needed data. As mentioned previously about the schools as object, we tried to dig deeper about this critical thinking skills in students also for the teachers who take responsibility in class.

Observation in this research took time approximately 3-4 day for each school which done altogether with interview process. In observations, we tried to sit in the class and watching how the evaluation and learning process in accelerated class happened everyday. We also lightly interrupted teacher in the middle of class, commonly in short break moment, to do interview to teachers also to students. In the end of observation process, we gave them questionaire in order to confirm our conclusion which will be explained later in this research.

### RESULT AND DISCUSSION

Observations result have similarity among all schools which have accelerated class in it. Mostly all of them merely using classical learning process (78%) that means they just focusing on explanation to students in class, while using English as their main language. Teachers and students also agreed that using English has already made them feeling special and different with "common class". It means that they do not realized what accelerated class purpose form beginning and still focusing on language usage rather than learning process or even evaluation result. It also proofs that English usage in K-12 schools

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has become main factor for most parents' point of view in seeing "more quality schools" and they really willing to pay more for that (Coleman, 2009a; Siregar, 2018).

Other result from observation is most teachers did not use any critical thinking evaluation effort in their learning process. While most of them merely used memorizing as their main evaluation criteria for students, they rarely use problem based learning or even project based learning as their main learning process. About 38% teachers using memorizing in their evaluation, and 41% using imitation in it, while the minority rest have already doing problem based learning in their evaluation. Imitation in this context commonly done by creating project that has guide from text book. Surely, this is false assumption from the teachers about project based learning. It means that most teachers lack instructional design knowledge and commonly focus on their English skills in delievering learning material to accelerated class' students.

Interview results have confirmed previous observation result in this research. Interview being done to teachers, some students as sample population and also headmaster of school. Most teachers (about 40%) believed that English usage and good class facility (air conditioner, LCD projector and comfortable chair and desk) are the main reason of being accelerated class, rest of them believed that students' output (good result in final exam and decent English skill) are the main reason. It is similar with headmasters' opinion when they are being asked what the main reason is of becoming accelerated class.

However, some students have different ideas of becoming inside accelerated class. Nearly 50% have opinion that being inside accelerated class means that they are in dfferent level comparing with common class. Being different should be proven by how good they are solving problem in real life and how can they have better understanding in learning process. Rest of them and some minor voices told us that accelerated class merely different in English usage and its facility rather than learning process and its evaluation. They somehow satisfied with their different social level in school and society within become accelerated class' member.

While both teachers and students being asked about critical thinking skill, which includes memorizing, analyzing and identifying problems, evaluating and judging also making decision of problems, most of them still confuse about this concept. Most teachers thought those mentioned components of critical thinking are not completely being taught in accelerated class. Even though most of them have good facility which can support critical thinking skill learning process, they rarely used them all. Teachers mostly tought (about 50%) that making decision is depend on students' ability and personality and it can not be taught inside class. Thus, they did not believe that critical thinking skill is teachable among students of accelerated class properly.

On the other hand, students felt different about critical thinking skills in accelerated class. While they were being explained about critical thinking skill during interview process, most of them (more than 50%) agreed that critical thinking skills are essential for their life skill in the future. Especially for high school students who mostly already thinking about college life, they realized that critical thinking is highly recommended skill for them to acquire. Thus, this different point of view creating invisible gap between teachers and students of accelerating class. However, most of students are not brave enough to express their want to teachers in the class. This attitude caused by Indonesian culture which commonly very "polite" to elder people (in this case is their teachers), which creating this invisible gap.

Last step of this research is spreading questionaire which merely ensuring what observation and interview result in the end. The result of questionaire actually underlining what has teachers and students already answere in previous sessions. More than 80% of teachers in accelerated class said that they still use paper-pencil test which means they merely did memorize and less analyzing identifying problems for evaluation style in class. Thus, there actually no difference between accelerated class and common class. However, teachers having argument that this kind of test being done because of Indonesia education system which have final national exam (Ujian Nasional or national test) which has

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multiple choice form and it is focusing on memorizing rather than analyzing or even identifying problems.

