

APPLICATION LEARNING COOPERATIVE MODEL TWO STAY TWO STRAY FOR INCREASE MOTIVATION AND LEARNING OUTCOMES STUDENT CLASS VIII IN SCIENCE SUBJECTS AT SMP NEGERI 2 LIMBOTO

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Abstract

The most learning model known moment this and have Lots used in learning is the cooperative model . Learning cooperative is one of the models during This Already often used , with objective For increase participation participant educate, facilitate participant educate with experience attitude leadership and create decision in group, as well give opportunity for participants educate For interact and learn together with different friends background behind. With learning cooperative participant educate Work in a manner collaborative For reach something objective together, as well as participants educate will develop Skills relate with fellow man who will useful outside school . this in accordance with opinion Enggen and Kauchak. Learning cooperative is A learning strategy groups that involve participant educate work in a manner collaborate for reach objective together.

Keywords: Learning Cooperative, Model Two Stay Two Stray, Motivation, Learning Outcomes

INTRODUCTION

One of the national goals as stated in the Preamble of the 1945 Constitution is "Educating the life of the nation ." This has been described in Law no. 20 of 2003 concerning the National Education System which reads: "National education aims to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens " (UU No. 20 2003: 9). To form participants students who have the knowledge, attitudes and skills, educators must be sensitive in observing and knowing the whereabouts of the participants he taught. Educator demanded own ability in plan, design and implement various learning strategies considered suitable with interests and talents as well as in accordance with level development participant educate included in it utilise various learning resources and media For ensure effectiveness learning. Because success learning process in class influenced by factors educators and participants educate. Educator besides control material, demanded must Master delivery strategies material. Educator way create atmosphere influential class to response participant educate in the learning process.

In the process of learning Indonesian , educators expected can using the right learning model , deep create atmosphere learning that is active, innovative, creative effective, and fun so that it can interesting interest and elicit motivation participant educate For can participate in a manner active in Study as well as give a wide range of opportunities for participant educate For obtain experience. Using the right learning model can push growing pleasure participant educate to learning, growing and improving motivation in do task, give convenience for participant educate For understand material learning so that possible participant educate reach results learn more good (Aunurrahman, 2009: 143)

Furthermore criteria model selection as well method learning should based on principle efficiency and effectiveness in reach objective learning and engagement participant educate . For That educator must think which model is the most effective and efficient one can be help participant educate in reach goals that have been formulated . Selection of the right learning model directed to participants educate can follow activity learning optimally. In learning cooperation , opportunity participant educate Study from behavior himself or from environment need enhanced, with method involve participant educate in a manner active in the learning process . More and more involved active in learning , power absorption and power remember participant educate to studied material the more increase. Besides That educator in increase quality teach him, must capable planning teaching programs and able do it in the learning process teach .

Lots of research show that learning through Friend peers like learning cooperative it turns out more effective from learning _ through educator (teacher). This means , success in Study No solely must obtained from educator course , but can also be done through Friend else , that is Friend peer . In matter This educator only Act as facilitator , motivator, and mediator. With Study group every participant educate feel responsible answer to group , participants educate participate participate and work The same with other individual effective , raises constructive change in behavior someone and every member safe and content inside class .

Learning cooperative model two stay two stray is a capable learning model increase participation participant educate during the learning process going on For each other interact, work same and mutual share results, information form knowledge, views, opinions, as well thinking to participant teach another. Model learning two stay two stray (two stay two guests) is a " learning model purposeful cooperation give chance to group For share results, information, with group others (Hanafiah and Suhana, 2009: 56). In learning This every group consists from four people, two people on duty as visitor For group others , the remaining two on duty serve arriving guests from another group for share results work and information they to arriving guests.

In the learning model two stay two stray, development ability participant educate in good communicate with fellow participant educate or with educator who based attitude each other value must need in a manner Keep going continuously improved. Habits For willing hear and appreciate opinion colleagues fellow participant educate often not enough get attention from educator, because considered as matter routine that goes on activity everyday . On p ability This No can develop with Good so course, will but need guided exercises from educator . Habits each other appreciate what is practiced in the spaces class and done in a manner Keep going continuously will become stock for participant educate For developed in a manner real in life socialize.

Reason low motivation and results Study participant educate on the material classification creature life among them that is lack of book sources, less use of media suitable, management less class well , as well less use of learning models right one possible effort done educator For increase motivation and results low learning is through the use of learning models that can create condition Study effective and capable teaching develop method Study participant educate active. Educator must can give chance Study for participant educated , and capable increase quality role participant educate . Participant educate Don't considered as object that is passive accept information from educator , however more from it, participants educate considered as acting subject in a manner active in learn. Educator must capable learn to participant educate How participant educate can Study from behavior himself or from

environment. Educator must can designing a suitable learning model For every meeting in every material learning.

THEORITICAL REVIEW

Learning Outcomes

Study can involve brain and change behavior that results happen in brain form ability certain in finish problem. Acquired abilities from business Study called results learn . In other words results Study is acquisition from something activity Study form resulting abilities change behavior in self individual. Change behavior the can shown in form appearance reactions, attitudes, actions, skills and knowledge. this in accordance with opinion from Slameto (2010: 2) and Sudjana (2009: 22) that , the results Study is all that is earned somebody form ability , change new behavior in a manner whole and is results from experience Alone in interaction with environment, for example 1) skills and habits, 2) knowledge and understanding, 3) attitudes and ideals. Furthermore Sukmadinata (2005: 102) states that , learning outcomes or achievement is realization or expansion from skills potential or existing capacity someone . Study results somebody can seen from behavior Good behavior in form mastery knowledge , skills think nor Skills motor.

Study results participant educate can measure tall low ability learn what it has form Skills knowledge intelligence , abilities and talents obtained and usually mirrored in form values certain . According to Winkel (2009: 375) that , Processing information in Study arrangement activity cognitive precisely looked role from control subject to activity stimulating cognitive For concentrate mind and attention For process material new lesson , digdeep old knowledge memory period long and increase results learn it. Whereas According to Personal (2009: 53-54) that, Learning outcomes is information that can given by educators about progress knowledge that has achieved by the participants educate . those results given to participants educate can compare between must result achieved and the results that have been achieved. With know results learn that has taken , participants educate will do effort repair in take activity learning next .

Mastery results learn by someone can seen from change his behavior. More and more change experienced behavior , then more a lot of abilities are also acquired . That ability raises change behavior in the cognitive domain covers a number of level or level . As stated by Purwanto (2011: 50) that , learning outcomes cognitive is is that change happen in area cognition , a learning process that involves cognition covers activity since from reception of external stimuli by sensory , storage and processing in brain become information until calling return when needed For settlement problem. Processing information in Study arrangement activity cognitive precisely looked role from control subject to activity stimulating cognitive For concentrate mind and attention For process material new lesson, dig deep old knowledge memory period long and increase results learn it .

Study results is all capabilities somebody after accept experience learn it. According to Gagne (1986: 49-50) that : Learning outcomes is internal capabilities that include intellectual , cognitive strategies , verbal information , skills motor and attitude . Furthermore, Briggs (1988: 67) argues that , learning outcomes is capacity measurable change desired individual based on characteristic features or variable default through implementation learning certain

Learning Cooperative Model Two Stay Two Stray

Learning cooperative is a current learning model This Lots used For realize activity Study participant centred teaching students, especially For overcome problems found in enable participant educate , which is not can Work The same with other people, participants aggressive or not care about other people. According to Arends (2007: 5) that , learning cooperative can be marked with features namely : 1) participants educate Work in team For reach goals , 2) team That consists on participant outstanding students low , medium , and high , 3) if maybe , team consists on mixture race , culture and gender, 4) system the reward group oriented nor individual. Application learning cooperative No as easy as imaginable . In fact , deep planning and implementation Study cooperative , educator (teacher) a lot make no decision profitable participant educate . According to Isjoni (2009: 9) that : " Purpose main in application of learning models cooperative is for participants educate can Study in a manner group together his friends with method each other value opinion and give chance to others for put forward the idea with convey opinion they in a manner flock ". Furthermore, Alma et al (2009: 81) argued that , Participant educate in group , study with portion mainly discuss tasks , in a mutual sense help in finish task or solve problem related with learning models cooperative , Johnson and Johnson (1994: 81) say that , for reach maximum results learning model cooperative must apply the five elements namely: a) positive interdependence (mutual dependency positive), b) personal responsibility responsibility answer individual), c) face to face promotive interaction (interaction promotive), d) interpersonal skills (interaction between members), and e) group