Other result from questionaire is how critical thinking skill developed in accelerated class. Most teachers said that developing critical thinking skill which include implementing problem based learning or even project based learning, really need careful and long plan in its preparation. It still added by using English as their main language in class, which is not becoming their mother tongue daily spoken. So, it become harder for teachers in creating such good instructional design in accelerated class. On the same point of view, students also hoping that their teachers implementing different level of learning process. When they are having explanation about critical thinking skill, most students showed their enthusiasm and wishing that they can have such skill. However, while most of their learning environment seems not supporting this skill development. On the other hand, they still want their teachers creating such learning process in order to build critical thinking skill for them.

## CONCLUSION

Accelerated class in Indonesia, which originally come from RSBI, has created such negative and also positive image among parents. Some said that accelerated class merely gaining big profit with its expensive rate and doing no improvement beside of its English usage in class. Some others said that accelerated class really create great students with its facility and good learning process.

Assuming high rate of accelerated class, many parents and community hoping that it will create critical thinking skill for students inside it. However, many assumptions and different point of view struggling without clear evidence. Even though some researchs already claimed that English usage in class of Asian countries is not effective, still there are opinions against it. So, this research already found partial evidence for claiming which assumption is correct. Whether English usage is enough already for accelerated class, or critical thinking skill is more wanted in its learning process.

However, this research tried to find empirical evidence in field without subjective judgement about accelerated class. While field study which took place in North Sulawesi has already received its result, then we can have some conclusion from it. There are some important key results from it, which are: (1) the assumption of accelerated class, between merely English usage or critical thinking skill, (2) teachers and students wish in creating critical thinking skill outcome from learning process, (3) teacher having difficulties in planning critical thinking skill effort in class, (4) students somehow want critical thinking skill is being held in accelerated class using proper learning process, and (5) good facility and English usage is not enough for accelerated class with such high rate.

On the other hand, we can assume that teachers need proper training in creating careful plan for critical thinking skill effort in class. It is also need support from headmaster as school authority for it, thus, accelerated class become really different. These evidences also need further field study to other accelerated classes, whether they already try different approach for their own advantage in learning process. It also need proper research to elaborate teachers and students in order to create critical thinking skill for them.

Thus, we can also give some suggestions for school with accelerated class based upon this research, which are: (1) there should be further training for teachers to create instructional design for critical thinking skill, (2) role change for teachers, from information source into facilitator to let students improve their critical thinking, (3) English usage perhaps not becoming most important factor for accelerated class output, while most students do not really want it and on the other hand parents merely pay higher rate just for their pride.