Widyantini (2006: 4) said that , learning cooperative developed through discussion and communication with purpose for participants educate each other share ability , mutual Work same , each other Study think critical , mutual convey ideas/ opinions or advice, mutually give chance distribute ability , mutual help study each other evaluate abilities and roles self Alone nor Friend other. Learning cooperative can give motivation in participants educate For each other learn material in group . If anything member group that doesn't control material , then matter This will influential negative to mark group , because That all group try so that all member the group it worked , and p this will support success learning (Ismiati , 2008: 31)

Learning cooperative model two stay two stray possible participant educate For develop knowledge , abilities and skills in a manner full in atmosphere open and democratic learning . Participant educate No Again as object learning , however can also play a role as a tutor for Friend his peers . With carry out learning cooperative like here , participant educate possible can reach success in study , besides it can too practice participant educate For own various skills , fine Skills thinking as well Skills social, eg Skills For put forward opinion , communicate , exchange knowledge and experience , accept / appreciate suggestions and input from others, work same , loyalty comrade , and reduce emergence deviant behavior in life class (Isjoni , 2009: 42-43)

Learning cooperative like the two stay two stray model need developed For reach results Study form performance academic , tolerance , accept language Indonesia , and development Skills social . For reach results Study That learning cooperative demand Work equal and interdependence participant educate in structure task , structure purpose , and structure the award . Structure task relate with How task organized . Structure goals and rewards refers to degrees Work The same or required competition For reach objective nor award (Nur in Widyantini , 2006: 3) and Sagala (2010: 82).

Motivation Study

Motivation stem from the word motive that can interpreted as Power the driving force that is inside self somebody For do activities certain to achieve something purpose. Even motives can interpreted as something internal conditions (preparedness). arising motivation Because exists change energy in self someone marked with emergence of " feeling " and preceded with response to exists purpose . Hamalik (2007: 158) argued that , Motivation is change energy in self someone marked _ with emergence desire and reaction For do activity in reach purpose . Temporary That Woodwort (in Sanjaya, 2010: 250) suggests " A motives are a set that can make individual do activities certain For reach goal ", (A motive is a set predisposition to the individual of certain activities and for seeking certain goals).

There is three elements / features tree in motivation , that is motivation That start happening change energy , marked with exists feeling, and stimulated Because exists purpose . But in essence that motivation is condition psychological push somebody For do something to want . this in accordance with opinion from Hoy and Miskel (1982: 96) that, Motivation is complex forces , drives , desires , circumstances _ tension , or other internal psychology whose mechanisms guard activity proceed For reach target personnel . In activity learning , motivation can said as whole Power drive inside self participant students who raise , guarantee continuity and deliver direction activity learn , so expected objective can reached . In activity learning , motivation is needed , because someone who doesn't have motivation in study , no will Possible do activity learn .

According to Suprijono (2009: 163) that " Motivation Study is a giving process Spirit learning , direction , and persistence behavior . That is , motivated behavior is full behavior energetic , purposeful and enduring ". Furthermore Hanafiah and Suhana (2009: 26) stated that , motivation Study is strength (power motivation), power driving force , or _ tool builder and strong will in self participant educate For Study in a manner active , creative , effective , innovative , and fun in framework change Act do , fine in aspect cognitive , affective , and psychomotor .

There are two forms motivation Study that is living motivation in self participant educational and useful in situation functional learning , and motivation caused by factors from outside situation learn. Sardiman (2011: 89-91) differentiates motivation Study over two form , namely : a) motivation intrinsic, ie the motivation that arises from in self individual Alone without There is coercion encouragement of others, however on base will himself , b) motivation extrinsic, that is the motivation that arises as consequence influence from outside individual, whether Because exists solicitation, order, or coercion from others so with circumstances thereby participant educate Want to do activity learn .

Motivation is one aspect main for success in learn . because that 's motivation Study get it become attention so can grow and develop . Sudjana (2009: 62) and Uno (2008: 23) argue that , the success of the learning process can seen in motivation learn . essence motivation Study is internal and external encouragement to participants educate moment carry out activity learning such as ; a) interest and concern to learning , b) enthusiasm participant educate For make tasks learn , c) responsibility answer, feeling happy and satisfied in do the tasks given , d) existence desire and desire For successful , e) exists future hopes and aspirations , f) existence environment conducive learning , so possible somebody can Study with good , g) exists interesting activity in learn .

Motivation Study is facet experienced psyche development , that is can affected by conditions physiological or maturity psychological someone . According to Suprijono (2009: 166) that " Motivation

strategy can developed based on the ARCS model. this model is condition, confidence, and satisfaction". A educator demanded own ability For awaken motivation Study participant educate so that can reach objective Study because , they will Study with truly if own motivation .

METHOD E RESEARCH

Study This held in SMP Negeri 2 Limboto . School This chosen become place study Because researcher is one power teacher eye science lessons at institutions the . In this research, researcher collaborate with educators who teach derived biology from School this too as partner . Partner teacher the help researcher observe during implementation action going on . Observation results collaborator become material input for researcher , use cycle improvements next or in taking conclusion end. Study This is Classroom Action Research (PTK) that can taken For improve processes and results classroom learning so that quality learning on the material biology can improved . approach taken in study This is approach qualitative .

In study This involve a number of variables that can grouped become the input variable is educators and participants students, the process variable is use of learning models cooperative two stay two stray as well as the output variable is motivation and results Study participant educate .

Study action class held through two cycles. this intended For obtain maximum results Every cycle consists of two meetings and four stages namely ; planning , implementation action , observation / evaluation , and reflection . Every cycle terminated with activity reflection so that weakness / deficiency every cycle can followed up on the cycle next .

RESEARCH RESULTS AND DISCUSSION

Description of Research Results Data

Cycle I

Based on analysis mark motivation Study participant educate For cycle I got seen in Appendix 3 the results can seen in Table 4.5 below ;

Table 1 Value Motivation Study Participant educate Cycle I

| Value Range | Amount Participant educate | Percentage (%) | Criteria |
|-------------|----------------------------|----------------|-----------|
| 68 - 100 | 7 | 58,33 | Tall |
| 35 - 67 | 5 | 41.67 | Currently |
| 0 - 34 | 0 | 0 | Low |
| Amount | 12 | 100 | |

Table 1 shows that mark motivation Study participant educate on learning cooperative model two stay two stray Not yet in accordance with what to expect . From the results the it turns out participant students who get mark motivation Study tall only 7 people or 58.33%, the remaining 5 people or 41.67% got mark motivation Study medium , and no There is One anyone participant students who get mark motivation Study low .

Acquisition mark motivation Study participant students in cycle I yet in accordance with indicator success i.e. at least 85% of participants educate own motivation high on the learning process

cooperative two stay two stray , because it is very necessary followed up on implementation action cycle II.

Cycle II

Motivation Study participant educate during learning in cycle II for every indicator experience enhancement compared to with cycle I. Results of analysis as contained in Appendix 4, value motivation Study participant students in cycle II is very satisfying Because No There is participant students who have motivation medium and low , that is all participant educate or 100% already own motivation tall in learning cooperative model two stay two stray especially on the material classification creature live. this _ can seen in Table following :

Table 2 Value Motivation Study Participant Educate in Cycle II

| Value Range | Amount Participant educate | Percentage (%) | Criteria |
|-------------|----------------------------|----------------|-----------|
| 68 – 100 | 12 | 100 | Tall |
| 35–67 | 0 | 0 | Currently |
| 0 – 34 | 0 | 0 | Low |
| Amount | 12 | 100 | |

Based on Figure 2 shows that results achievements motivation Study participant students in cycle II already go beyond criteria i.e. at least 85% of participants educate own motivation high on the learning process cooperative two stay two stray. For more he explained enhancement acquisition mark motivation Study participant educate every indicator can seen in Table 4.7 about comparison results motivational data analysis learn on cycles first and cycle second .