## REFERENCES

- Artivana, Y., Pudjiastuti, A., Bestary, R., & Zamroni. (2018). Buku Pegangan Pembelajaran Beroriestan pada Keterampilan Berpikir Tingkat Tinggi. Jakarta: Direkturat Jenderal Gara dan Teraga Kependidikan.
- Coleman, H. (2009a). Indonesias. International Standard School. The Stirl anguage and freedopment Conference. Coleman, H. (2009b). Teaching other subjects through English in two harm regions. Teachers' responses and implications for learners. British Council.
- Finnis, R. H. (1993). Critical thinking assessment. Theory Into Practice, 32(3), 179-126. https://doi.org/10.1080/00405849309543594
- Faccione, N. C., Facione, P. A., & Giancarlo, C. A. (1994). Critical Thinking Disposition as a Measure of Competent Clinical Judgment: The Disposition Toward Critical Thinking as a Measure of Competent Clinical Judgment: The Development of the California Critical Thinking Disposition Inventory 1. Journal of Nursing Education, 33(8), 345–350.
- Pacrone, P. A. (1990). Critical Thinking: A Statement of Experi Consensus for Purposes of Educational Assessment and Instruction. Research Findings and Recommendations.
- Relationship to Critical Thinking Skill. Informal Lerge, 2001). https://doi.org/10.22329/il.v20i1.2254
- Fisher, A. (2001). An Introduction. Cambridge: Cambridge University Press.
- Ginanjar, M. H. (2017). KEBIJAKAN SEKOLAH BERTARAF INTERNASIONAL (SBI) ASTTARA IDEALIS DAN DILEMATIS. Edukasi Islami: Jurnal Pendidikan Islam, 1(2), 6-8. https://doi.org/10.16309/j.cnki.issn.1007-1776.2003.03.004
- Gokhale, A. A. (1995). Collaborative Learning Enhances Critical Thinking. Journal of Technology Education, 7(1), 22-30. https://doi.org/10.21061/jte.v7i1.a.2
- Herlinda, W. D. (2018). Sekolah Internasional Wajib Ganti Status Jadi SPK. Bagamana Standar Pendidikannya? Kabar24 Bisnis.com. Retrieved December 15, 2019, from Bisnis.Com website: https://kabar24.bisnis.com/read/20170604/255/659062/sekolah-internasional-wajib-gantistatus-jadi-spk,-bagaimana-standar-pendidikannya
- Ipnugraha, I. (2013). Pioneering of Schools with International Standard to Respond the Globalization.

  Journal of Education and Learning (EduLearn), 7(3), 153.

  https://doi.org/10.11591/edulearn.v7i3.180 Lai,
- E. R. (2011). Critical Thinking: A Literature Review. In Pearson. https://doi.org/10.1046/j.1537-2995.1995.35395184278.x Liauw, H. (2015). Sekolah "Internasional" Berganti Label. Retrieved
  December15,2019,fromKompaswebsite:https://edukasi.kompas.com/read/2015/02/17/213855
- 91/Sekolah.Internasional.Berganti.Label ?page=all

  Mariati. (2007). Menyoal Profil Sekolah Bertaraf Internasional. Jurnal Pendidikan Dan Kebudayaan.
  13(67).
- Nugraheni, M. (2018). Jumlah Sekolah Internasional di Indonesia Terus Bertambah Parenting. Dream.co.id. Retrieved December 15, 2019, from Dream.Co.Id/Parenting website: https://parenting.dream.co.id/diy/jumlah-sekolah-internasional-di-indonesia-terus-bertambah1808131.html
- Pithers, R. T., & Soden, R. (2000). Critical thinking in education: A review. Educational Research, Vol. 42, pp. 237–249. https://doi.org/10.1080/001318800440579
- Purnomo, S. H. (2012). English teaching and 'rsbi' schools. Jurnal Lingusitik Terapan, 9(3), 1-6.
- Putri, A. S. V. (2010). The implementation of bilingualism in the teaching learning activities at international (A Descriptive Qualitative Study in SD Negeri SBI Gemolong in the 2009 / 2010 Academic Year) Arranged by: Vina Ardian Septyani Putri Teacher Training And Education. Sebelas Maret University.
- Rinaldi, I., & Saroh, Y. (2016). the Rise of National Plus School in Indonesia Education for Parents and Government. Lingua Didaktika, 10(2), 194–205.
- Siregar, U. (2018). Sekolah Mahal di Ibukota Bisa Jadi Jaminan Masa Depan Cemerlang? | KOLOM: Bersama berdialog untuk mencapai pemahaman | DW | 23.02.2019. Retrieved December 15.

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- Sayder, L. G., & Snyder, M. J. (2008). Teaching Critical Thinking and Problem Solving Skills How Critical Thinking Relates to Instructional Design. The Delta Pi Epsilon Journal, 1(2), 90-100.
- sternberg, R. J. (1986). Critical Thinking: Its Nature, Measurement and Improvement. National Institute of Education, Washington, DC., p. 37.
- Sternberg, R. J. (1987). Teaching Eight Before Easy You Critical Ways Begin Thinking: to Fail. The PhiDelta Kappan, 68(6), 456–459.