Table 3 Average Value of Motivation Study Participant educate Each Indicators in Cycle I and Cycle II

| Indicator Motivation | Average Value of Cycle I | Average Value of Cycle II |
|-------------------------------|--------------------------|---------------------------|
| Attention (attention) | 80,16 | 95,24 |
| Relevance _ _ _ | 92,22 | 98.33 |
| confidence (believe self) | 73,61 | 94.44 |
| Satisfaction (satisfaction) | 75.00 | 96.53 |
| liveliness | 73.96 | 95.49 |
| Average | 78,82 | 95.83 |

Table 3 shows that mark motivation Study participant educate every indicators in cycle II already fulfil criteria set, because result already above 94.00% , meanwhile established criteria only 85%. range comparison mark motivation in a manner overall in cycle I and cycle II can seen in Table 4 following :

Table 4 Comparison of Motivational Values Study Participant Educate in Cycle I and Cycle II

| range Mark | Cycle I | | Cycle II | | Criteria |
|------------|----------------------------|----------------|----------------------------|----------------|-----------|
| | Amount Participant educate | Percentage (%) | Amount Participant educate | Percentage (%) | |
| 68 – 100 | 7 | 58,33 | 12 | 100 | Tall |
| 35–67 | 5 | 41.67 | 0 | 0 | Currently |
| 0 – 34 | 0 | 0 | 0 | 0 | Low |
| Amount | 12 | 100 | 12 | 100 | |

Based on Table 4 can is known that motivation Study participant educate show significant improvement, This in accordance analysis as contained in Appendices 3 and 4, the results it turns out participant students who have motivation while in cycle I there were 5 people or 41.67%, in cycle II it became 0, meanwhile participant students who have motivation high in the first cycle only 58.33% increased to 100% in cycle II

Discussion

Activity study action class implemented on the material biology specifically material classification creature implementing life learning cooperative model two stay two stray has indicator success ie if 85 % of participants educate own motivation high on the learning process cooperative two stay two stray and 85% participants educate obtain minimum score of 75 on the result learn , then activity in learning considered complete .

Cycle I

Activity Educator

Based on results analysis of observational data , activity educators in the first cycle of its implementation Already fulfil established criteria i.e. 85% activity educator done or very good criteria . Observed aspect like preparation learning , available 100% or very good criteria . On activities beginning learning there is type activities that are not carried out at the meeting first and second ie educator convey scope material so that implementation activity beginning learning only 80% implemented , but the average implementation cycle I reached 95.00% with very good criteria. Although activity educator implementation reached 95.00%, applicability learning cooperative model two stay two strays still need optimized Because Still There is participant students who feel confused at the moment visit to group other . With thereby activity educators on implementation action this first cycle there is a number of type necessary activities increased on cycle next . efforts educator For increase implementation activity learning in cycle II is as following : **First** , educator can create atmosphere / condition fun learning for participant educate so that happen interaction active between educators nd participants educate or between fellow participant educate . this done because the “ learning process will going on effective If participant educate is at in situation positive emotions ... Atmosphere _ heart matters a lot to ability participant educate in absorb knowledge and skills learned

" (Personal , 2009: 285) . **Second** , educators apply learning cooperative model two stay two stray optimally for obtain maximum results .

Activity Participant Educate

Observation results activity participant educate during the learning process show that 73.33 % of its activities done . this Not yet in accordance with established criteria ie at least 85% activity participant educate done with very good criteria . In cycle I participants student who gives response or submit question to material discussion is 0%. the cause is ; **first** , lack of passion and concern participant educate in accept discussed material . **second** , participant educate not enough believe self so hesitate inside put forward his opinion Good in give question nor answer questions during the learning process going on . this in accordance with opinion from Hero (in Anonymous , 2003: 15) that , " A passive attitude, low self-esteem and lack of confidence can be a factor that hinders participants educate in displaying their learning achievements .

Motivation Study

Based on results research , that implementation activity learning For cycle I, total participant students who get mark motivation 68 ke on or categorized as motivation tall ie as many as 7 people or 58.33% and those who received grades below 68 or categorized as motivation currently as many as 5 people or 41.67%. Acquisition mark motivation Study participant students in cycle I Not yet in accordance with criteria already set i.e. at least 85% of participants educate own motivation tall in learning cooperative model two stay two stray on the material classification creature live . Necessary effort done For increase motivation Study participant educate is **first** , educator in a manner optimum deliver guidance to affected individuals / groups difficulty in solve problems that exist in LKPD. Educators really need awakenmotivation because " Awaken motivation Study participant educate is one roles and tasks educator in every process of learning Indonesian . In framework awaken motivation , educator must can show importance experience and material learning for life participant educate " (Sanjaya, 2008: 135). **second** , educator must more optimal in give reward / bait come back to participant educate so that motivation participant educate will more strong , fine That done Because want to maintain / improve results learn that has neither , nor For repair results less study satisfying . this in accordance with opinion Darmadi (2009: 131), Fathurrohman and Sutikno (2007: 21) that , Award on achieved success participant educate in do something is one driving motivation spirit and encourage it For do and achieve more both and participants students who haven't achievement will motivated For Can chase accomplished friend . Furthermore Daryanto (2009: 136) argues that Giving incentive or award on success achieved learning participant teach (can form praise or good numbers) , educator help increase motivation participant educate so that participant educate pushed For try get results Study more continue . Award given in learning can grow cultivate a sense of love , pride , and responsibility answer to assigned tasks . Love , pride and responsibility answer possible participant educate can carry out his job with good , discipline , and full earnestness , so can reach results optimal learning .

Learning Outcomes

Based on results study that For results Study participant students in cycle I, who obtained value above 75 or categorized complete as many as 4 people or 33.33% and those who get grades below 75 or

category No complete as many as 8 people or 66.67%, with average 64.17 and power absorption 64.17%. this show that acquisition results Study participant educate Still low and yet in accordance with established criteria i.e. at least 85% of participants educate obtain mark according to KKM 75. Because it , researchers and collaborators conclude that on implementation cycle First Still there is weaknesses / deficiencies that must be done repair and must followed up on the cycle next. With repair such, then implementation activity learning Cycle II was carried out optimally for motivation and results Study participant educate can achieved with ok . The low results learning in cycle I is caused by several matter such as ; lack of concentration and attention participant educate on the material learning , participants educate Not yet apply experience learn at the time evaluation carried out . Like case with motivation , results Study participant students also experience increase in cycle II. For acquisition results learn on cycle here , participant students who get value 75 to on or categorized as complete is 11 people or 91.67%, achievement the Already go beyond established criteria _ that is only 85%. Amount participant students who get mark motivation high in cycle I was 58.33% increase become 100% in cycle II. Whereas completeness results Study from 33.33% in the first cycle increased to 91.67%, mean and power absorb from 64.17 and 64.17% in the first cycle increased to 88.58 and 88.58% in cycle II. When compared acquisition mark between cycle I and cycle II, value motivation experience enhancement of 41.67%, completeness results Study of 58.34%, and mean and power absorb by 24.41%. because that , from the data obtained can concluded that learning cooperative model two stay two stray as innovation very effective learning For increase motivation and results Study participant educate especially in material classification creature live . With so , then hypothesis which reads : 1) if learning cooperative model two stay two stray applied so motivation Study participant educate on the material classification creature life will increases , 2) if learning cooperative model two stay two stray applied so results Study participant educate on the material classification creature life will increase , got accepted and tested the truth .

CONCLUSION

Based on description results research and discussion , then can made conclusion as following :

1. Application learning cooperative model two stay two stray can increase motivation Study participant educate the eyes IPA lesson ie of 41.67 % with acquisition mark For criteria motivation high in cycle I was 58.33% to 100% in cycle II.
2. Application learning cooperative model two stay two stray can increase results Study participant educate . Details acquisition results Study the namely ; a) completeness results Study experience enhancement of 58.34%, with the gain in cycle I was 33.33% increased to 91.67% in cycle II, b) mean and power absorb experience enhancement by 24.41% with gain on cycle I was 64.17 and 64.17%, increased to 88.58 and 88.58% in cycle II

After study results study action proven class with data analysis and discussion , researcher disclose some suggestions as following :

1. A educator should can implement and develop various learning models for participants educate will motivated in follow the learning process , because participant students who have motivation high learning tend show results maximum learning .

2. Remember learning cooperative model two stay two stray proven can increase motivation and results Study participant educate , then other educators / teachers preferably can apply it in activity learning specifically PA material .
3. For carry out learning cooperative model two stay two stray need enough preparation ipe , then educator / teacher teacher expected can determine or choose material and grade / amount participant really teach _ suitable with this model , so that the learning process walk with good and got obtained maximum results .

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